REGULAR MEETING AGENDA

Date: 4/10/2019
Time: 7:00 p.m.
City Council Chambers
701 Laurel St., Menlo Park, CA 94025

A. Call To Order

B. Roll Call

Celebrate the outgoing Complete Streets Commissioner – Bianca Walser

C. Reports and Announcements

Under "Reports and Announcements," staff and Commission members may communicate general information of interest regarding matters within the jurisdiction of the Commission. No Commission discussion or action can occur on any of the presented items.

D. Public Comment

Under "Public Comment," the public may address the Commission on any subject not listed on the agenda. Each speaker may address the Commission once under Public Comment for a limit of three minutes. Please clearly state your name and address or political jurisdiction in which you live. The Commission cannot act on items not listed on the agenda and, therefore, the Commission cannot respond to non-agenda issues brought up under Public Comment other than to provide general information.

E. Regular Business

E1. Approve the Complete Streets Commission regular meeting minutes of March 13, 2019 (Attachment)

E2. Recommend to City Council to approve the removal of on-street parking on Middle Avenue between Olive Street and San Mateo Drive to install a preferred bike lane alternative (Staff Report #19-003-CSC)

E3. Recommend to City Council to approve the removal of on-street parking on Santa Cruz Ave between Olive Street and Avy Avenue - Orange Avenue to install sidewalks and bike lanes (Staff Report #19-004-CSC)

E4. Recommend to City Council to approve the removal of on-street parking on the west side of Laurel Street at Ravenswood Avenue to install an exclusive southbound left turn lane and to extend the northbound bike lane to the intersection (Staff Report #19-005-CSC)

E5. Provide feedback and recommend to City Council the Middle Avenue project on a page

E6. Approve the Commission's quarterly report to the City Council tentatively scheduled for May 7, 2019

E7. Recommend to City Council to approve the Commission goals and priorities for 2019-2020 (Staff Report #19-006-CSC)

E8. Provide feedback on the Caltrain Business Plan

F. Informational Items

F1. Update on City Council work plan and capital improvement program

F2. Update on major project status

G. Committee/Subcommittee Reports

G1. Update from Active Transportation Network Subcommittee (Kirsch/Weiner)

G2. Update from Downtown Access and Parking Subcommittee (Behroozi/Goldin/Levin)

G3. Update from Multimodal Subcommittee (Levin/Walser)

G4. Update from Safe Routes to School Program Subcommittee (Lee/Meyer)

G5. Update from Transportation Master Plan Subcommittee (Behroozi/Levin)

G6. Update from Zero Emission Subcommittee (Goldin/Meyer/Walser)

H. Adjournment

At every Regular Meeting of the Commission, in addition to the Public Comment period where the public shall have the right to address the Commission on any matters of public interest not listed on the agenda, members of the public have the right to directly address the Commission on any item listed on the agenda at a time designated by the Chair, either before or during the Commission's consideration of the item.

At every Special Meeting of the Commission, members of the public have the right to directly address the Commission on any item listed on the agenda at a time designated by the Chair, either before or during consideration of the item.

Any writing that is distributed to a majority of the Commission by any person in connection with an agenda item is a public record (subject to any exemption under the Public Records Act) and is available for inspection at the City Clerk's Office, 701 Laurel St., Menlo Park, CA 94025 during regular business hours.

Persons with disabilities, who require auxiliary aids or services in attending or participating in Commission meetings, may call the City Clerk's Office at 650-330-6620.

Agendas are posted in accordance with Government Code Section 54954.2(a) or Section 54956. Members of the public can view electronic agendas and staff reports by accessing the City website at menlopark.org/agenda and can receive e-mail notification of agenda and staff report postings by subscribing to the "Notify Me" service at menlopark.org/notifyme. Agendas and staff reports may also be obtained by contacting the City Clerk at 650-330-6620. (Posted: 4/5/2019)

REGULAR MEETING MINUTES - DRAFT

Date: 3/13/2019
Time: 7:00 p.m.
City Council Chambers
701 Laurel St., Menlo Park, CA 94025

A. Call to Order

Chair Kirsch called the meeting to order at 7:06 p.m.

B. Roll Call

Present: Behroozi, Goldin, Kirsch, Lee, Levin, Walser, Weiner
Absent: Mazzara, Meyer
Staff: Associate Civil Engineer Michael Fu, Associate Transportation Engineer Kevin Chen

Chair Kirsch announced the reordering of agenda, hearing Information Item F1 before the Regular Business items.

C. Reports and Announcements

Staff Chen announced upcoming City events and a summary of City Council actions on advisory commissions/committee organizational and transportation related items since the February 13 Commission meeting.

Commissioner Lee announced that Encinal Elementary School and the Town of Atherton are exploring safety improvements on Encinal Avenue within the Town of Atherton. Commissioner Levin summarized the City Council's objectives related to downtown parking and announced an upcoming Caltrain Vision 2040 community meeting in the City of Redwood City. Commissioner Behroozi suggested to the City Clerk's Office to reach out to past unselected applicants for the upcoming Commission vacancies.

D. Public Comment

- Ken Kershner asked the Commission to expand the Safe Routes to School Program to include a focus for work trips and to encourage private partnership for implementation.

F. Informational Items

F1. Receive a status update on the development of the City's Green Infrastructure Master Plan (Staff Report #19-002-CSC)

Staff Fu provided a presentation (Attachment).

Chair Kirsch led a discussion.

E. Regular Business

E1. Approve the Complete Streets Commission regular meeting minutes of February 13, 2019 (Attachment)

ACTION: Motion and second (Levin/Lee) to approve the Complete Streets Commission regular meeting minutes of February 13, 2019, passed (7-0-2, Mazzara and Meyer absent).

E2. Recommend to City Council to approve the Commission goals and priorities for 2019-2020

Chair Kirsch led a discussion.

ACTION: By acclamation, the Commission directed staff to refine the content based on Commission feedback.

F. Informational Items

F2. Update on major project status

Staff Chen provided updates on the Neighborhood Traffic Management Program projects, Transportation Master Plan, Middle Avenue pedestrian and bicycle rail crossing, Willow Road and U.S. Highway 101 interchange construction, Downtown to Bay Trail bicycle wayfinding signs, and the Safe Routes to School Program.

G. Committee/Subcommittee Reports

G1. Update from Active Transportation Network Subcommittee

Commissioner Weiner shared the Middle Avenue project on a page (PoP) and asked the Commission to provide feedback offline through staff (Attachment).

G2. Update from Downtown Access and Parking Subcommittee

Commissioner Levin reported that the City Council is exploring downtown parking and access strategies and will be evaluated in a future City Council meeting.

G3. Update from Multimodal Subcommittee

Commissioner Levin reported on the Caltrain Business Plan and received support from the Commission to bring it back in a future Complete Streets Commission meeting for further discussion (Attachment).

G4. Update from Safe Routes to School Program Subcommittee

Commissioner Lee reported the hiring of the new Safe Routes to School Coordinator, the releasing of the draft Safe Routes to School Strategy, and the soon-to-be released Safe Routes to School maps. Commissioner Behroozi expressed interest for the Commission to provide feedback on the maps at a future meeting.

G5. Update from Transportation Master Plan Subcommittee

Commissioners Behroozi and Levin reported on the Subcommittee's suggested mapping strategies for community feedback on projects proposed in the draft Transportation Master Plan Working Paper and asked the Commission to provide feedback offline through staff (Attachment).

G6. Update from Zero Emission Subcommittee

None.

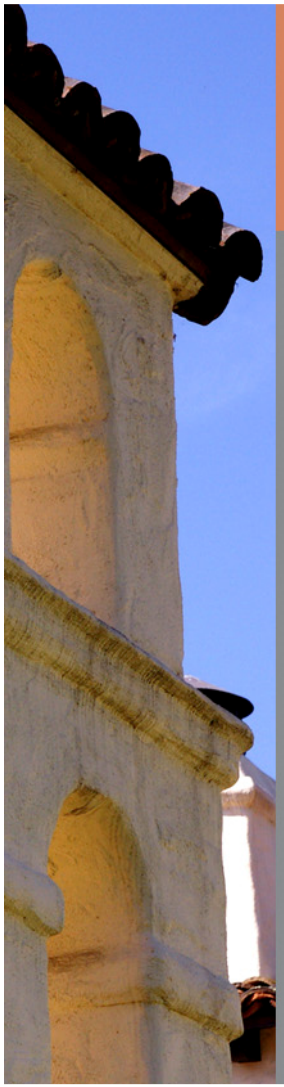
H. Adjournment

Chair Kirsch adjourned the meeting at 9:37 p.m.

THIS PAGE INTENTIONALLY LEFT BLANK

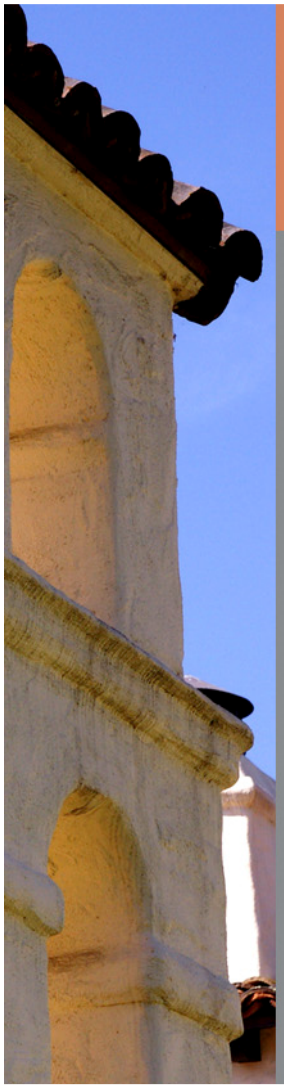
GREEN INFRASTRUCTURE (GI)

THE PLAN FOR A SUSTAINABLE FUTURE



INTRODUCTION

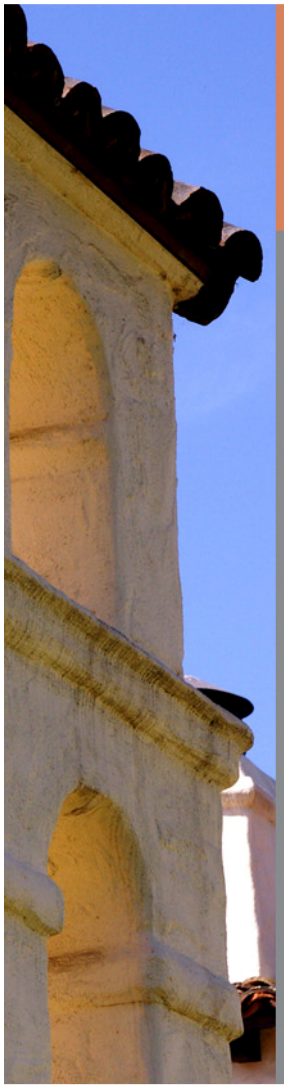
- The City is developing a Green Infrastructure (GI) Plan
- This plan addresses environmental and transportation concerns
- Staff welcomes the Commission's role in promoting GI



PRESENTATION NARRATIVE

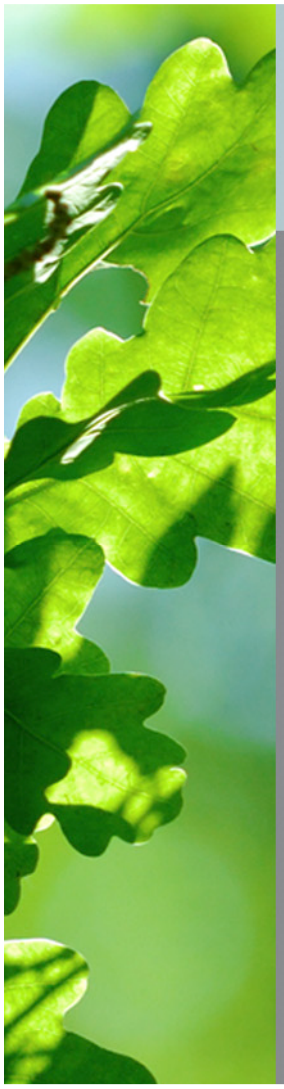
- A Pressing Concern
- The Solution
- Our GI Plan

A PRESSING CONCERN



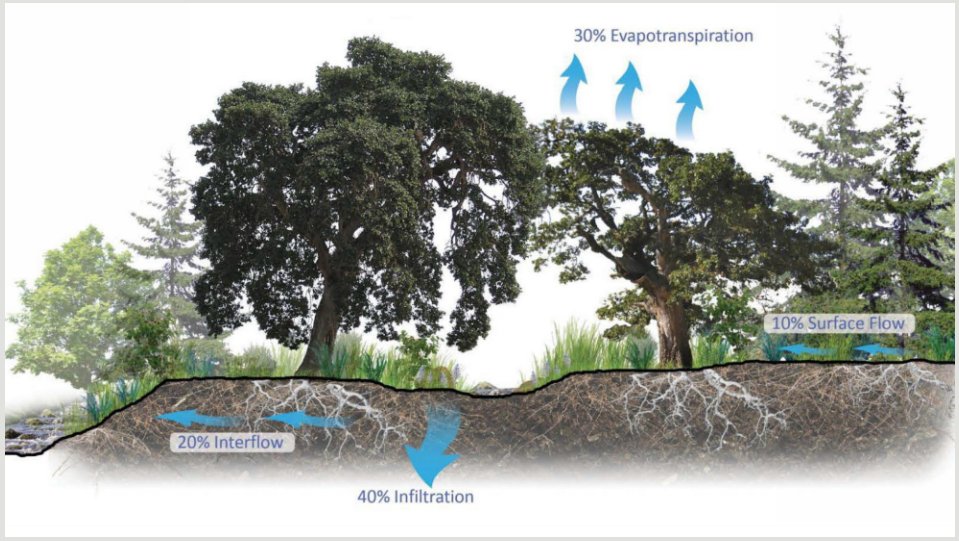
THE PROBLEM

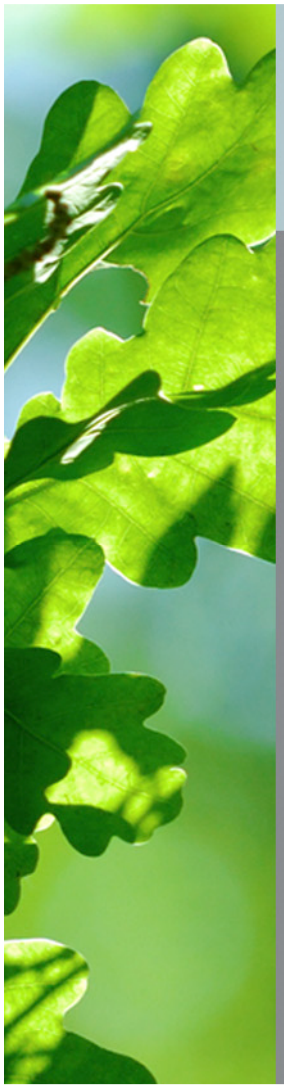
- Untreated runoff is polluting the environment and Bay…



PRE-DEVELOPMENT

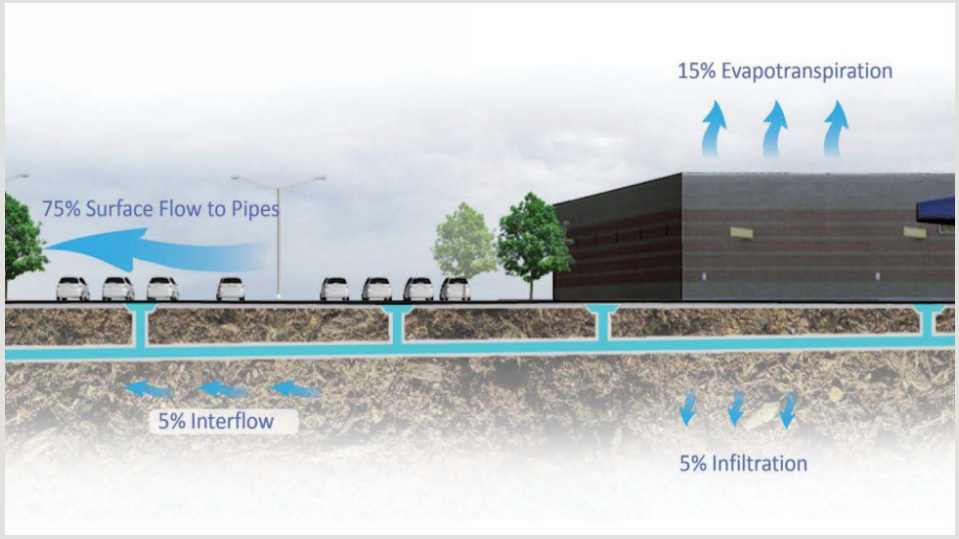
- Runoff is filtered by landscape and absorbed through native soil

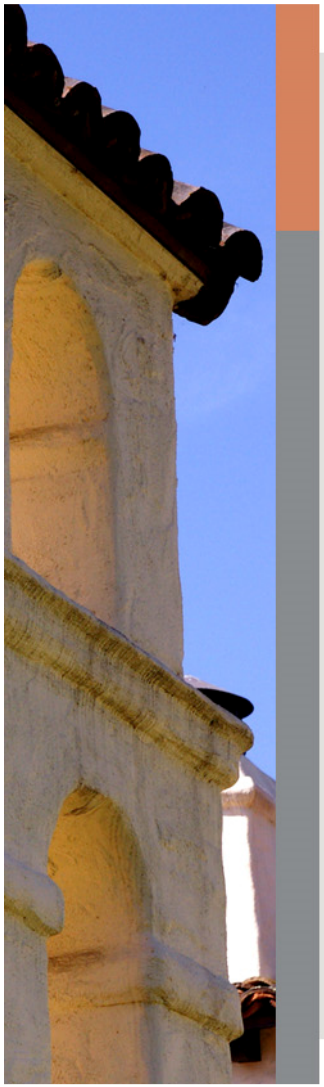




POST-DEVELOPMENT

- Impervious area hinders infiltration and increases pollutant loads

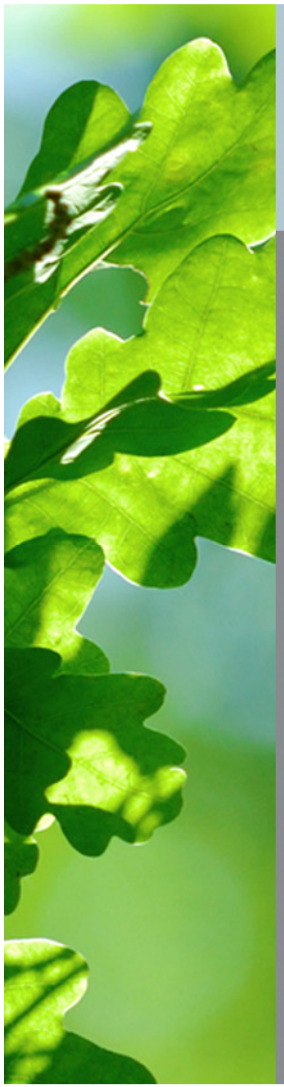




HOW ARE WE IMPACTED

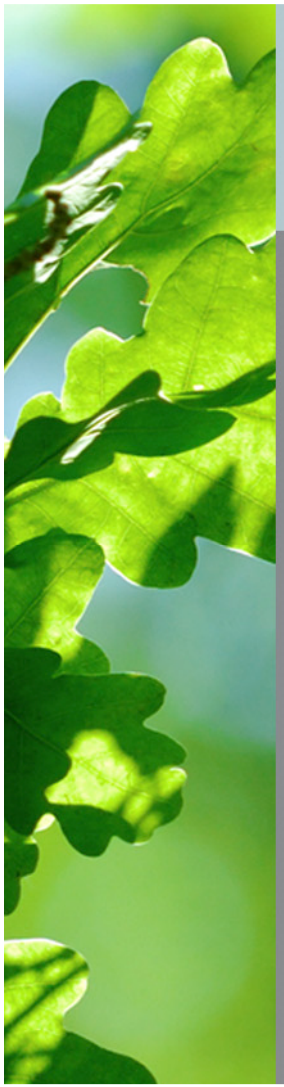
- Untreated runoff exacerbates pollution and erosion to the Bay
- Pollutants such as PCBs and mercury contaminate wildlife
- Cities are mandated to take action to address the concern

THE SOLUTION



GREEN INFRASTRUCTURE (GI)

- Our plan for a eco-friendly, sustainable City



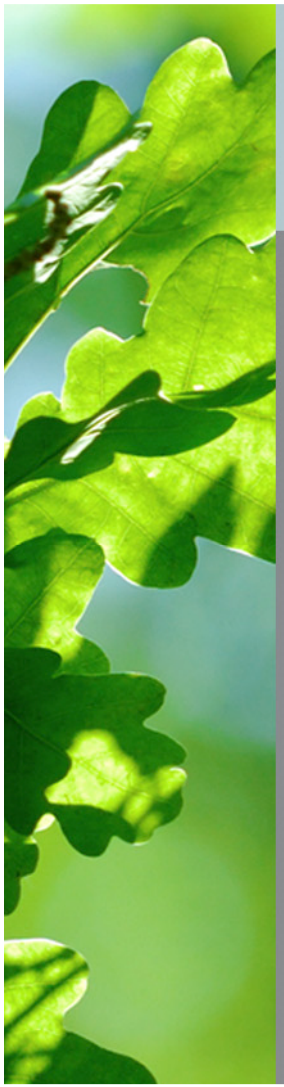
WHAT IS GREEN INFRASTRUCTURE (GI)?

- Storm water treatment features that use vegetation and natural processes to mimic Pre-Development conditions.

Example 1: GI planter strip

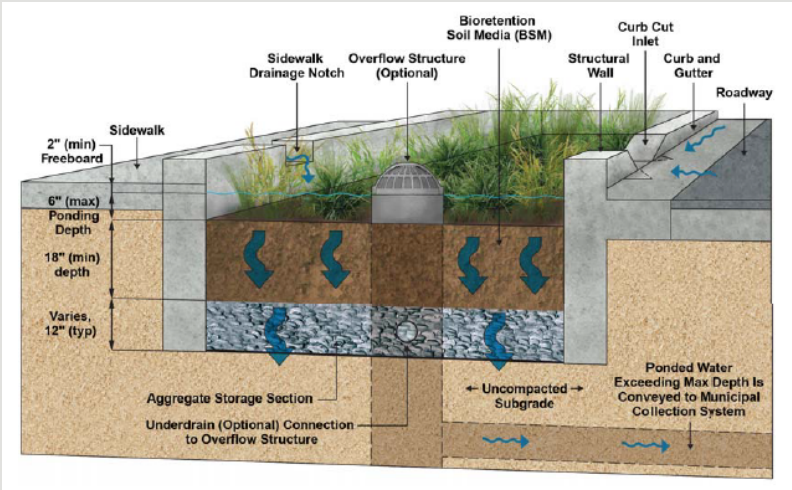
Example 2: Permeable paver w/ swale

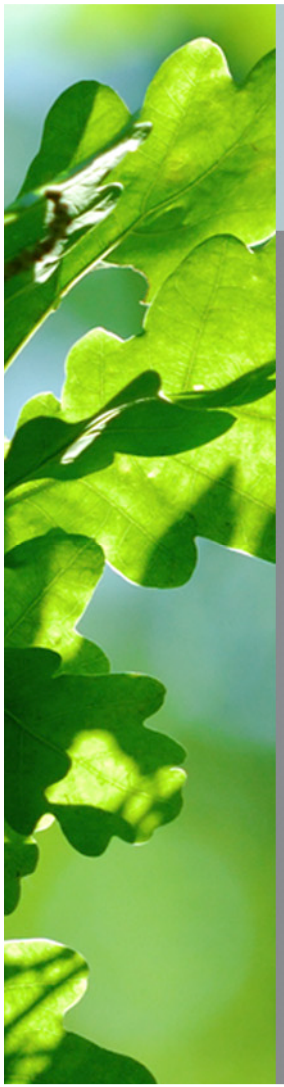
Example 3: Bioretention Area



HOW DOES GI WORK?

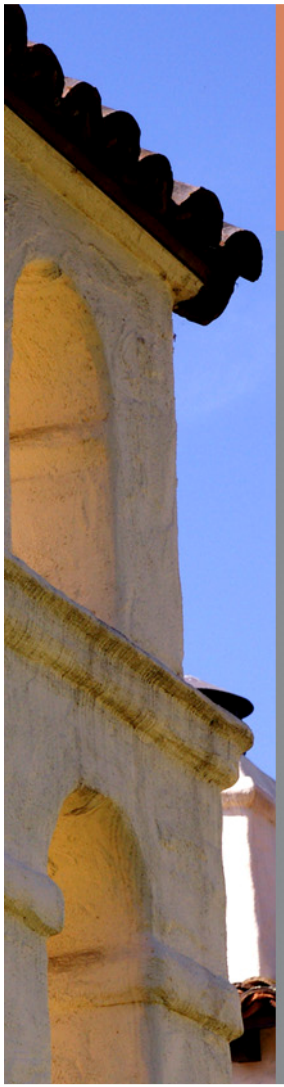
- Vegetation and special soils treat raw storm water
- Designed to retain storm water and slow runoff





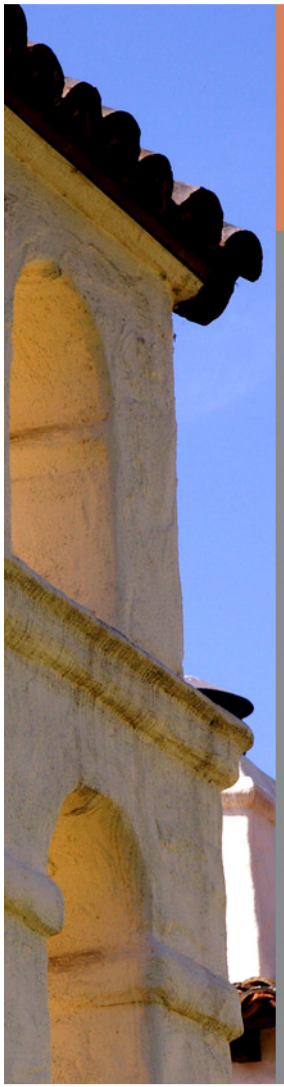
BENEFITS OF GREEN INFRASTRUCTURE

- Promotes groundwater recharge
- Treats pollutants from runoff
- Enhances urban greening
- Mitigates flooding and erosion
- Correlated with traffic safety



GREEN INFRASTRUCTURE (GI)

- So we can transition from this…



GREEN INFRASTRUCTURE (GI)

- To a more sustainable future!

ADDITIONAL EXAMPLES

CURB EXTENSION

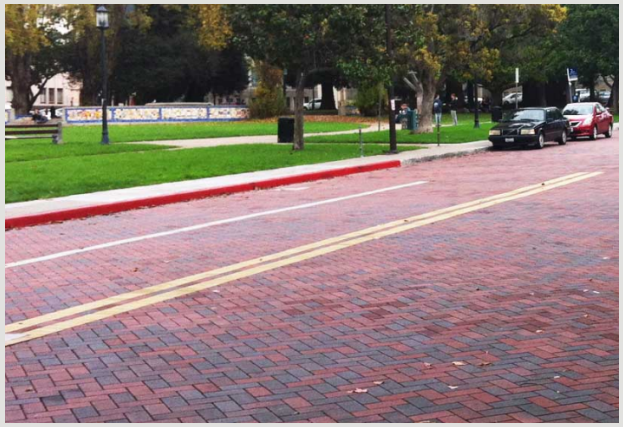
- Provides added buffer between vehicles and pedestrians
- Promotes safer pedestrian crossings and traffic calming

LANDSCAPE BARRIER

- Promotes safety between vehicles and bicycles
- Linear treatment ideal for lengthy street spans (Green Streets)

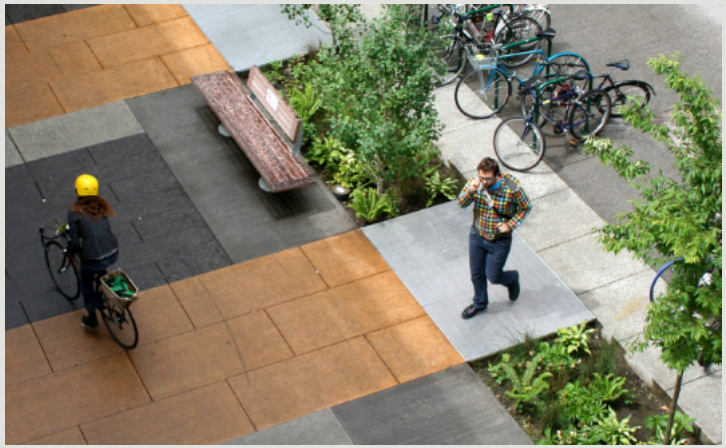
PERMEABLE PAVING

- Good option where space is constrained
- Utilized in parking lots and low density roads



STORM WATER TREATMENT PLANTERS

- Good option where space is limited (sidewalks, etc.)
- Enhances urban greenery and beautification



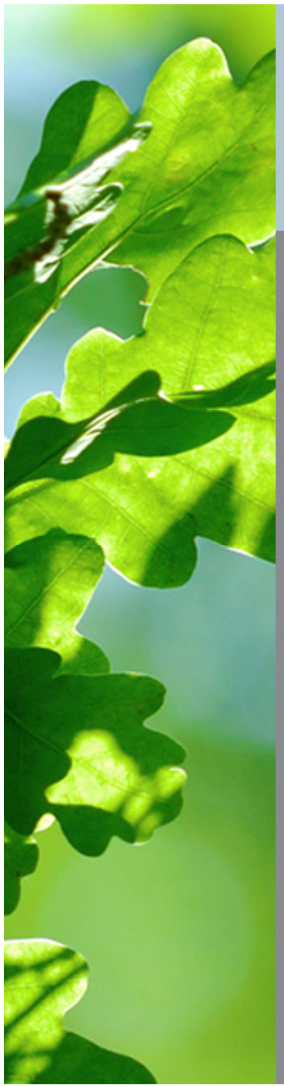
BIORETENTION AREA

- Can accommodate select trees to promote urban greenery
- Ideal for parking lots, parks, and wider streets

GREEN ROOF

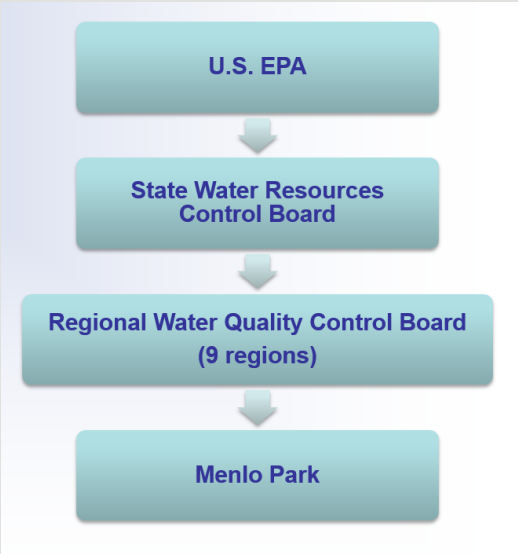
- Mitigates heat island effect and provides recreation
- Reduces energy usage to promote sustainability

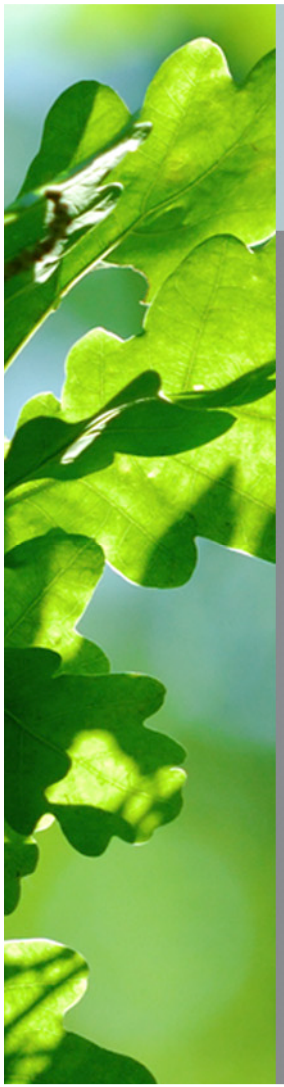
OUR GI PLAN



REGULATORY BACKGROUND

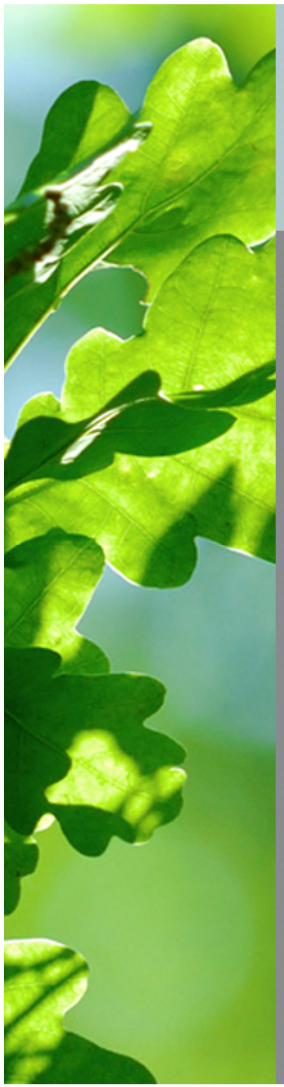
- The NPDES program is delegated to Regional Water Quality Control Boards
- Bay Area's Regional Board issues a Municipal Regional Permit (MRP) to regulate clean storm water
- The latest MRP requires Cities to prepare a master plan for storm water treatment by 9/30/19 (aka **GI Plan**)





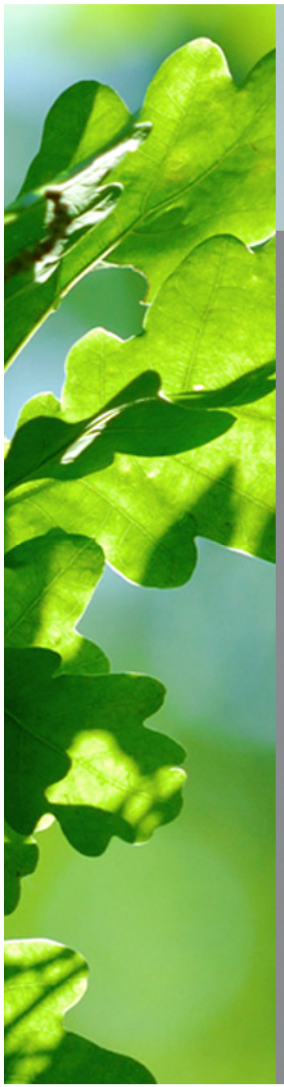
GI PLAN – OBJECTIVES

- For public parcels and ROW
- Update City policy
- Prioritize and track projects
- Establish design guidelines, outreach, and funding



GI PLAN – COMPLETED MILESTONES

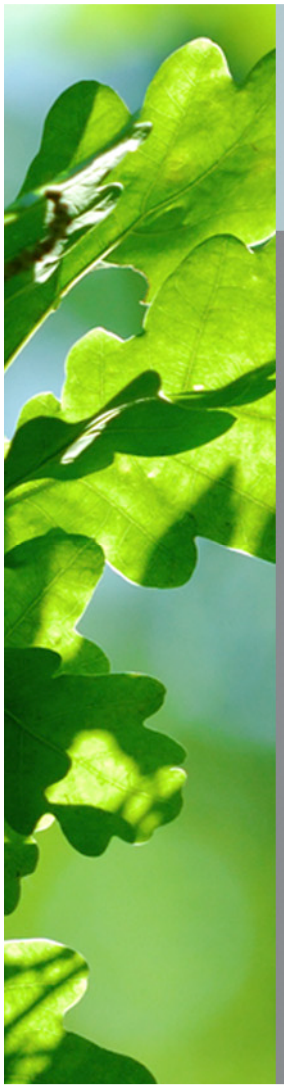
Council Actions	Adopted
Adopted Budgets(s) FY2016 - 2019	June 2015 – 2018
GI Workplan	May 23, 2017
RFP for GI Plan Consultant	July 3, 2017
Authorize Consultant Contract	August 6, 2018



GI PLAN – UPCOMING MILESTONES

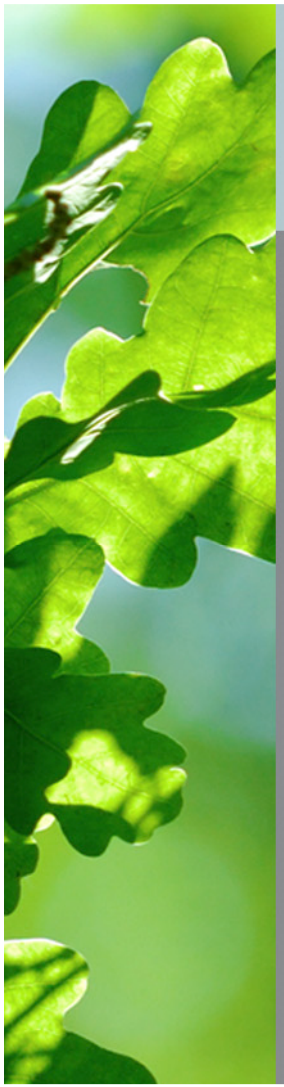
- We welcome your support moving forward!

Deliverable	Target Date
GI Plan – Final Draft	April 2019
Presentation to Council	May 21, 2019
Adoption by Council	July 16, 2019
Submittal to State	Sept 30, 2019



COMPLETE STREETS COMMISSION ROLE

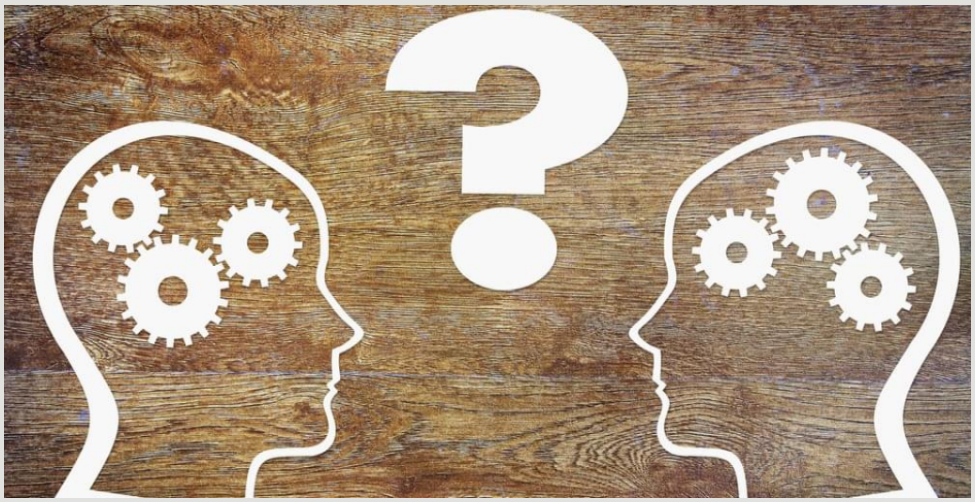
- Integrate GI as part of future Transportation initiatives
- Promote the concept of “no missed opportunities”
- Help promote GI outreach
- Review related GI guidelines and City policies on next slide



RELATED POLICIES & PLANS

- SMC's Sustainable Streets Guidelines: Link
- General Plan Update: Link
- Transportation Master Plan: Link
- Climate Action Plan: Link
- Parks and Recreation Facilities Plan: Link

QUESTIONS?



THANK YOU

THIS PAGE INTENTIONALLY LEFT BLANK

REGULAR MEETING MINUTES

Date: **2/13/2019**
Time: **7:00 p.m.**
City Council Chambers
701 Laurel St., Menlo Park, CA 94025

A. Call to Order

Chair Kirsch called the meeting to order at 7:02 p.m.

B. Roll Call

Present:	Behroozi (arrived at 8:22 p.m.), Goldin, Kirsch, Lee, Levin (arrived at 7:07 p.m.), Mazzara, Meyer, Walser, Weiner
Absent:	None
Staff:	Associate Transportation Engineer Kevin Chen, Junior Engineer Marlon Aumentado

Chair Kirsch welcomed the new Complete Streets Commissioner – Evan Goldin.

C. Reports and Announcements

Staff Chen announced upcoming City events and a summary of City Council actions on advisory commissions/committee organizational and transportation related items since the January 9, Commission meeting.

D. Public Comment

None.

E. Regular Business

E1. Approve the Complete Streets Commission regular meeting minutes of January 9, 2019 (Attachment)

ACTION: Motion and second (Lee/Walser) to approve the Complete Streets Commission regular meeting minutes of January 9, 2019, passed (7-0-1-1, Meyer abstained, Behroozi absent).

E2. Adopt a Resolution to install a passenger loading zone and red curb on Pine Street at Oak Grove Avenue (Staff Report #19-001-CSC)

Staff Aumentado provided a presentation (Attachment).

- Marie Moran requested that the project be postponed while the design feasibility of a vehicle cut-out on Oak Grove Avenue is being assessed.
- Bette Bohler spoke in opposition of the project. Bohler also requested that parking be removed on

one side of Pine Street to aid emergency vehicle access.
- Jen Wolosin spoke in support of the Oak Grove bike lanes and suggested working with the property owner to construct a new gate and pathway to allow building access from Pine Street.
- Phillip Bahr shared his email with the Commission, spoke in opposition of the project, and supported removing parking on one side of Pine Street (Attachment).

ACTION: Motion and second (Meyer/Mazzara) to adopt a resolution to install a 5-minute passenger loading zone and red curb on Pine Street at Oak Grove Avenue with an amendment to revert back if a vehicle cut-out on Oak Grove is feasible and constructed, passed (8-0-1; Behroozi absent).

E3. Discuss the Commission subcommittees

Chair Kirsch led a discussion and each subcommittee shared their goals and priorities.

ACTION: By acclamation, the Commission voted to:
- Select Commissioner Goldin to the Downtown Access and Parking Subcommittee
- Retitle Electric Vehicle Subcommittee to the Zero Emission Subcommittee
- Select Commissioner Goldin to the Zero Emission Subcommittee

E4. Discuss the Complete Streets Commission goals and priorities for 2019 - 2020

Chair Kirsch led a discussion.

- Jen Wolosin spoke in support of obtaining a civil engineer for the capital improvement division under public works, dedicated to safe routes to school transportation infrastructure projects.

ACTION: By acclamation, the Chair and Vice Chair will summarize the feedback and provide staff a list of Commission goals and priorities offline.

F. Informational Items

F1. Update on major project status

Staff Chen provided updates on the transportation master plan, Ravenswood Avenue railroad crossing project, Middle Avenue pedestrian and bicycle rail crossing, Willow Road and U.S. Highway 101 interchange construction, and a construction bid for rectangular rapid flashing beacons at five locations.

G. Committee/Subcommittee Reports

G1. Update from Active Transportation Network Subcommittee

None.

G2. Update from Electric Vehicle Subcommittee

None.

G3. Update from Downtown Access and Parking Subcommittee

None.

G4. Update from Multimodal Subcommittee

Commissioner Levin provided meeting summary from a Silicon Valley Regional Rail Committee meeting that she attended.

G5. Update from Safe Routes to School Program Subcommittee

None.

G6. Update from Transportation Master Plan Subcommittee

None.

H. Adjournment

Chair Kirsch adjourned the meeting at 9:28 p.m.

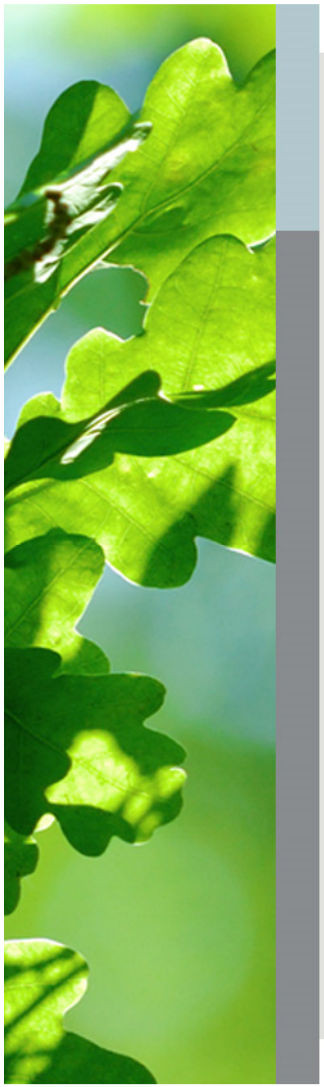
THIS PAGE INTENTIONALLY LEFT BLANK

PINE STREET LOADING ZONE

Marlon Aumentado

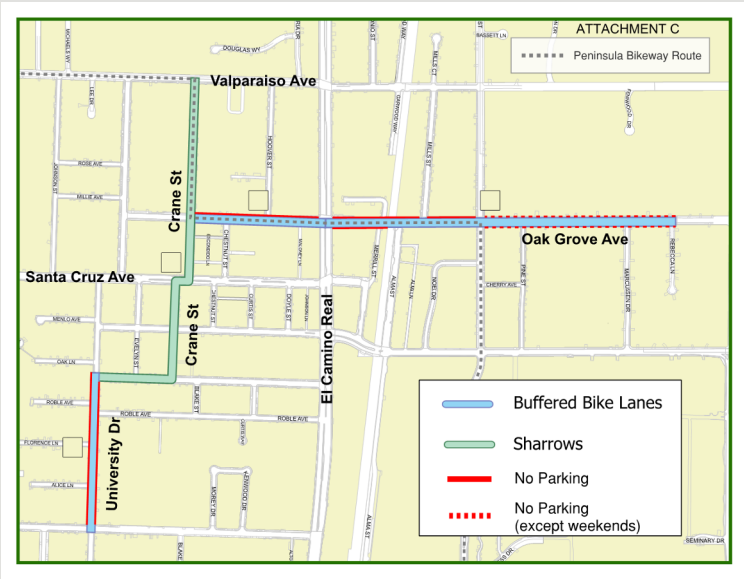
AGENDA

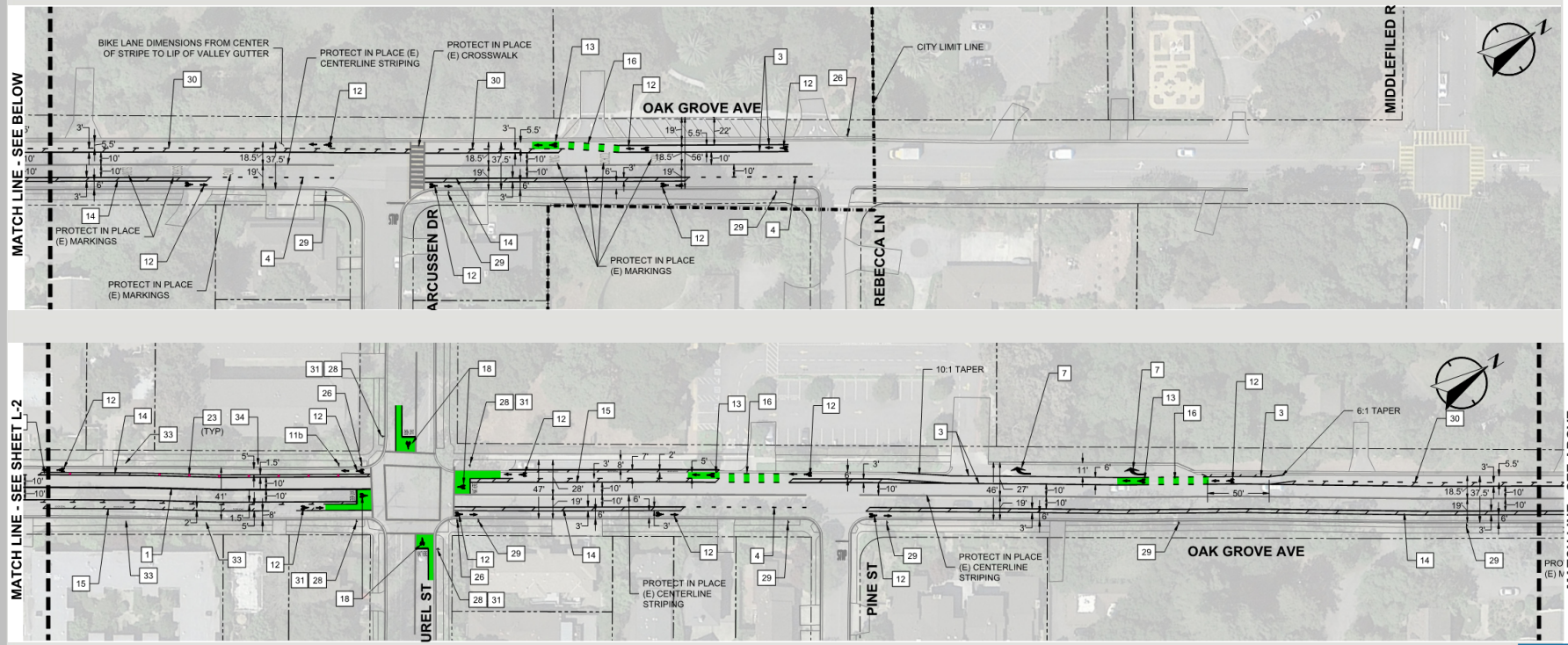
- Background Information
- Analysis
- Proposal



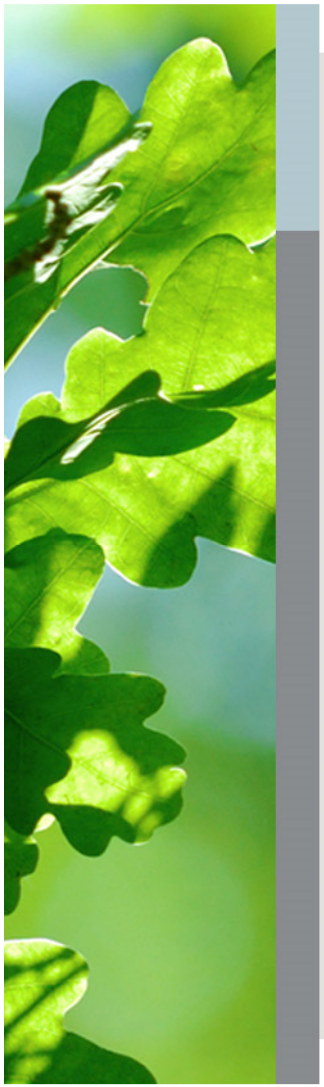
BACKGROUND INFORMATION

- Nov 13, 2018
  - City Council adopted resolution to approve the permanent installation of bicycle facilities and remove parking on Oak Grove Avenue
  - Council directed staff to move forward with implementation of a loading zone on Pine Street while the feasibility of a vehicle cut-out on Oak Grove is assessed

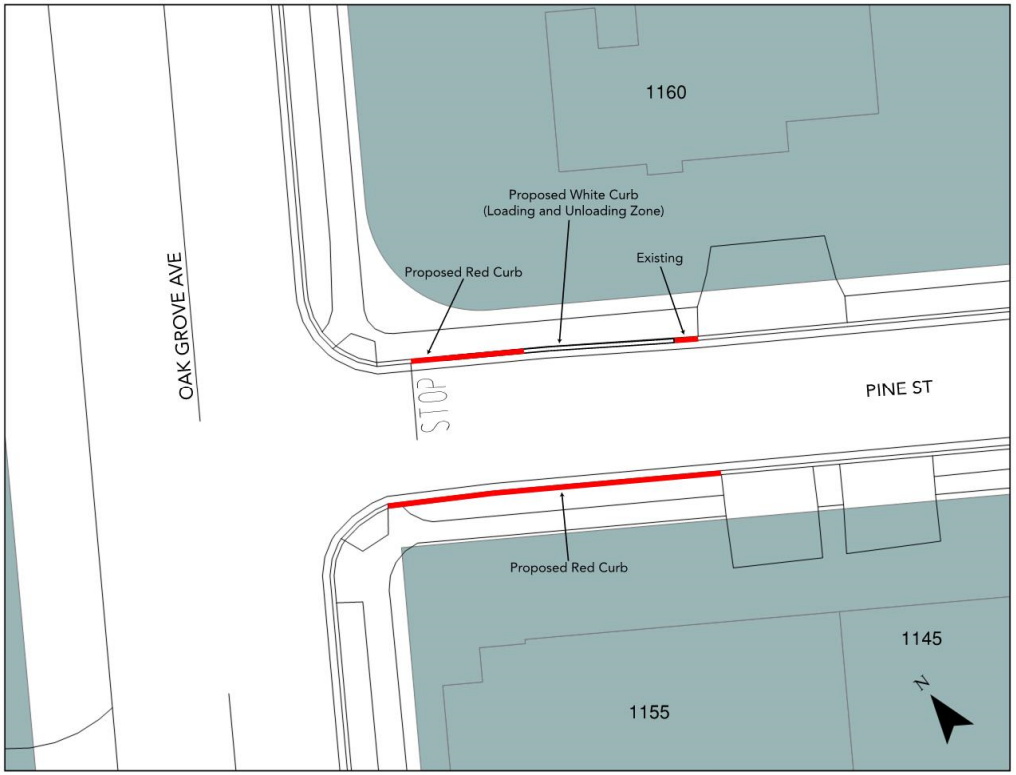


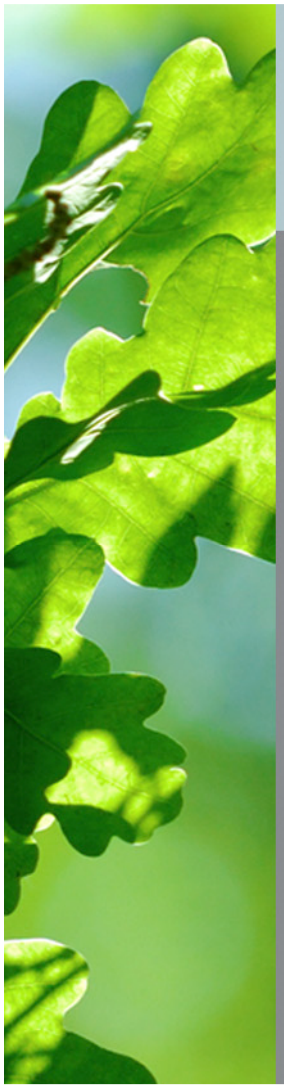

MATCH LINE - SEE BELOW
BIKE LANE DIMENSIONS FROM CENTER OF STRIPE TO LIP OF VALLEY GUTTER
PROTECT IN PLACE (E) CENTERLINE STRIPING
PROTECT IN PLACE (E) CROSSWALK
OAK GROVE AVE
CITY LIMIT LINE
MIDDLEFILED R
PROTECT IN PLACE (E) MARKINGS
PROTECT IN PLACE (E) MARKINGS
PROTECT IN PLACE (E) MARKINGS
ARCUSSEN DR
REBECCA LN
MATCH LINE - SEE SHEET L-2
10:1 TAPER
6:1 TAPER
OAK GROVE AVE
PROTECT IN PLACE (E) CENTERLINE STRIPING
PROTECT IN PLACE (E) CENTERLINE STRIPING
UREL ST
PINE ST
MATCH LINE - SEE ABOVE

PINE STREET



PROPOSAL


1160
Proposed White Curb
(Loading and Unloading Zone)
Proposed Red Curb
Existing
OAK GROVE AVE
STOP
PINE ST
Proposed Red Curb
1145
1155
N



Staff recommends that the Complete Streets Commission adopt a resolution to install a 5-minue passenger loading zone (white curb and signage) and red curb (removing a total of three on-street parking spaces) on Pine Street at Oak Grove Avenue to provide a short-term loading area for adjacent residents

THANK YOU

From: Phillip Bahr <bahr5@outlook.com>
Sent: Wednesday, February 13, 2019 3:17 PM
To: transportation@menlopark.org
Cc: Phillip Bahr
Subject: "Potential White Curb Installation" (Pine Street, Transportation Meeting Agenda Item on 2/13/2019)

To Whom This Concerns:

I am in opposition to the proposal of the Potential White Curb Installation on Pine Street. The proposed Potential White (and Red) Curb Installation does not add parking, it removes parking.

REQUEST: I agree that we have a parking and access problem on Pine Street. What can I do to assist in a prompt resolution (say within the next thirty to ninety days)?

BACKGROUND: We have a bigger and yet connected problem on Pine Street. Safety and Accessibility. Pine Street is approximately twenty five feet in width. This width does not comply with current transportation standards. Cars and trucks oftentimes park illegally on our sidewalks and California Water Service meter covers. I've been told that the reason folks park on our sidewalk is to avoid getting their vehicles damaged. They've damaged our sidewalks, street tree planting areas and utility covers.

Vehicles also use our street as a short cut. I have witnessed cars darting across Ravenswood and Oak Grove onto Pine Street as they leave from a local business and school.

Of most concern, fire trucks and ambulances are unable to drive down our street in an emergency if cars are parked on both sides of the street. This is an unacceptable situation and the City was notified of this condition in 2017.

Kind Regards,

Phillip Bahr
1119 Pine Street, B
Menlo Park, CA 94025

THIS PAGE INTENTIONALLY LEFT BLANK

Active Transportation Network Subcommittee -
Middle Avenue Bike Lane Proposal

Scope Summary

Middle Ave is an important part of the transportation network as it fronts Safeway Plaza, Nealon and Lyle Parks, two senior centers, a preschool and other community amenities. Bicyclists use Middle Ave as a route to Hillview School and to the bike bridge at the south end of San Mateo Dr. The Stanford project at 500 El Camino Real, recent capital investments in both Nealon and Lyle Parks and the eventual construction of the Caltrain undercrossing will make Middle Ave even more critical to a well-functioning transportation system for the city. The Complete Streets Commission has prioritized a proposal which includes:

1. Improved access to Safeway Plaza for cyclists and pedestrians
2. Improved bike/ped crossings to Nealon Park at Blake and Roble entrances
3. Improved bike/ped crossing to Lyle Park at Arbor Rd
4. Improved bike/ped crossing to the San Mateo bike bridge at San Mateo Ave
5. Continuous standard, buffered or protected bike lanes along the entire length of Middle Ave, with at least one side of street parking to be removed
6. Continuous bike lanes along Olive St to Santa Cruz Ave and Hillview Middle School, with potential parking restriction or removal
7. Parking safety improvements along Nealon Park frontage
8. Improved El Camino Real crossing to Middle Plaza at 500 ECR
9. Sidewalk improvements along south side of Middle Ave

Key Project Activities and Timeline

1. Complete Streets Commission to evaluate and recommend preferred design alternative on Middle Ave from San Mateo to Olive in anticipation of the tentative 2020 repaving of the same street segment (Winter 2019)
2. Complete Streets Commission to support improvements related to the completion and occupancy of 500 ECR and ongoing study of the Middle Avenue Caltrain crossing (ongoing)
3. City Council to identify resources for evaluation, design, and implementation

THIS PAGE INTENTIONALLY LEFT BLANK

Middle Ave from University to ECR connects the busiest areas in Menlo Park which generate thousands of car trips per day.

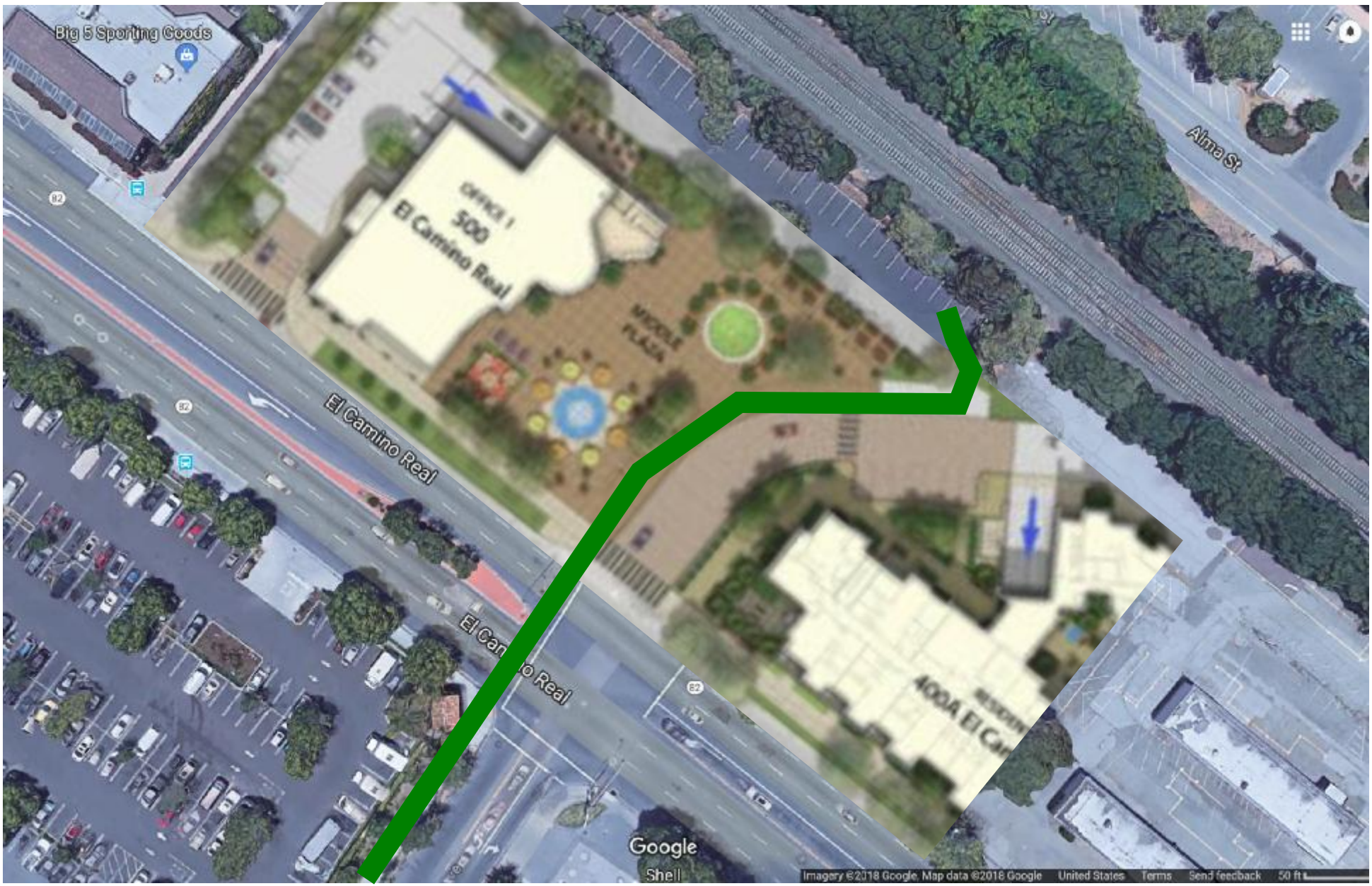
Middle Ave has no bike infrastructure. Walking and biking conditions around Nealon Park are unsafe and undignified. Safeway has limited bike accessibility.

Pedestrians forced to walk on uneven pavement between cars and hedges.

Nealon crosswalk at Blake requires walking through gutte


Middle Ave
Google

Widened sidewalk fronting Safeway on Middle becomes mixed use path across ECR to Middle Plaza, Big 5 and tunnel.



Detail view of Safeway separated sidewalk and bike lanes.
Separate Safeway bike entrance with bike parking.
Car entrance will require enhancements to increase visibility in both directions.
Exit to northbound ECR will use ECR exit and Uturn at Middle (yellow line)

Palo Alto Middlefield Rd two-way protected bike lane

"Ohtaki Left" - Northbound Safeway traffic uses ECR turn lane instead of Middle Ave. No right turns allowed into Safeway from Middle.

Two-way protected bike lane from Nealon Park to Safeway.

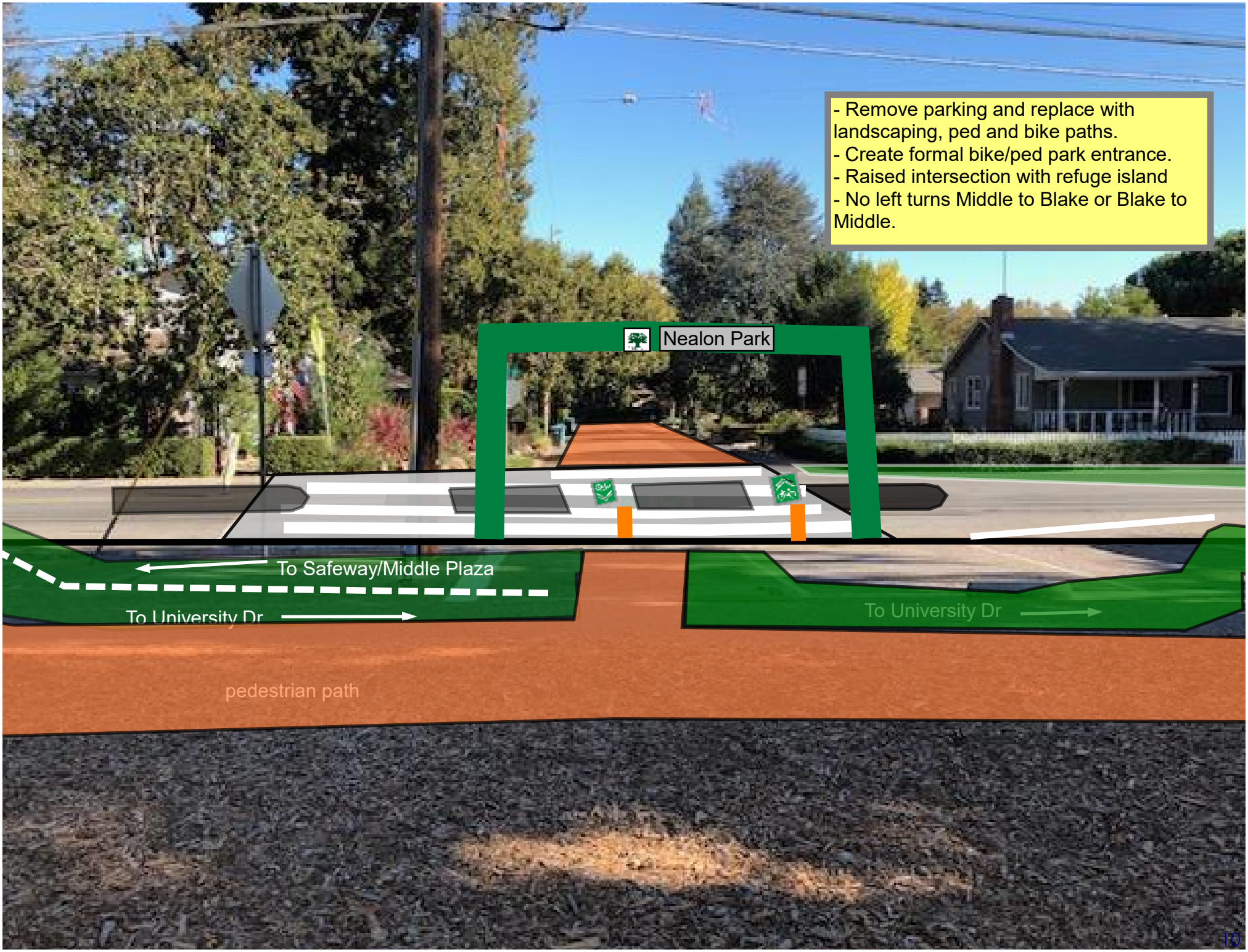
Becomes protected one-way bike lanes west of Blake.

East of Blake parking remains on south side of Middle.

Ample parking available (subject to parking study) in the Nealon parking lot so parking is removed from park frontage on Middle. Space is reclaimed for landscaping and paths.

Raised crosswalk with pedestrian refuge prohibits left turns on to and out of Blake.

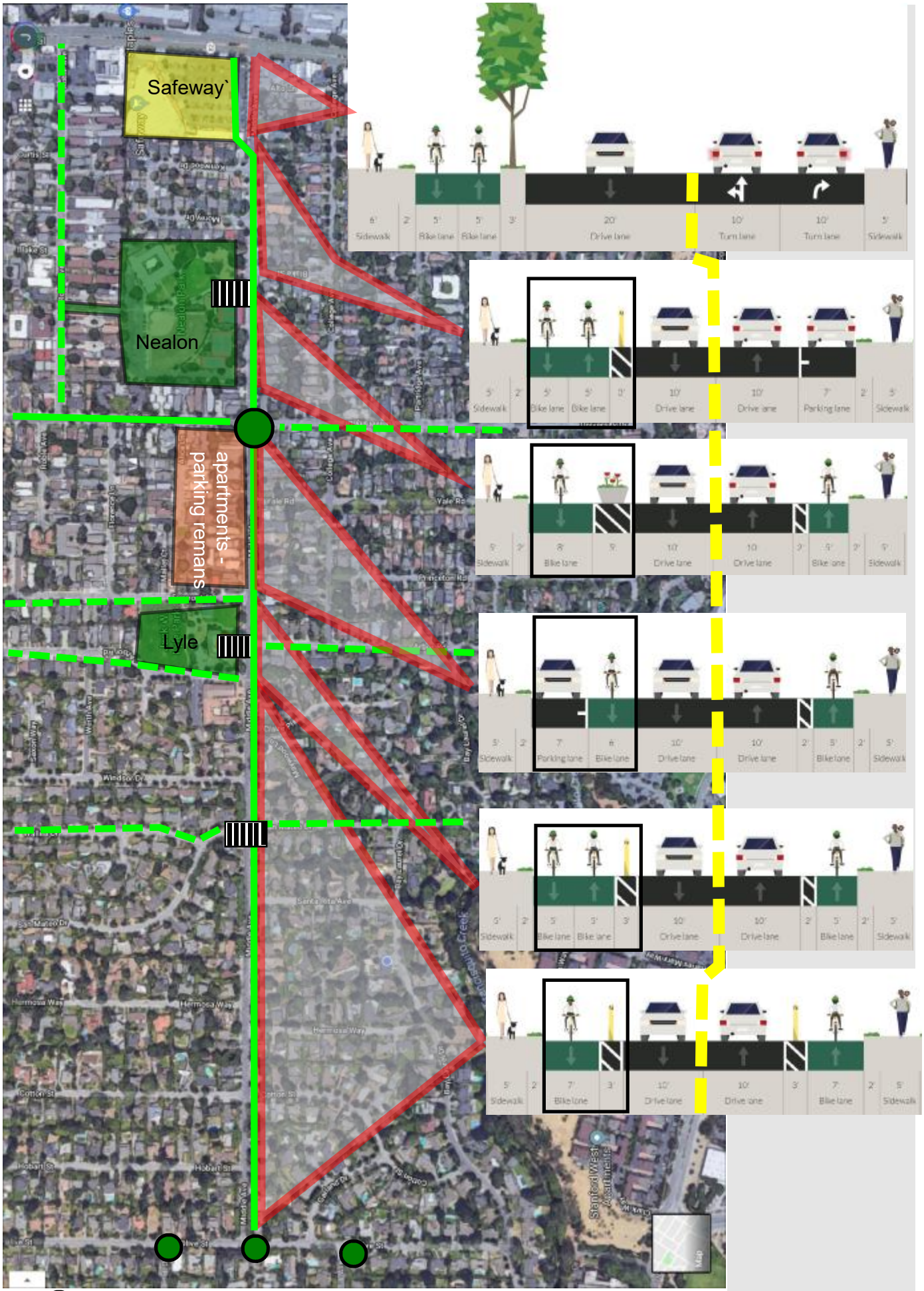

View from Nealon Park looking south toward Blake St.
Existing crosswalk at Blake has no sidewalk on one side and is between a sign and utility pole


- Remove parking and replace with landscaping, ped and bike paths.
- Create formal bike/ped park entrance.
- Raised intersection with refuge island
- No left turns Middle to Blake or Blake to Middle.
Nealon Park
To Safeway/Middle Plaza
To University Dr
To University Dr
pedestrian path


Existing Roble
entrance path


Improved lighting
Nealon Park
improved surface

Middle Ave proposal



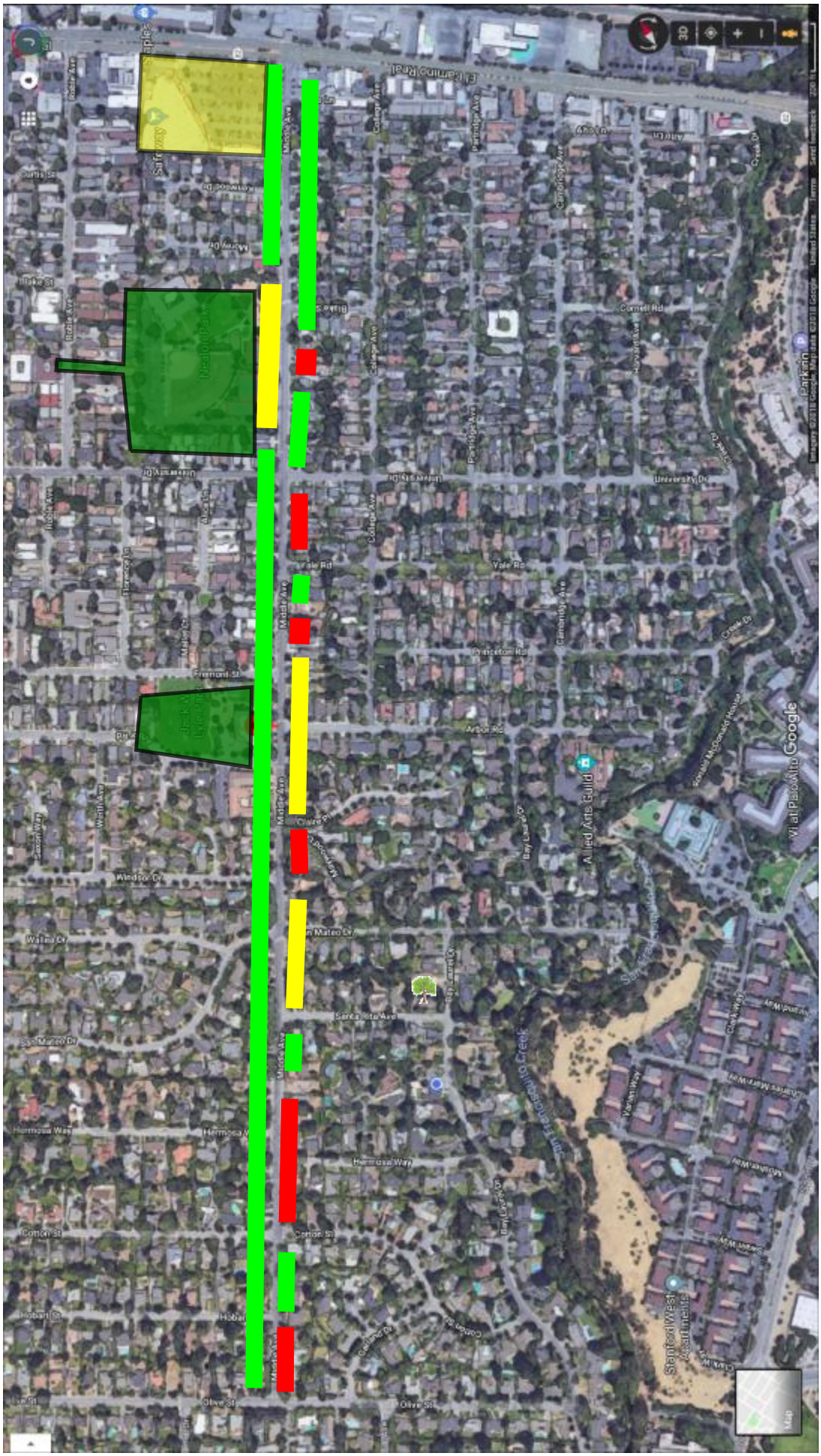
traffic circle

raised crosswalk

MIddle Ave continues westward via Oak and Oakdell which induces large numbers of turns between the segments. Traffic circles can be used to facilitate turning and to improve safety for all travel modes.

traffic circle

raised crosswalk



Middle Ave sidewalk conditions north and south sides

paved sidewalk

unpaved sidewalk

no sidewalk

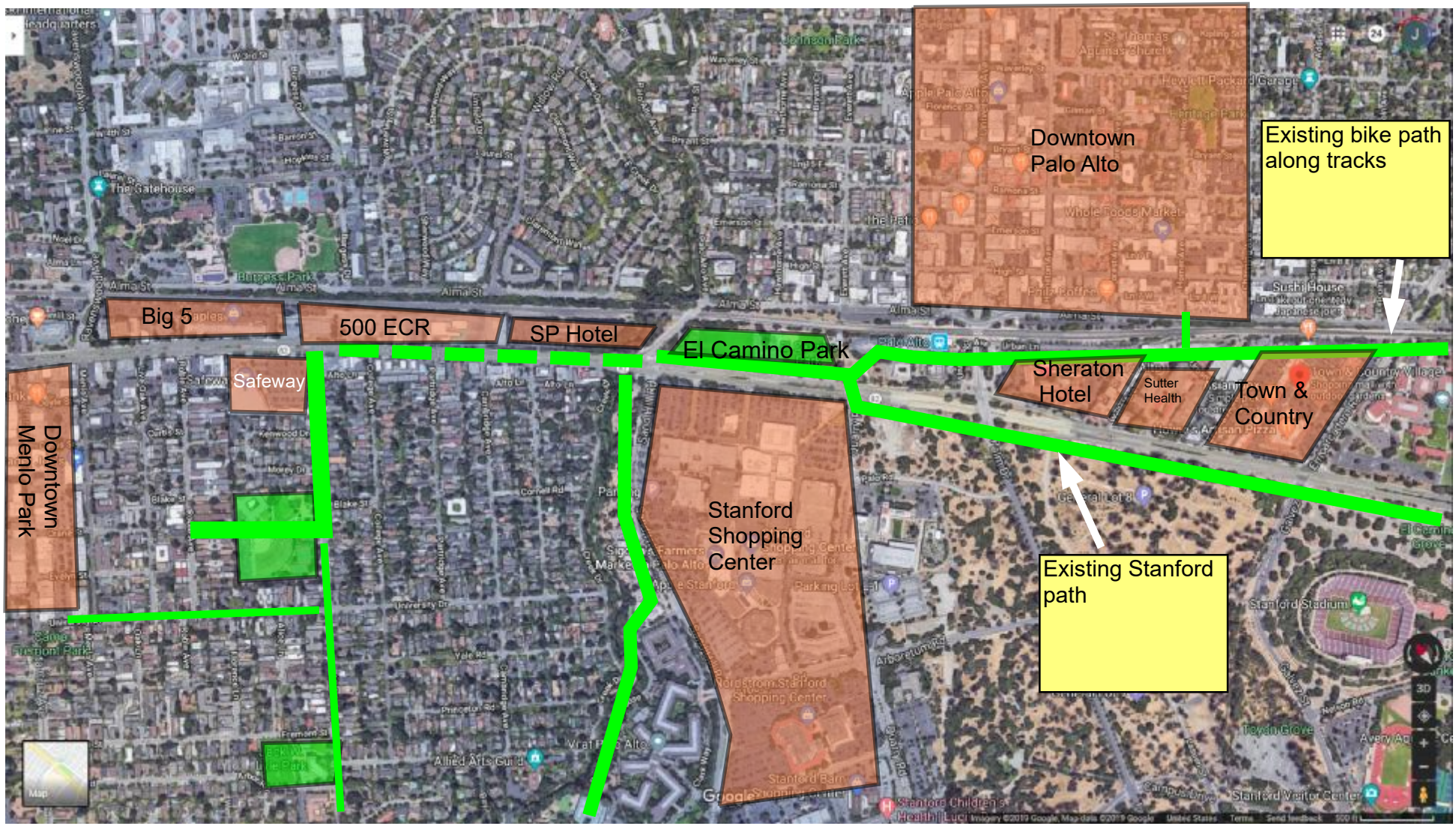
All intersections should have marked crosswalks.

Use bulbouts on corners to reduce crossing distances and slow turning cars.

Olive St proposal

Parking available whereever easement space is available. No parking on street.

Santa Cruz Ave & Olive: Raised intersection with RRFB.
Potential for moving playground equipment to existing grass area and creating new bike entrance to Hillview School with additional bike parking.



Missing Link: Extend El Camino Park path to Middle Ave to combine it with existing facilities: Stanford, Caltrain, Sutter Health, Town & Country, Sheraton Hotel, etc. Use ECR east side parking lane for two-way protected bike path, shown as dashed green line. Also expand adjacent sidewalk by replacing plantings with sidewalk.

Multi-year effort involving Palo Alto, Caltrans, Stanford, Managers Mobility Partnership.

ATTACHMENT G-3

Caltrain Business Plan

FEBRUARY 2019

LPMG

February 28, 2019

Caltrain

Caltrain Business Plan Project Update

What is the Caltrain Business Plan?

What Addresses the future potential of the railroad over the next 20-30 years. It will assess the benefits, impacts, and costs of different service visions, building the case for investment and a plan for implementation.

Why Allows the community and stakeholders to engage in developing a more certain, achievable, financially feasible future for the railroad based on local, regional, and statewide needs.

What Will the Business Plan Cover?

Technical Tracks

Service

- Number of trains
- Frequency of service
- Number of people riding the trains
- Infrastructure needs to support different service levels

Business Case

- Value from investments (past, present, and future)
- Infrastructure and operating costs
- Potential sources of revenue

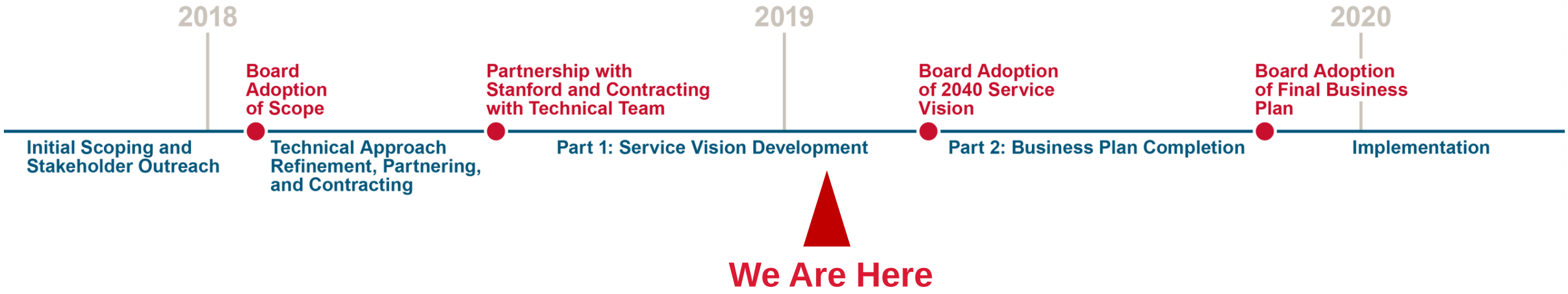
Community Interface

- Benefits and impacts to surrounding communities
- Corridor management strategies and consensus building
- Equity considerations

Organization

- Organizational structure of Caltrain including governance and delivery approaches
- Funding mechanisms to support future service

Where Are We in the Process?



Recap- Planning for Service in 2040

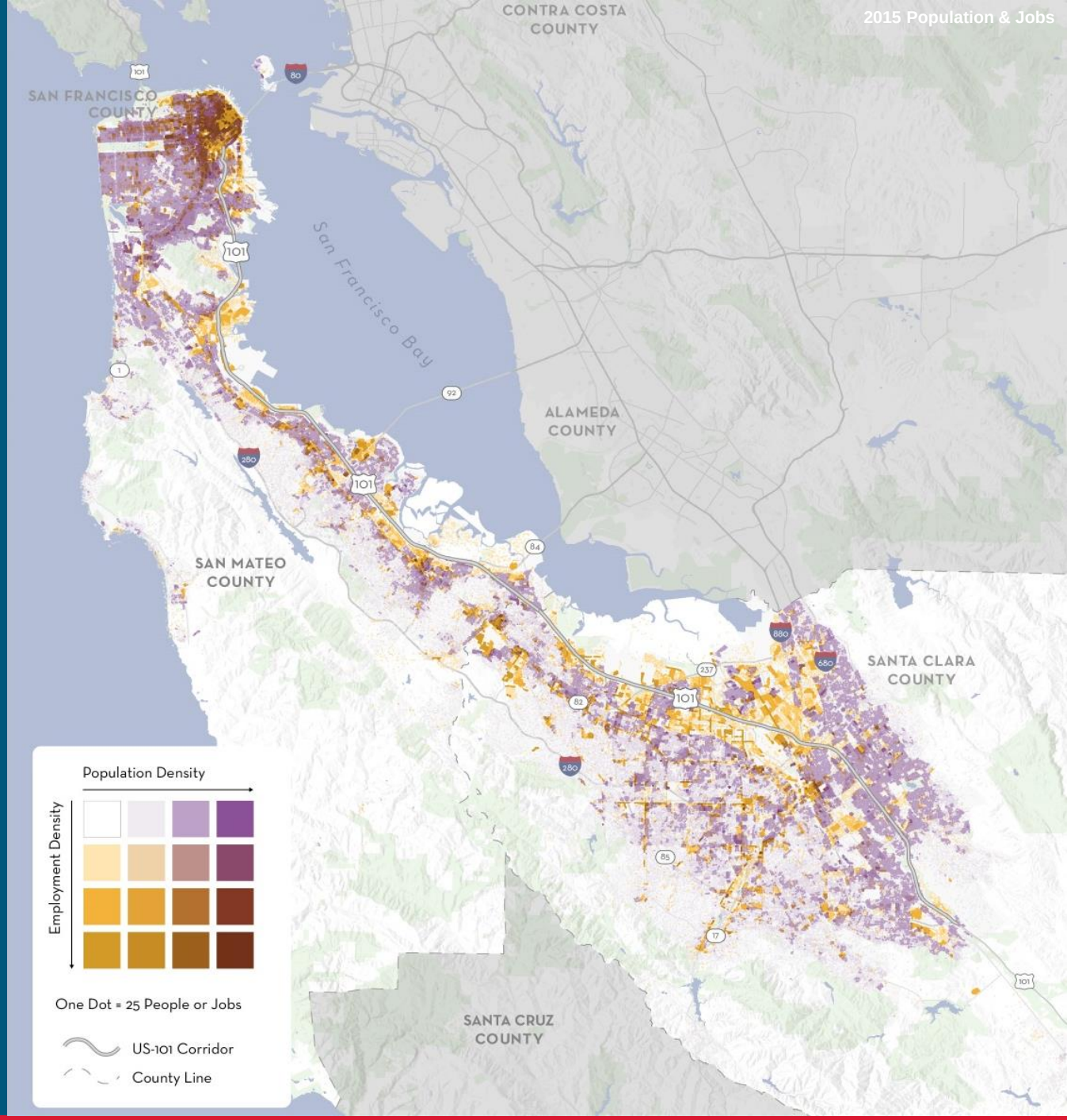
2040 Demand

The Caltrain corridor is growing

- Corridor expected to add 1.2 million people and jobs within 2 miles of Caltrain (+40%)[1]
- 80% of growth expected in San Francisco and Santa Clara Counties

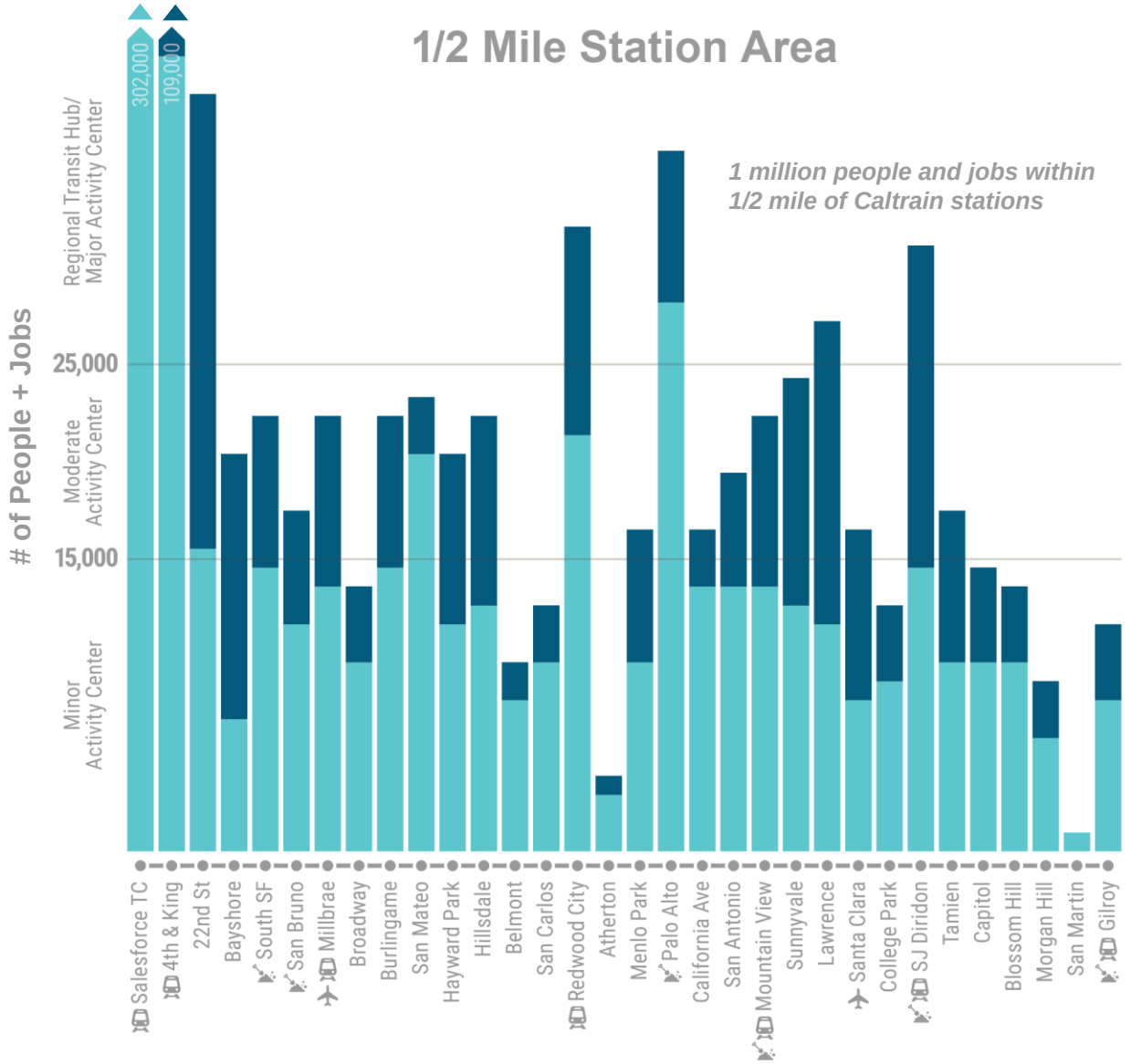
Major transit investments are opening new travel markets to Caltrain

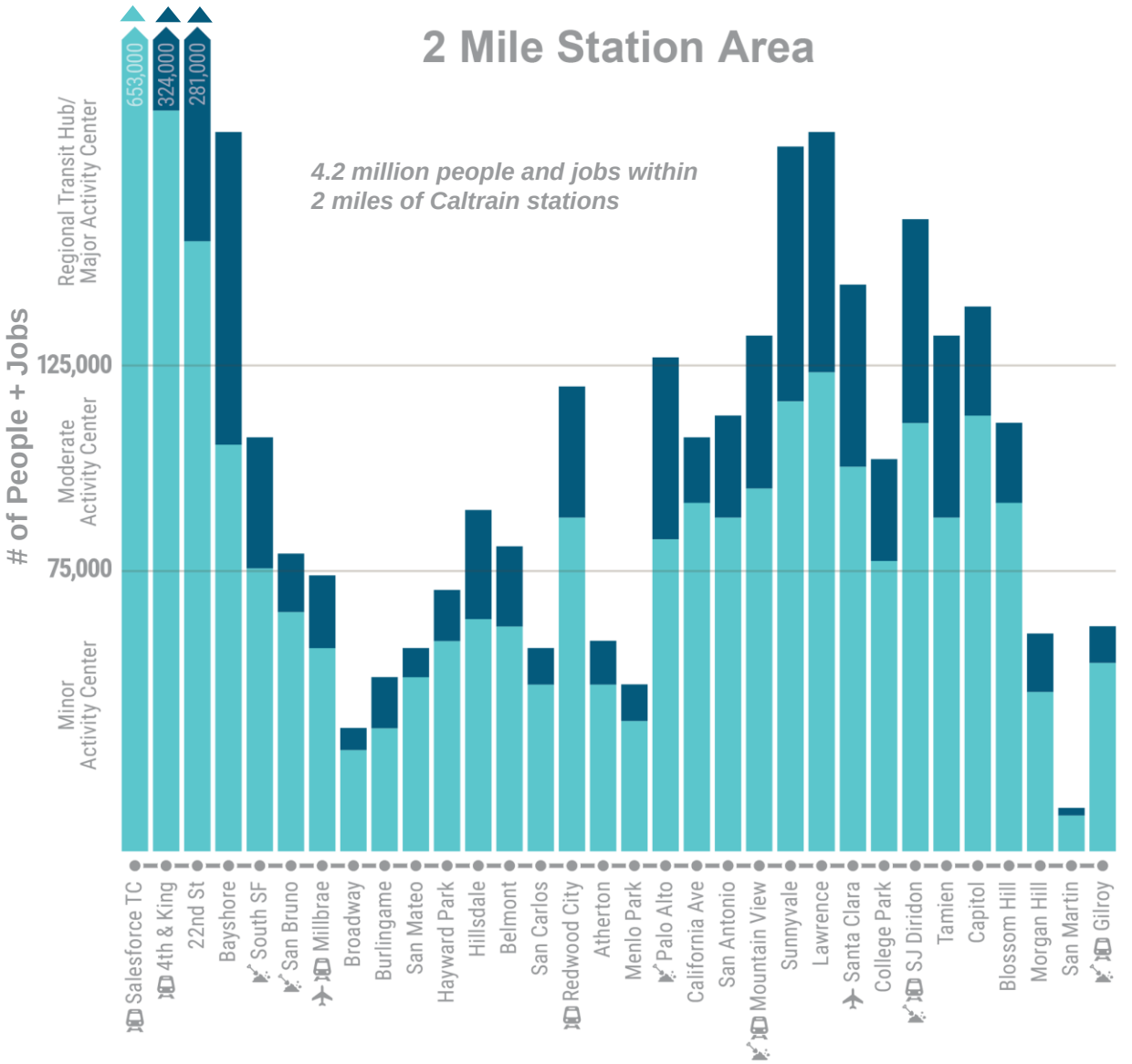
- Downtown Extension and Central Subway to provide more direct connections to downtown San Francisco
- Dumbarton Rail, BART to San Jose, and improvements to Capitol Corridor and ACE to strengthen connectivity with East Bay
- HSR and Salinas rail extensions to increase interregional travel demand



[1]Based on Plan Bay Area forecasts and approved projects by individual cities

2040 Land Use & Transportation Context

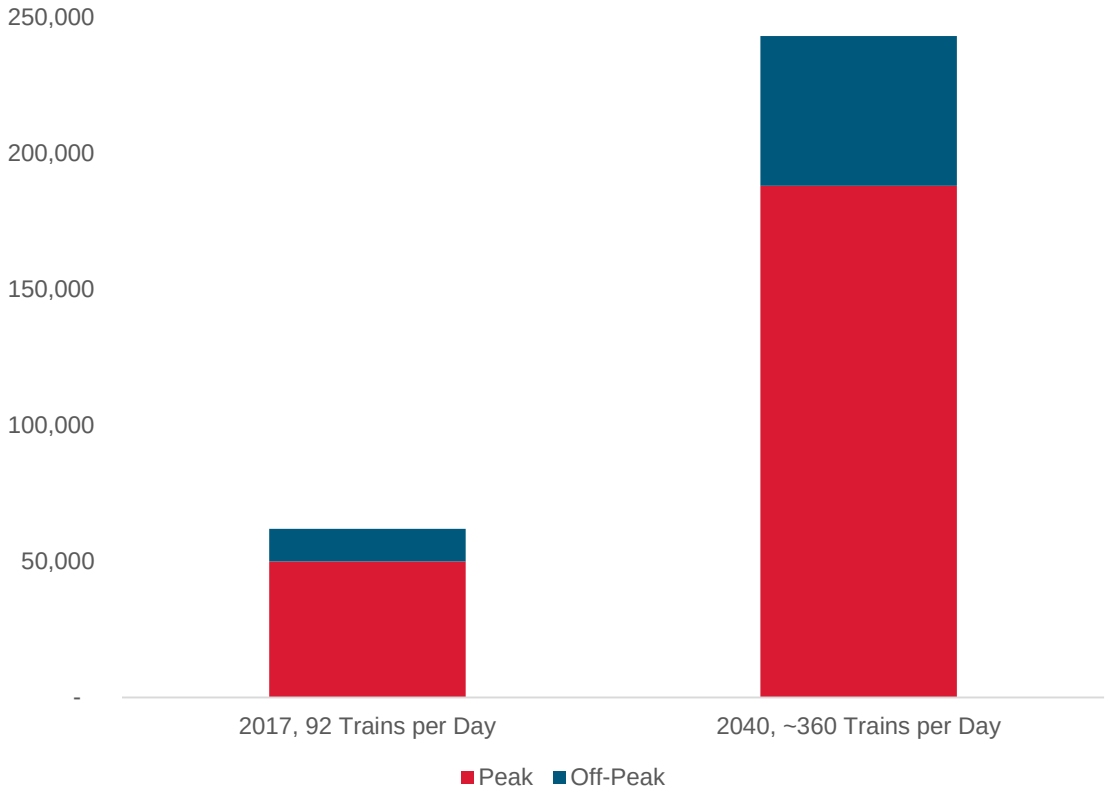




Indicates a station where substantial growth beyond Plan Bay Area forecasts is anticipated, but not yet approved

Exploring the Potential Long Term Demand for Caltrain Service

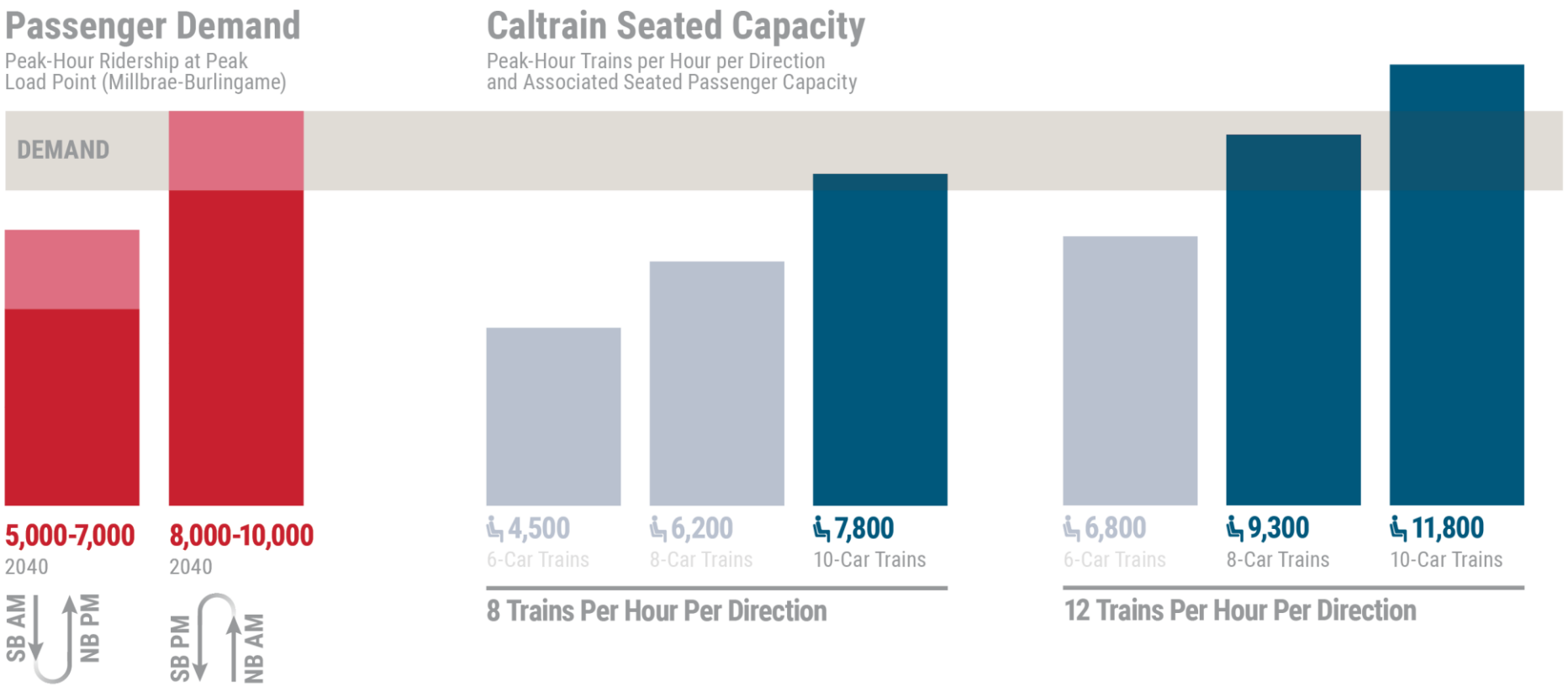
Using Plan Bay Area numbers for projected growth in jobs and housing, an unconstrained model run of high frequency, all-day BART-like service in the Caltrain corridor suggests that by 2040 there could be underlying demand for approximately 240,000 daily trips on the system



Description	2017: 92 Trains/Day	2040: ~360 Trains/Day
Daily	**62,000**	**240,000**
Peak	50,000	185,000
Off-Peak	12,000	55,000

Throughput Demand vs. Capacity

To comfortably serve the full potential market for rail in 2040, Caltrain would need to operate 8 trains per hour, per direction (TPHPD) with 10 car trains or 12 TPHPD with 8 or 10 car trains



Seated capacity based on Stadler EMU with different door and bike car configurations. Does not include consideration of potential HSR capacity to serve demand

Choosing a Vision: How Will the Railroad Grow?

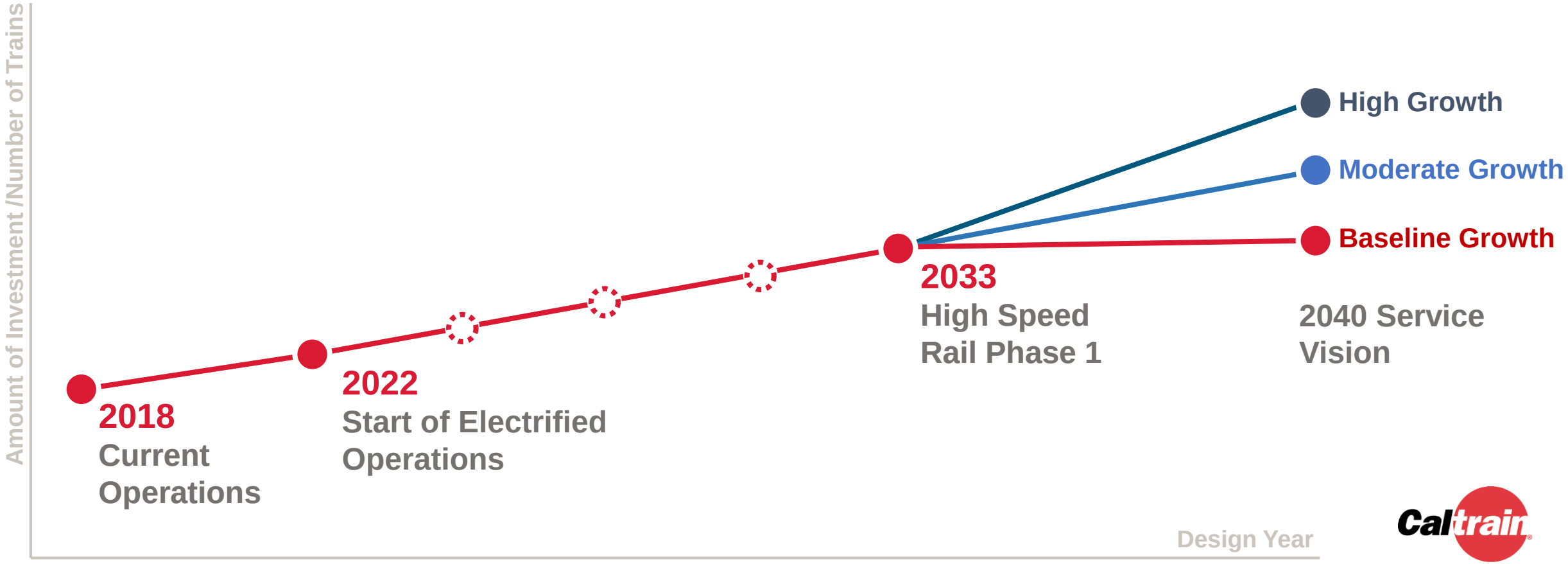
What

In the Spring of 2019 the team will present three growth scenarios to the Board. One “baseline” scenario will reflect past and ongoing Blended System planning efforts while two new scenarios will explore higher levels of growth. Each scenario will provide a detailed picture of how the railroad could grow over the next 20-30 years. The Board will be asked to choose one of these growth scenarios as the “Service Vision” for the corridor

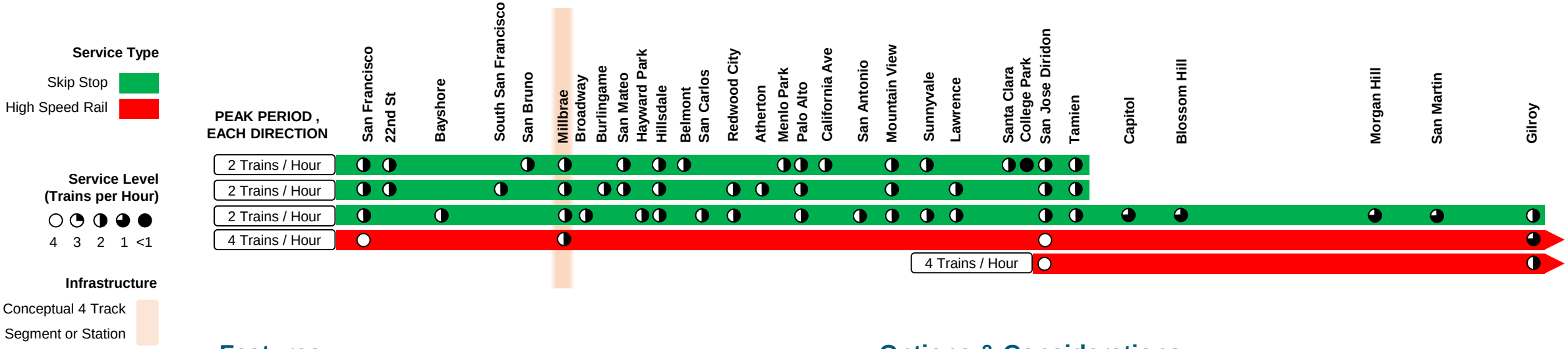
Why

In selecting a long range Service Vision the Board will answer the question “How should the railroad grow?” This will allow Caltrain to further optimize and refine the Vision while developing a Business Plan that builds towards the future in a consistent and efficient manner

2040 Service Scenarios



2040 Baseline Growth Scenario (6+4 Trains)



Features

- Blended service with up to 10 TPH north of Tamien (6 Caltrain + 4 HSR) and up to 10 TPH south of Tamien (2 Caltrain + 8 HSR)
- Three skip stop patterns with 2 TPH – most stations are served by 2 or 4 TPH, with a few receiving 6 TPH
- Some origin-destination pairs are not served at all

Passing Track Needs

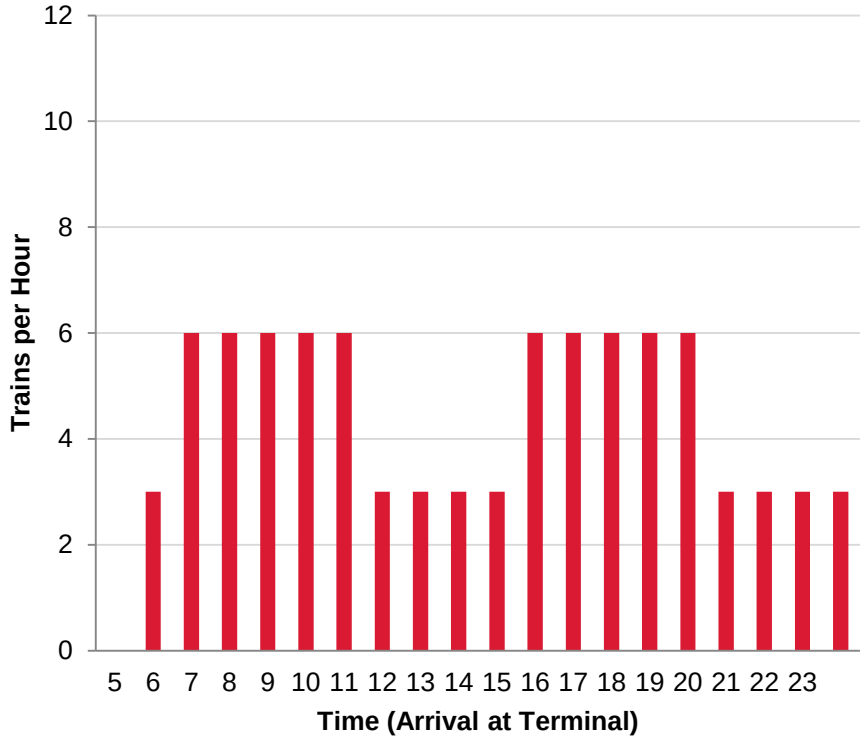
- Less than 1 mile of new passing tracks at Millbrae associated with HSR station plus use of existing passing tracks at Bayshore and Lawrence

Options & Considerations

- Service approach is consistent with PCEP and HSR EIRs
- Opportunity to consider alternative service approaches later in Business Plan process

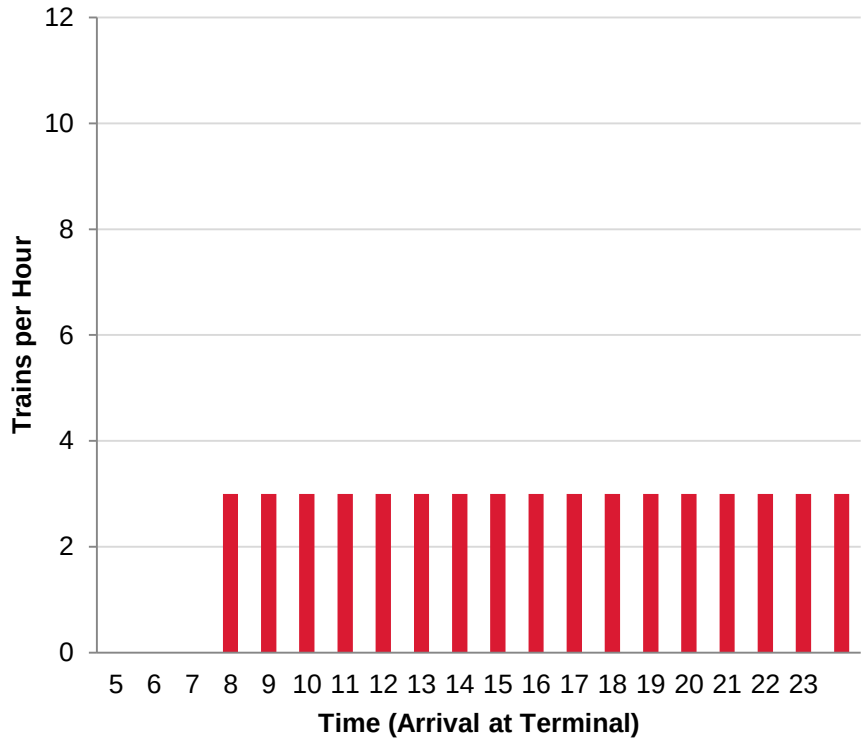
Baseline Growth Scenario – Full Day

Weekday Service



- 6 TPH during morning and evening peak periods (3 skip stop patterns at 2 TPH)
- 3 TPH during morning and evening off peak periods (3 skip stop patterns at 1 TPH)
- HSR operates 4 TPH during peak period and 3 TPH during off-peak periods

Weekend Service

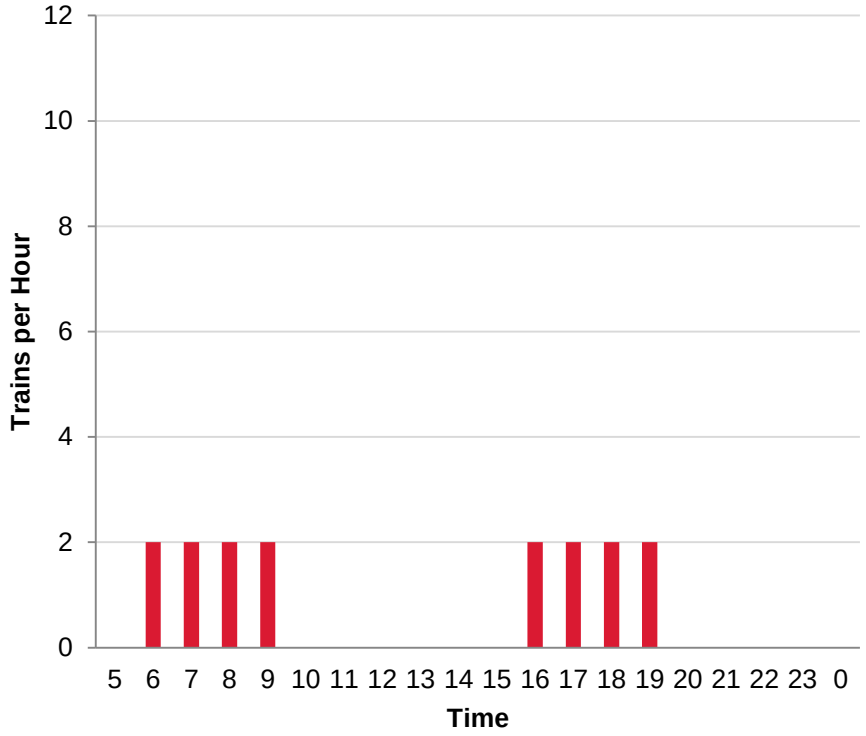


- 3 TPH during morning and evening peak periods (3 skip stop patterns at 1 TPH)
- HSR operates three trains per hour

Charts depict Caltrain arrivals only

Baseline Growth – South of Tamien

Weekday Service



- Caltrain: 2 TPH with skip stop service
- HSR: 8 TPH during peak periods and 4 TPH during off-peak periods

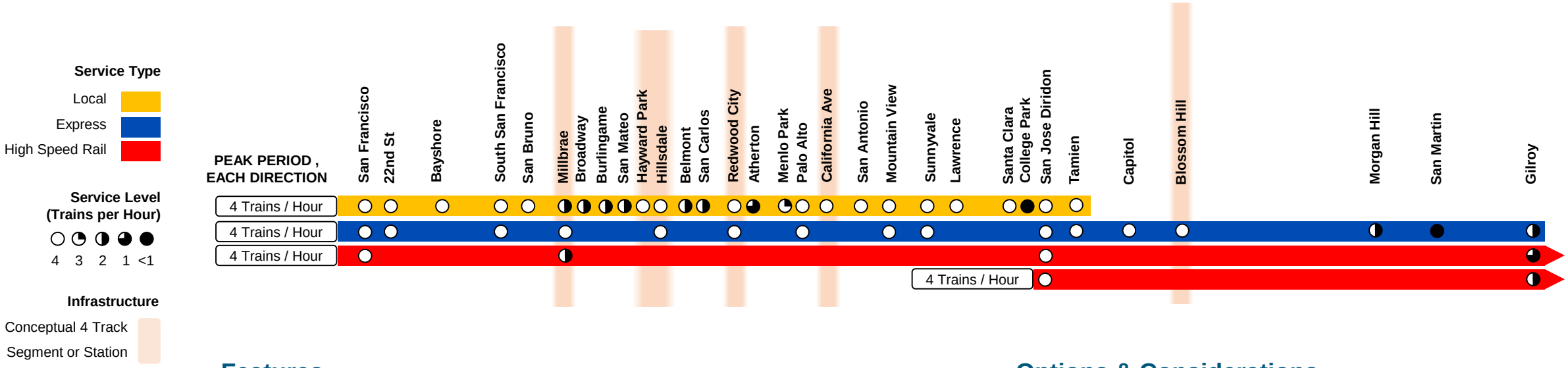
Weekend Service

NO WEEKEND CALTRAIN SERVICE

- HSR: 4 TPH throughout the day

Charts depict Caltrain arrivals only

Moderate Growth Scenario (8+4 Trains)



Features

- A majority of stations served by 4 TPH local stop line, but Mid-Peninsula stations are serviced with 2 TPH skip stop pattern
- Express line serving major markets – some stations receive 8 TPH
- Timed local/express transfer at Redwood City

Passing Track Needs

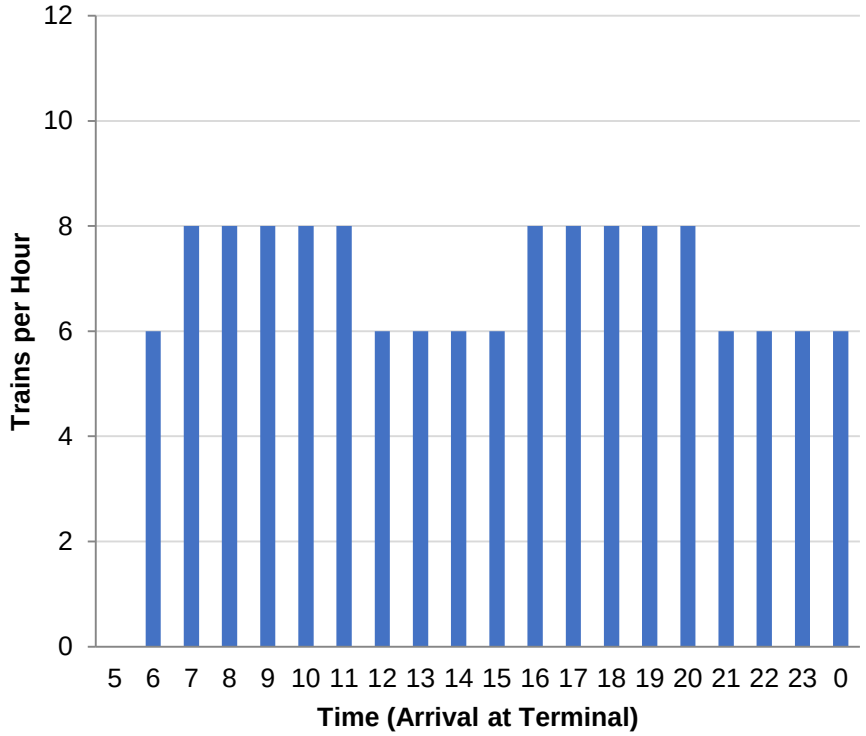
- Up to 4 miles of new 4-track segments and stations: Hayward Park to Hillsdale, at Redwood City, and a 4-track station in northern Santa Clara county (Palo Alto, California Ave, San Antonio or Mountain View. California Ave Shown)

Options & Considerations

- To minimize passing track requirements, each local pattern can only stop twice between San Bruno and Hillsdale - in particular, San Mateo is underserved and lacks direct connection to Millbrae
- Each local pattern can only stop once between Hillsdale and Redwood City
- Atherton, College Park, and San Martin served on an hourly or exception basis

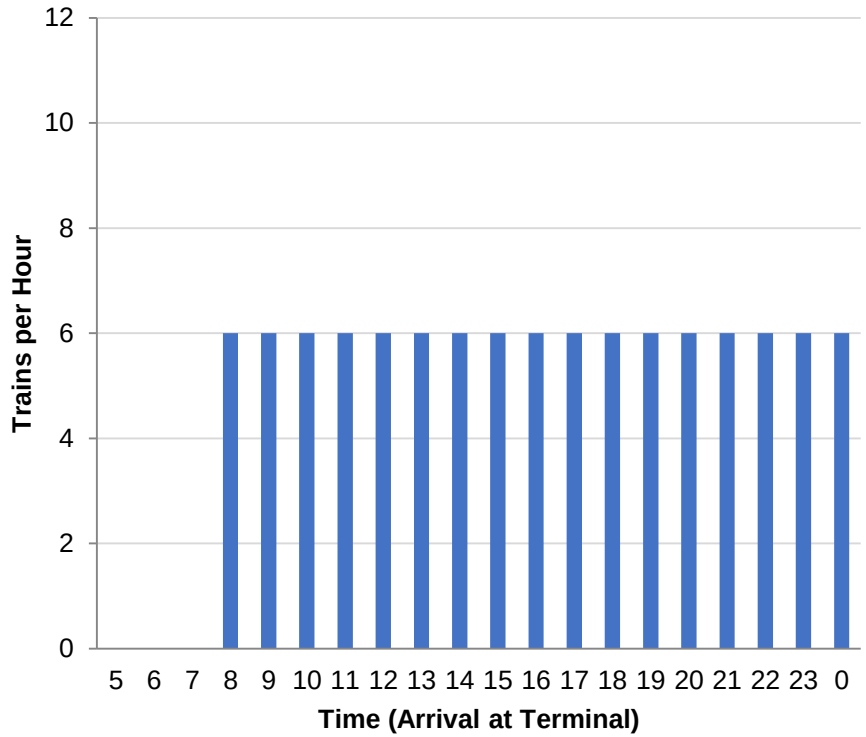
Moderate Growth Scenario – Full Day

Weekday Service



- 8 TPH during morning and evening peak periods (4 local and 4 express trains)
- 6 TPH during early AM, midday, and evenings (2 local and 4 express trains)
- HSR operates 4 TPH during peak period and 3 TPH during off-peak periods

Weekend Service

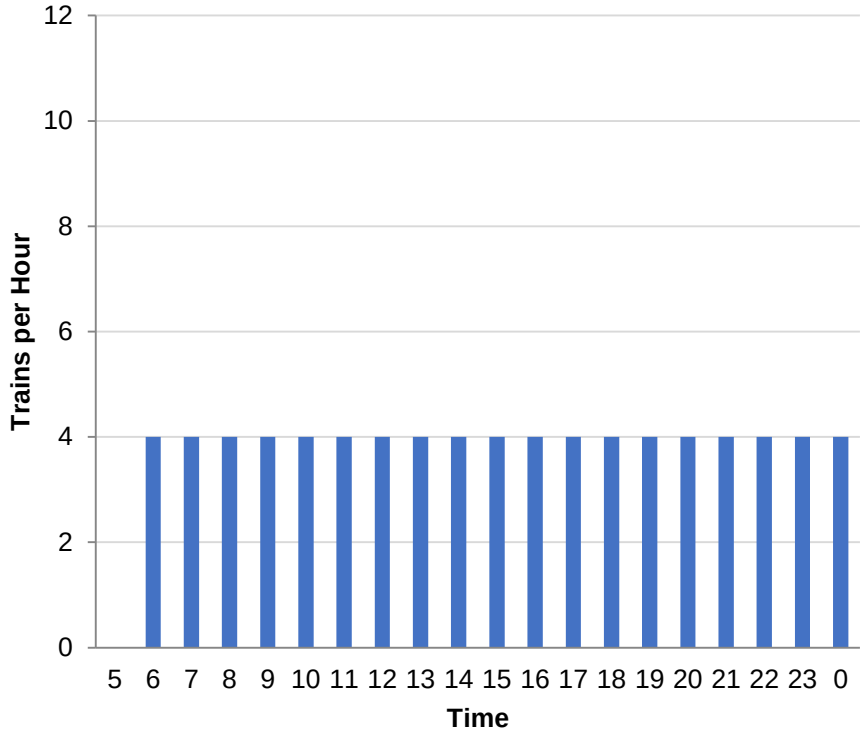


- 6 TPH during early AM, midday, and evenings (2 local and 4 express trains)
- HSR operates 3 TPH

Charts depict Caltrain arrivals only

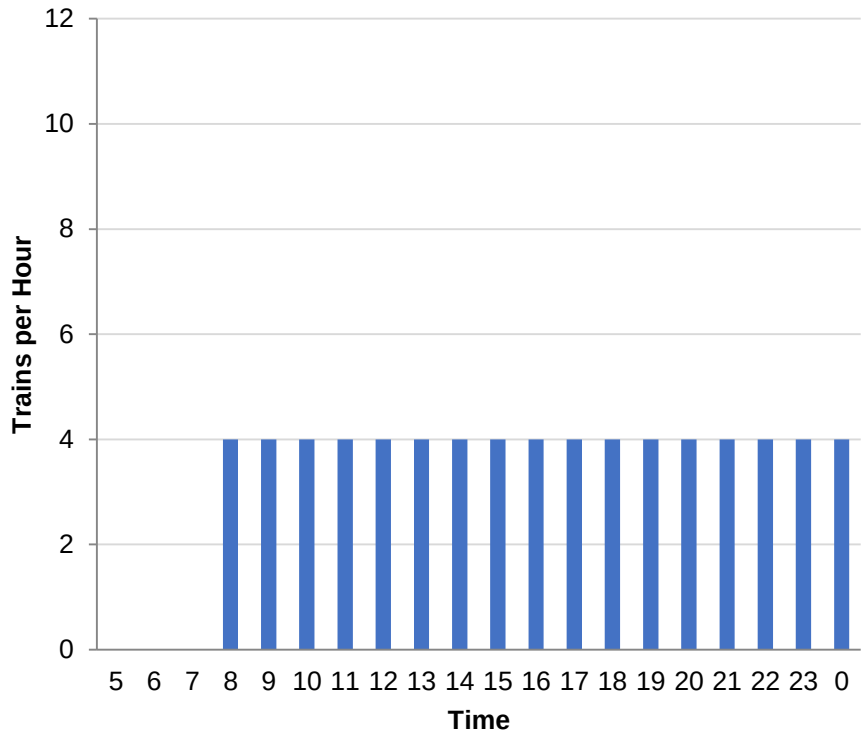
Moderate Growth – Capitol & Blossom Hill

Weekday Service



- Caltrain: 4 TPH throughout the day
- HSR: 8 TPH during peak periods and 4 TPH during off-peak periods

Weekend Service



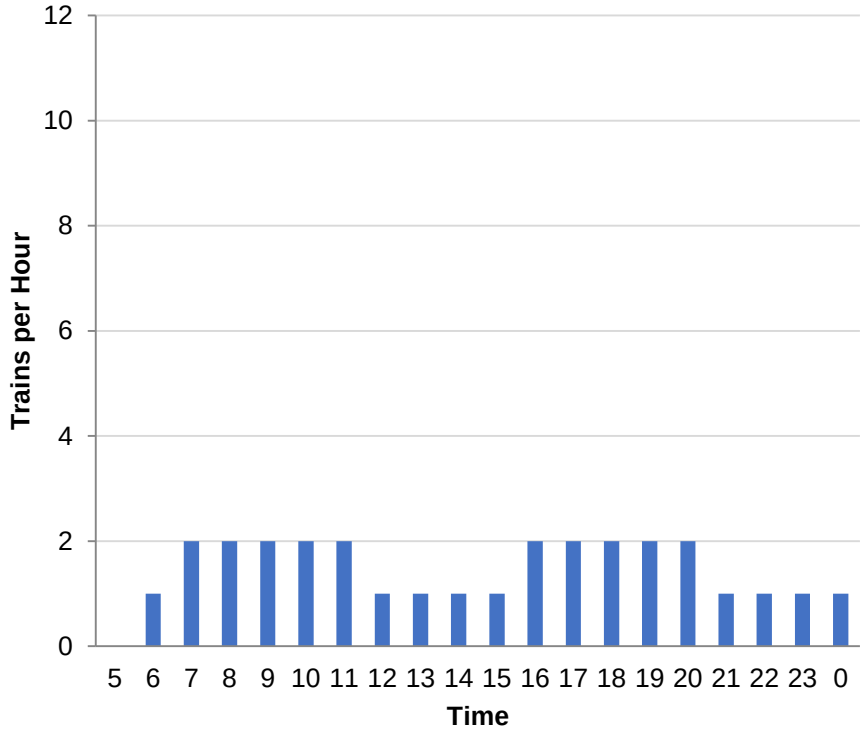
- Caltrain: 4 TPH throughout the day
- HSR: 4 TPH throughout the day

Assumes 4 track turnaround at Blossom Hill station

Charts depict Caltrain arrivals only

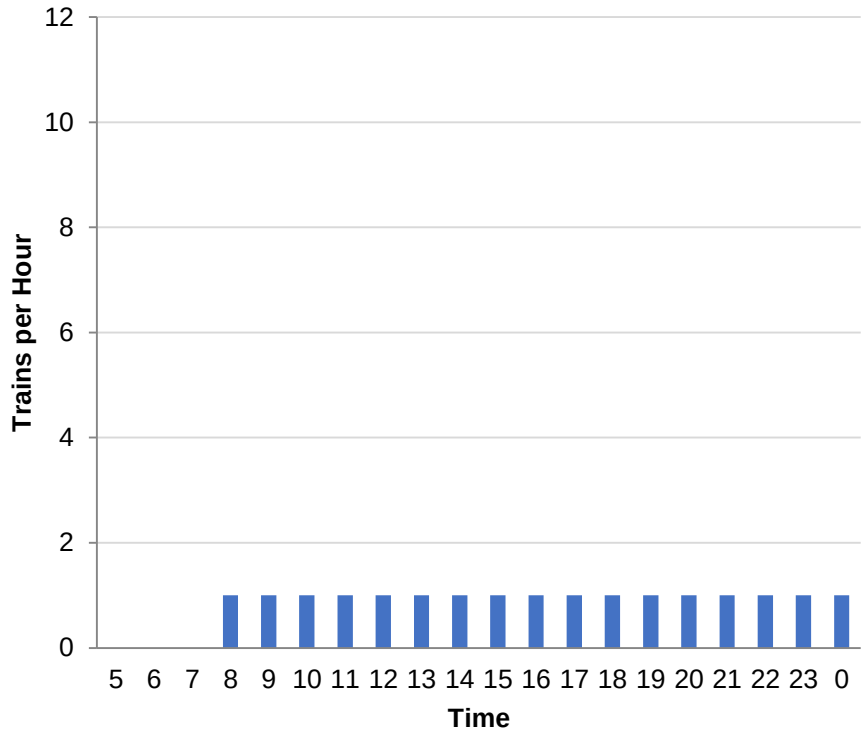
Moderate Growth – Morgan Hill & Gilroy

Weekday Service



- Caltrain: 2 TPH during peak periods and 1 TPH during off-peak periods
- HSR: 8 TPH during peak periods (3 stopping at Gilroy) and 4 TPH during off-peak periods (2 stopping at Gilroy)

Weekend Service

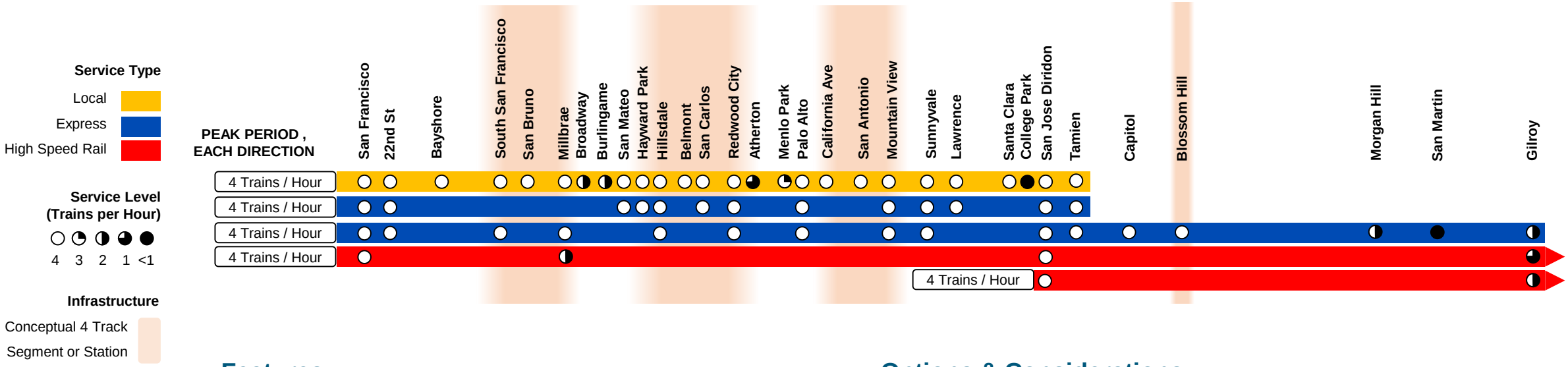


- Caltrain: 1 TPH throughout the day
- HSR: 4 TPH throughout the day (2 stopping at Gilroy)

Assumes 4 track turnaround at Blossom Hill station

Charts depict Caltrain arrivals only

High Growth Scenarios (12+4 Trains)



Features

- Nearly complete local stop service – almost all stations receiving at least 4 TPH
- Two express lines serving major markets – many stations receive 8 or 12 TPH

Passing Track Needs

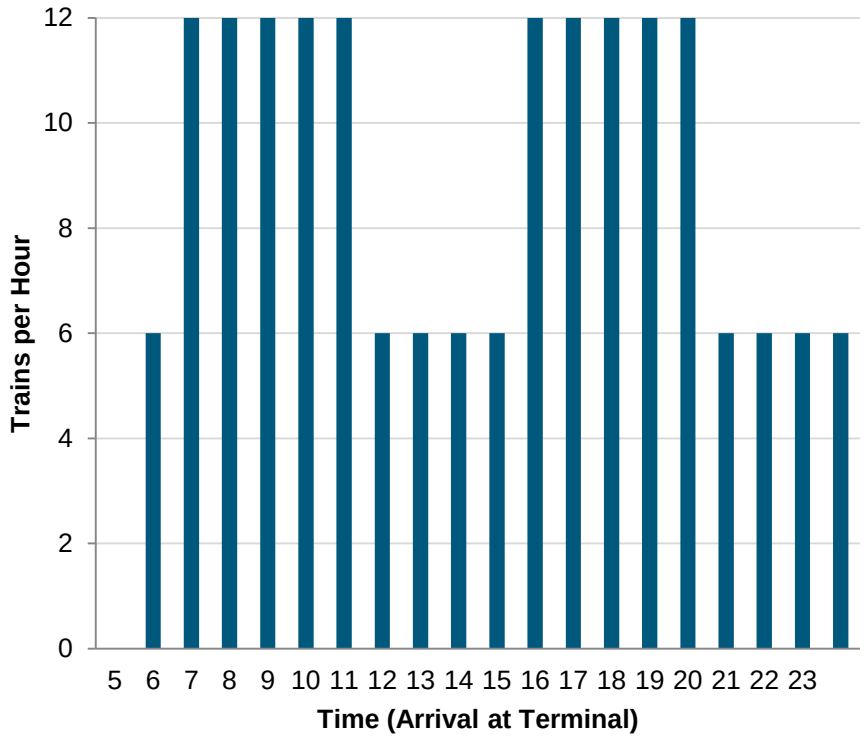
- Requires up to 15 miles of new 4 track segments: South San Francisco to Millbrae, Hayward Park to Redwood City, and northern Santa Clara County between Palo Alto and Mountain View stations (shown: California Avenue to north of Mountain View)

Options & Considerations

- SSF-Millbrae passing track enables second express line; this line cannot stop north of Burlingame
- Tradeoff between infrastructure and service along Mid-Peninsula - some flexibility in length of passing tracks versus number and location of stops
- Flexible 5 mile passing track segment somewhere between Palo Alto and Mountain View
- Atherton, College Park, and San Martin served on an hourly or exception basis

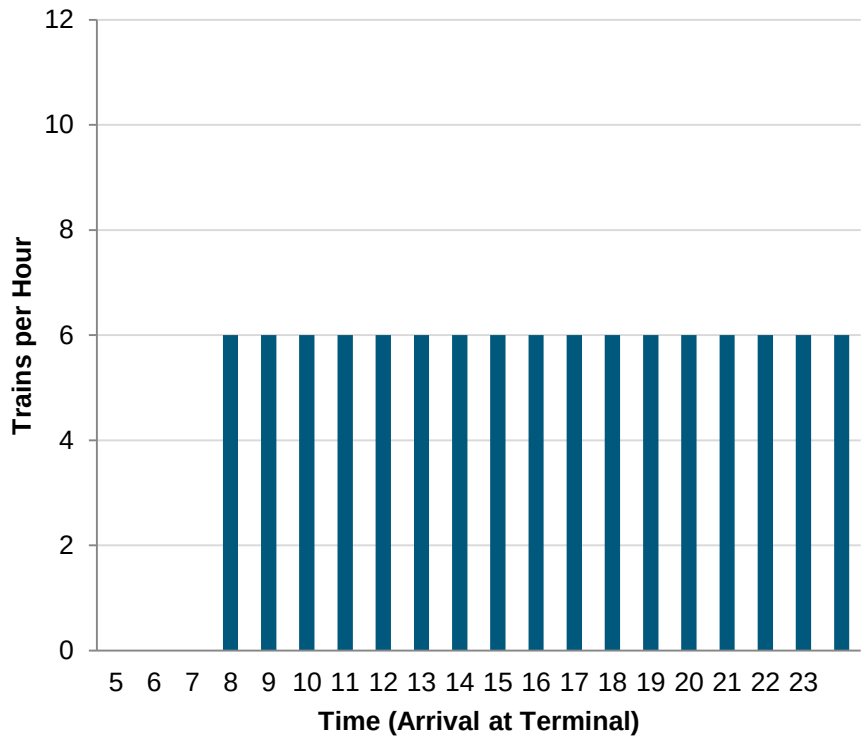
High Growth Scenario – Full Day

Weekday Service



- 12 TPH during morning and evening peak periods (4 local and 8 express trains)
- 6 TPH during early AM, midday, and evenings (2 local and 4 express trains)
- HSR operates 4 TPH during peak period and 3 TPH during off-peak periods

Weekend Service

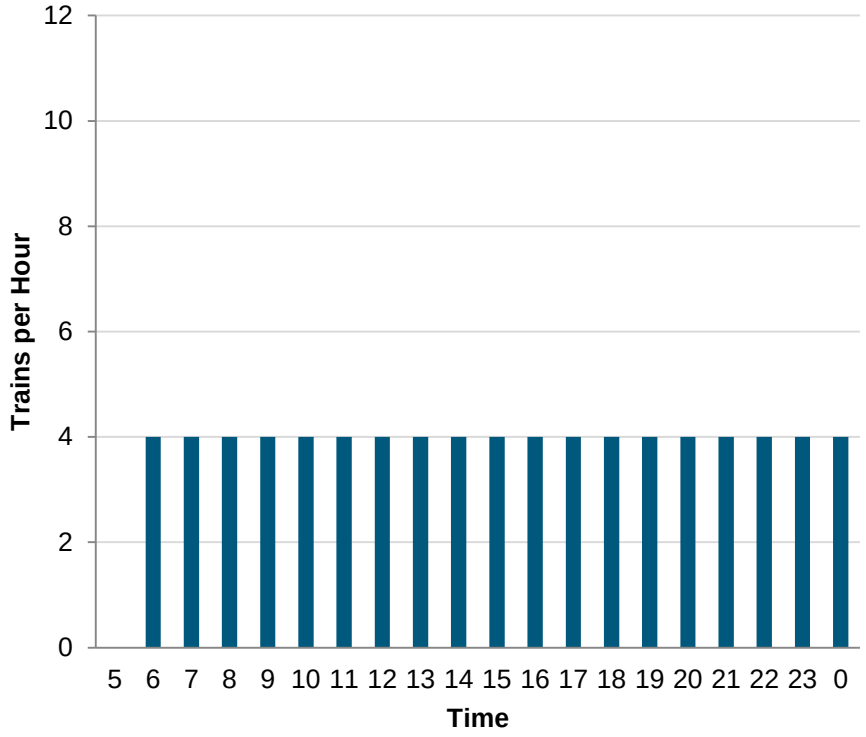


- 6 TPH during early AM, midday, and evenings (2 local and 4 express trains)
- HSR operates 3 TPH

Charts depict Caltrain arrivals only

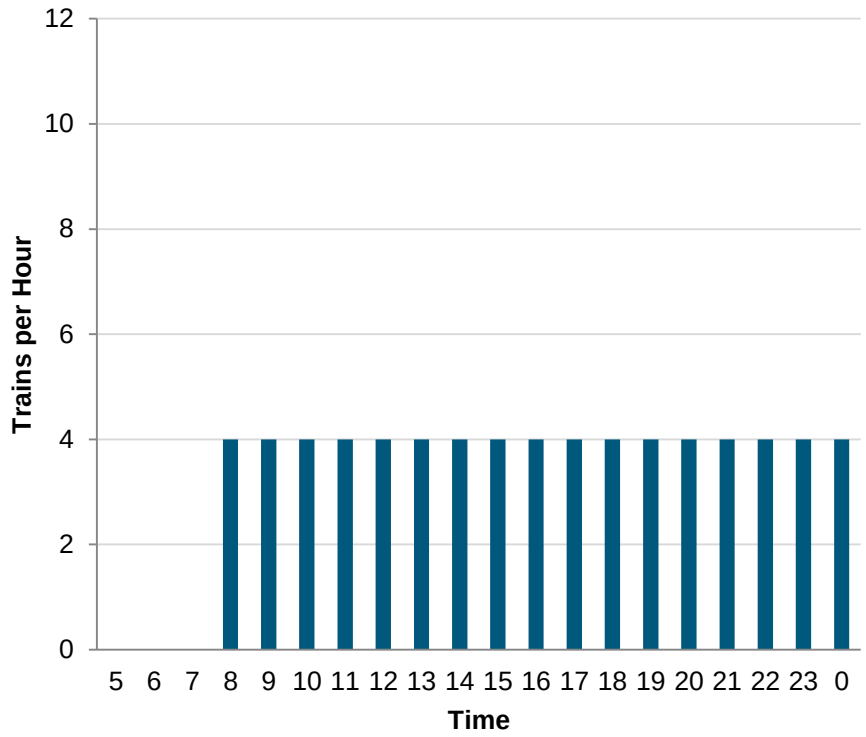
High Growth – Capitol & Blossom Hill

Weekday Service



- Caltrain: 4 TPH throughout the day
- HSR: 8 TPH during peak periods and 4 TPH during off-peak periods

Weekend Service



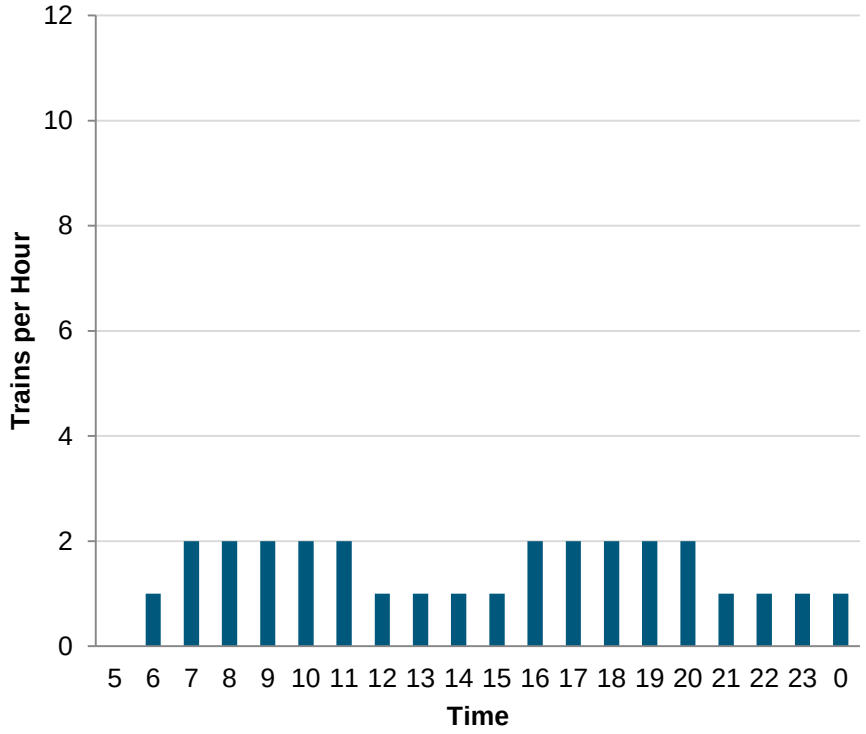
- Caltrain: 4 TPH throughout the day
- HSR: 4 TPH throughout the day

Assumes 4 track turnaround at Blossom Hill station

Charts depict Caltrain arrivals only

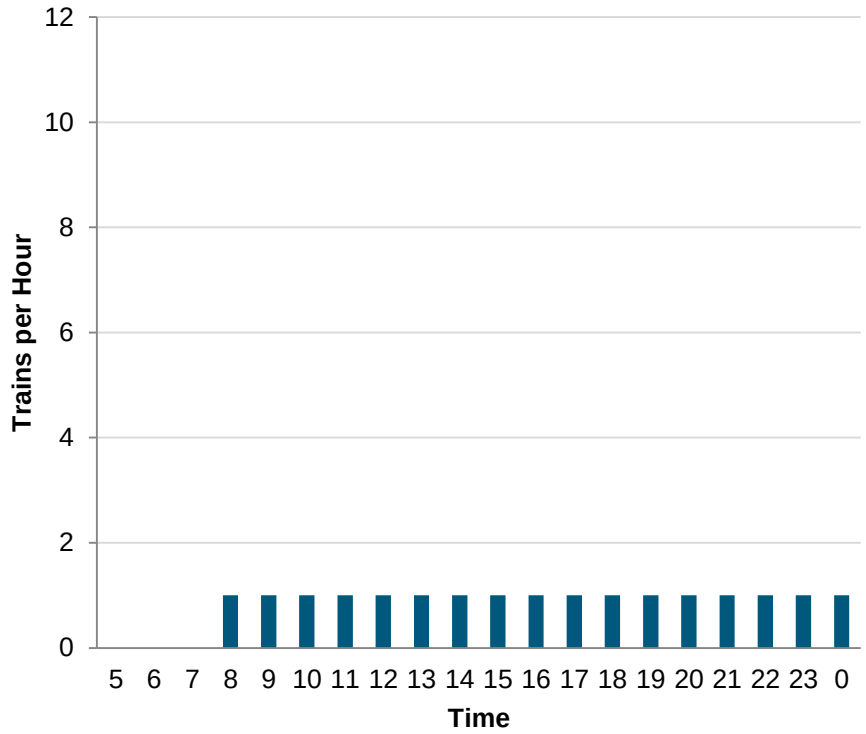
High Growth – Morgan Hill & Gilroy

Weekday Service



- Caltrain: 2 TPH during peak periods and 1 TPH during off-peak periods
- HSR: 8 TPH during peak periods (3 stopping at Gilroy) and 4 TPH during off-peak periods (2 stopping at Gilroy)

Weekend Service



- Caltrain: 1 TPH throughout the day
- HSR: 4 TPH throughout the day (2 stopping at Gilroy)

Assumes 4 track turnaround at Blossom Hill station

Charts depict Caltrain arrivals only

Next Steps

Additional Service Planning

Additional Service Planning

Costing

Business Case Analysis

Community Interface & Outreach

Terminal Planning

Ongoing Work

- Detailed terminal planning working sessions underway in partnership with San Francisco and San Jose staff
- Key topics in San Jose
  - Platform configuration at Diridon and Tamien
  - Turnback opportunities at Blossom Hill
  - Interface with Capitol Corridor and ACE
- Key topics in San Francisco
  - Service levels to Salesforce Transit Center and 4th & Townsend
  - Ongoing needs at 4th & King
- Continued exploration of service variability and options at terminals within each “Growth Scenario”

Rail Simulation

1

Collect and Input Data into Model

- Infrastructure
- Rolling stock
- Timetable

2

Code Model for Future Scenarios

- Baseline Growth
- Moderate Growth
- High Growth

3

Conduct Model Simulation Runs

Determines how reliably service scenarios can be operated and iterate as needed

4

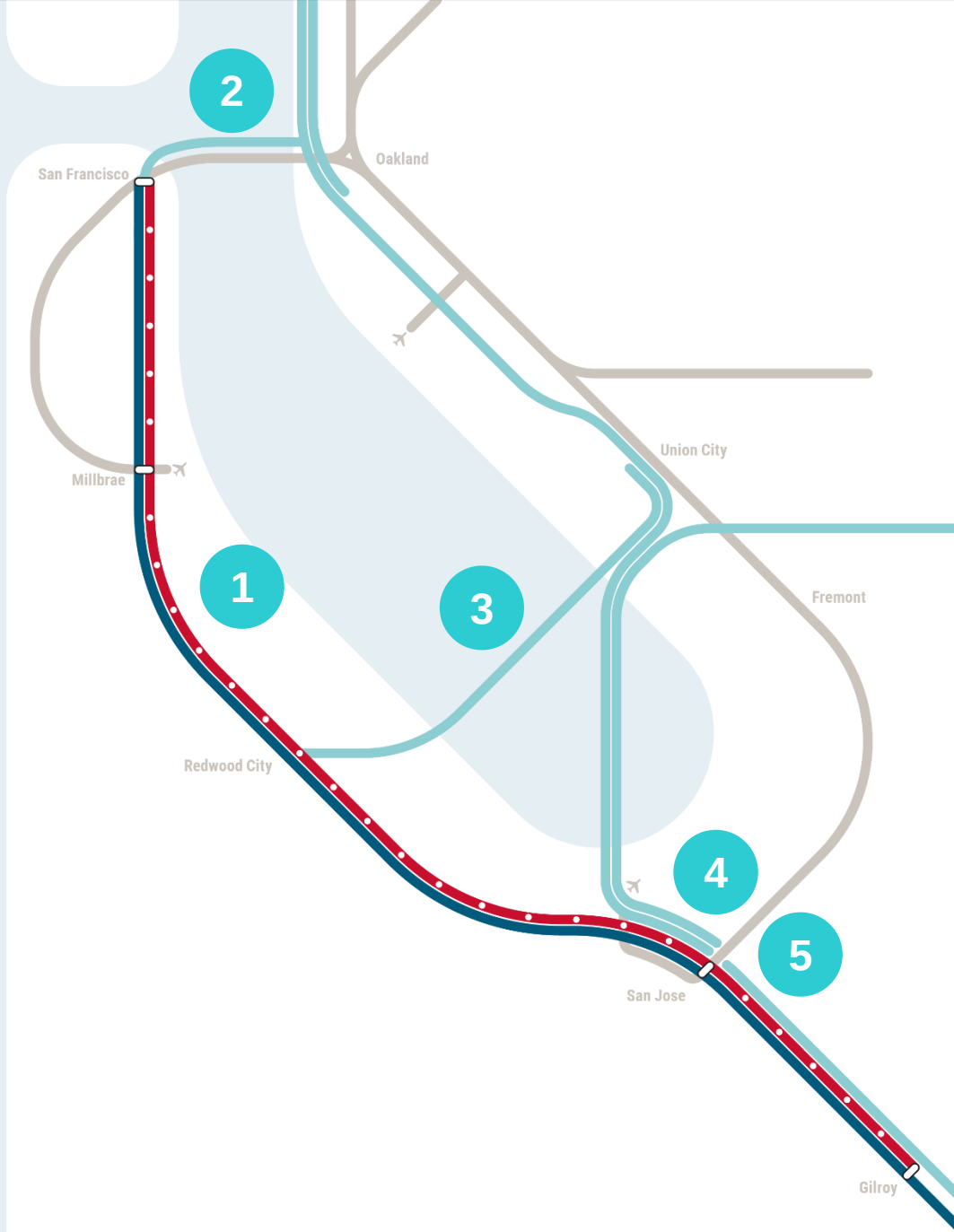
Present Model Results

Summarizes methodology, assumptions, and findings for each scenario and define next steps

Explorations

The project team is exploring options and variability within the service scenarios as well as how these scenarios might be further adapted to interface with planned and potential passenger rail investments throughout the region. **Examples-**

1. Further options and variations within growth scenarios
2. Potential Second Transbay Tube
3. Potential Dumbarton rail connection
4. ACE/Capitol Corridor connections
5. Monterey County connection / extension



Costing

Additional Service Planning

Costing

Business Case Analysis

Community Interface & Outreach

Capital Costs

1

Gathering Partner Costs

- Gather information on the cost estimates of partner and city projects (including grade seps) that touch the Caltrain corridor

2

Developing Capital Cost Estimates

- Develop capital cost estimates of additional infrastructure and fleet improvements needed to support service scenarios

3

Cost Allocation

- Assign infrastructure improvement costs in each of the growth scenarios

Business Case Analysis

Remaining Service Planning

Costing

Business Case Analysis

Community Interface & Outreach

Building the Business Case

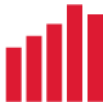
The business case will help the Board select a 2040 Service Vision with a fully informed understanding of what their choice means for the long-term costs and outcomes of the system and to the region as a whole. Once the Board has selected a long range Service Vision the business case can then be further optimized and detailed.

Examples of Major Inputs and Factors Considered within the Business Case Include

Infrastructure Investments and Renewals

Fleet Planning and Phasing

Current and Future Operations



Ridership and Travel Demand

Operating Costs and Revenues

Policy Assumptions

Direct & Indirect Jobs

User Benefits

Societal Benefits

Land Value

Community Interface & Outreach Update

Remaining Service Planning — Costing — Business Case Analysis — **Community Interface & Outreach**

Key Themes

Community Interface Meeting Results

Service Levels & Schedules

Travel demand and mode split goals in relation to existing and anticipated roadway congestion

Physical Corridor

Grade crossings, grade separations, and the stretches of fencing, walls, and vegetation in between

Land Development

Placemaking, jobs-housing balance, transit-oriented development, and zoning changes

Station Connectivity & Access

Local first/last mile solutions, multi-modal access, and equitable incentive programs

Upcoming Outreach & Community Interface Assessment Activities

Public Outreach

Project Stakeholders

Continued meetings and engagement

Public Forums

At SPUR and online (Reddit)

Community Meetings

Second round of public meetings

Online Open House

Hosted on project website

Community Interface

Jurisdiction Meetings

Second round of meetings with jurisdictions

Technical Documents

Definitions memo and Comparison Corridor Best Practices memo

Website: www.Caltrain2040.org

FOR MORE INFORMATION

WWW.CALTRAIN.COM

Hubs/Routes/Projects/Phases

DRAFT

Outline

Slide 1 - Goals
Slide 2 - Design Principles
Slide 3 - 34 Hubs Throughout City
Slide 4 - 7 Major Routes (Some with 2 Options) Connecting Hubs
Slide 5 - 2 Examples of Routes With Corresponding Necessary Projects
Slide 6 - 1 Example of Projects Within a Route Arranged Into Phases for Implementation
Slide 7 - Example of How to Audit Network to Ensure That Adjoining Hubs Connect

Note:This is a DRAFT and for illustration purposes only. There may be errors throughout.

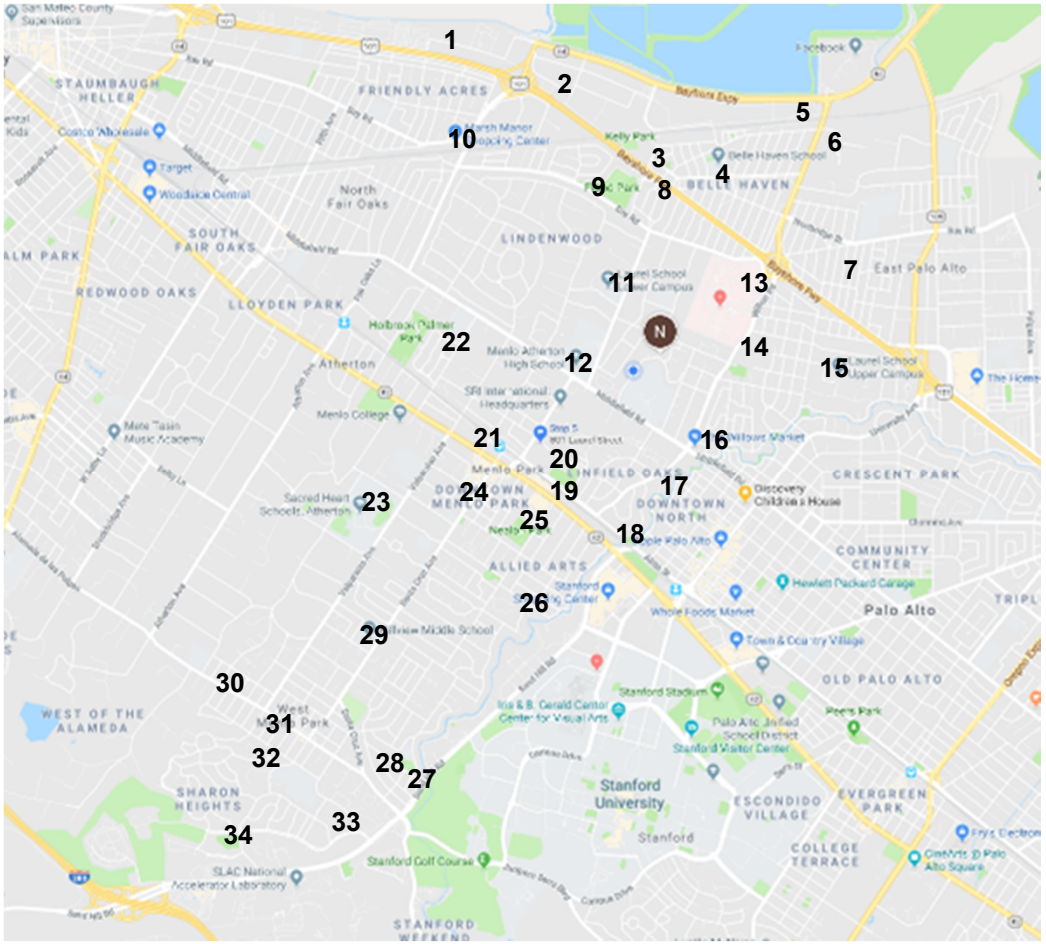
Slide 1 - Goals

1) Plan and communicate bike network as a set of complete routes that connect multiple key hubs in the city (such as schools, community centers, shopping, employment centers)
2) Community members can visualize the value that will be provided by the completion of these routes that provide safe access to key destinations
3) Community members can provide input on routes and project elements with outcomes in mind, contributing to constructive feedback
4) Community members can see when the full project will be completed (though it may take multiple phases)
5) Policymakers can make prioritization decisions

Slide 2 - Design Principles

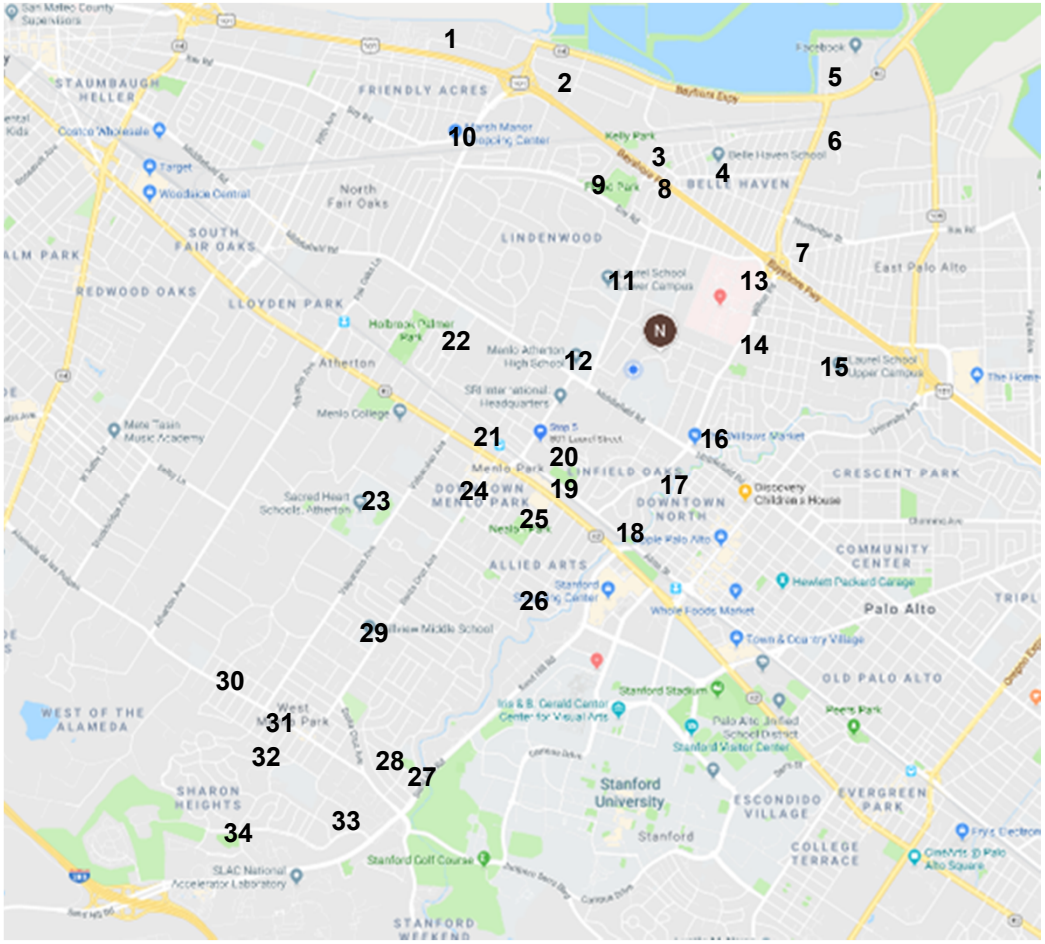
1) Protected bike lanes on major thoroughfares (places where people are likely to drive 30+ mph), e.g. Middlefield, Santa Cruz, Middle, Ravenswood, Valparaiso
2) Intersections on key routes with challenging streets should have first-class intersections following NACTO best practices.
3) “Bicycle boulevards” should follow NACTO best practices.
4) Design and commit to complete routes, even if they have to be implemented in two or more scheduled phases.
5) Design to create comfortable and inviting infrastructure for a target audience of “interested but concerned” who will bike if routes are safe and low-stress
6) Include interjurisdictional projects within routes, and plan phasing accordingly (e.g. projects are likely to take longer)
7) Use hubs to assess and improve pedestrian access - adapt “Safe Routes” planning to community centers, parks, shopping, etc.

Slide 3 - 34 Hubs Throughout City



1. Haven Street Apartments
2. TIDE Academy
3. Onetta Harris/Beechwood School
4. Belle Haven Elementary School
5. Facebook/Belle Haven Starbucks
6. Mid-Pen High School
7. East Palo Alto
8. Ringwood Bike Bridge/Boys and Girls Club
9. Flood Park
10. Marsh Manor
11. Lower Laurel Elementary School
12. Menlo-Atherton High School
13. VA
14. Willow Oaks School/Park
15. Upper Laurel School/Menalto Business District
16. The Willows Market
17. Linfield Oaks Bike Bridge
18. Alma Bike Bridge
19. Middle Avenue Undercrossing/500 El Camino
20. Burgess Park/Library/Pool/City Hall
21. Menlo Park Train Station/1300 El Camino
22. Encinal Elementary School
23. Menlo School/Sacred Heart
24. Downtown Menlo Park
25. Safeway/Nealon Park
26. San Mateo Bike Bridge
27. Sand Hill and Oak/Path to Stanford
28. Oak Knoll Elementary
29. Hillview Middle School
30. Las Lomitas Elementary School
31. Alameda Business District
32. La Entrada Middle School
33. Sharon Heights Safeway

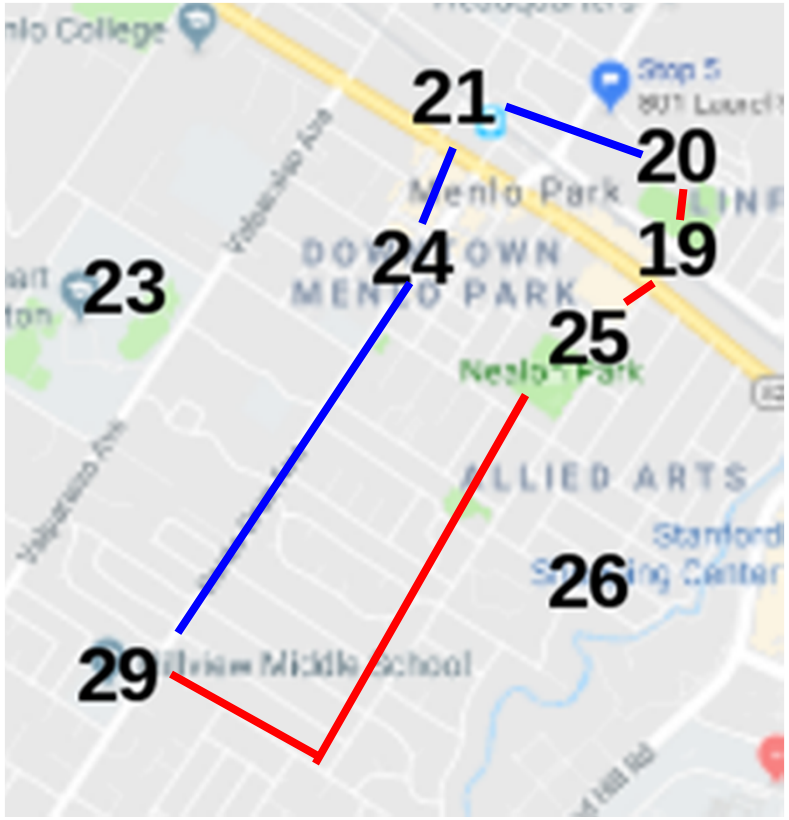
Slide 4 - 7 Major Routes (Some with 2 Options) Connecting Hubs



A. Haven Street Apartments to Menlo Park Train Station/1300 El Camino
   1-10-9-11-12-21
A. TIDE Academy to East Palo Alto
   2-3-4-7
A. Mid-Pen High School to Burgess Park
   a. 6-4-8-11-12-20
   b. 6-13-14-16-20
B. Upper Laurel/Menalto Business District to Nealon Park
   15-14-16-17-19-25
A. Burgess to Hillview
   a. 20-19-25-29
   b. 20-21-24-29
B. Menlo School/Sacred Heart to Sharon Park
   23-31-32-34
A. Oak Knoll to Sharon Heights Safeway
   a. 28-32-33
   b. 28-27-33

Yet to be incorporated into routes: 5,18, 22,26,30

Slide 5 - 2 Examples of Routes With Corresponding Necessary Projects



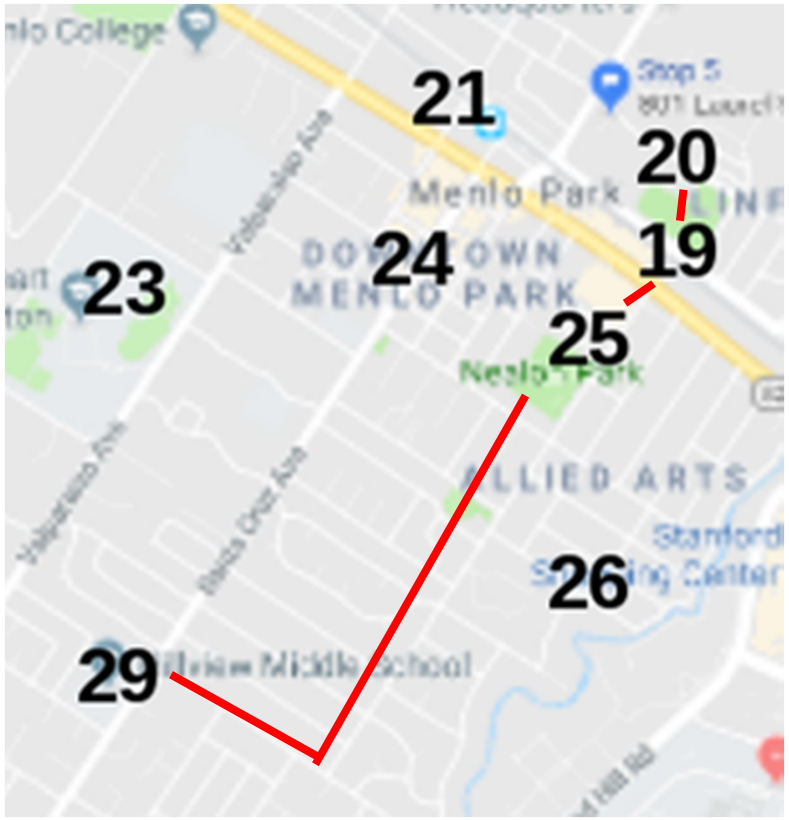
E. Burgess to Hillview (a): 20-19-25-29

- 20-19 (Burgess to Middle Undercrossing)
  - Project Item x
  - Project item y
  - Project item z
- 19-25 (Middle Undercrossing to Safeway/Nealon)
  - Project Item x
  - Project Item y
  - Project Item z
- 25-29 (Safeway/Nealon to Hillview)
  - Project Item x
  - Project Item y
  - Project Item z

E. Burgess to Hillview (b): 20-21-24-29

- 20-21 (Burgess to Menlo Park Train Station)
  - Project Item x
  - Project item y
  - Project item z
- 21-24 (Menlo Park Train Station to Downtown Menlo Park)
  - Project Item x
  - Project Item y
  - Project Item z
- 24-29 (Downtown Menlo Park to Hillview)
  - Project Item x
  - Project Item y
  - Project Item z

Slide 6 - 1 Example of Projects Within a Route Arranged Into implementation Phases



E. Burgess to Hillview (a): 20-19-25-29

- 20-19 (Burgess to Middle Undercrossing)
  - Project Item x
  - Project item y
  - Project item z
- 19-25 (Middle Undercrossing to Safeway/Nealon)
  - Project Item x
  - Project Item y
  - Project Item z
- 25-29 (Safeway/Nealon to Hillview)
  - Project Item x
  - Project Item y
  - Project Item z

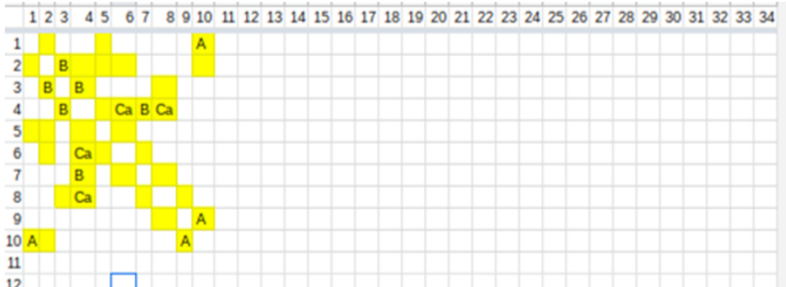
E. Burgess to Hillview (a) Phases

- Plase 1
  - 20-19 Project Item x and z
  - 19-25 Project Item x, y and z
  - 25-29 Project Item y
- Phase 2
  - 20-19 Project Item y
  - 25-29 Project Item x
- Phase 3
  - 25-29 Project Item z

Slide 7 - Example of How to Audit Network to Ensure That Adjoining Hubs Connect

Partial Map of Belle Haven (and Flood Park) that Shows Connections Between Hubs

***Note**: Map and Grid Need to be Completed for the Entire City*



Grid Shows Belle Haven Hubs Along Major Routes (per ordering on Slide 4)(Only Hubs in BH [and Flood Park] Shown):

A - Haven to Train (1-10-9)
B - TIDE to EPA (2-3-4-7)
Ca - Mid-Pen to Burgess (6-4-8)

- Yellow = Adjacent Hubs in BH
- Letter in Cell = Indicates Connected Hubs
- Empty Yellow Cell = Remaining Hubs that Need to be Connected that are Not Part of a Major Route (per Slide 4).

THIS PAGE INTENTIONALLY LEFT BLANK

STAFF REPORT

Complete Streets Commission
Meeting Date: **4/10/2019**
Staff Report Number: **19-003-CSC**

Regular Business: **Select a preferred bicycle lane alternative on Middle Avenue between Olive Street and San Mateo Drive to recommend to City Council**

Recommendation

Select a preferred bicycle lane alternative on Middle Avenue between Olive Street and San Mateo Drive to recommend to City Council. The alternatives are as follows:

1. Remove parking on one side of the road and install 5 foot bike lanes with 2 foot buffers on both sides of the road
2. Remove parking on both sides of the road and install 8 foot bike lanes with 3 foot buffers on both sides of the road

Policy Issues

The Middle Avenue Resurfacing project (project) was included in the City's 2017-18 Capital Improvement Program (CIP). The project is also consistent with policies stated in the 2016 General Plan Circulation Element and the El Camino Real and Downtown Specific Plan. These policies seek to maintain a safe, efficient, attractive, user-friendly circulation system that promotes a healthy, safe and active community and quality of life throughout Menlo Park.

Background

On January 24, 2017, City Council adopted Resolution No. 6366 authorizing the City to file an application to secure One Bay Area Grant (OBAG) program funds for the Santa Cruz and Middle Avenues Resurfacing Project. The OBAG program is a 5-year, $800 million regional transportation funding program administered by the Metropolitan Transportation Commission (MTC). This program supports local street and road maintenance, streetscape enhancements, bicycle and pedestrian improvements, transportation planning and safe routes to school projects. Its focus is funding projects that improve access to and within Priority Development Areas (PDAs), which are targeted growth areas within existing communities, typically with frequent transit service, near established job centers, shopping districts and other services. Within the City of Menlo Park, the City Council designated the El Camino Real/Downtown Specific Plan area as a PDA in 2013.

Santa Cruz Avenue and Middle Avenue were chosen due to their proximity to and role in providing access to the City's PDA, the need for repaving and their role in providing access to local schools, including students at Hillview Middle School and Oak Knoll Elementary School. In 2017, the MTC adopted Resolution 4202 that defines the regional funding commitment for this project and outlines availability of these funds in fiscal year 2019-20. An update on the Santa Cruz Avenue project will be presented on a separate report due to the differences in the scope of work. The Santa Cruz Avenue project involves the installation of

sidewalks in addition to the resurfacing and additional bike facilities.

Middle Avenue is an east-west street with one lane in each direction and a 30 mph posted speed limit. It is classified as a Neighborhood Collector in the 2016 General Plan Circulation Element between El Camino Real and Olive Street. Currently there are 10 foot travel lanes and a 4 inch white edgeline that separates the travel lanes from an 11 foot parking/bicycle lane. It currently has a daily traffic volume of approximately 7,580 vehicles. Previously a study was conducted that determined that the existing 42 foot curb-to-curb roadway width could not meet minimum standard width requirements to accommodate a travel lane, bike lane and on-street parking. The 4 inch edge line was installed to force vehicles to drive closer to the centerline to allow for bicyclists to ride further away from parked vehicles. .

Analysis

The scope of the project area includes Middle Avenue between Olive Street and San Mateo Drive, as shown on the map provided in (Attachment A) and described in more detail below.

The section of Middle Avenue between Olive Street and San Mateo Drive would be repaved and new striping installed as part of this project. The existing concrete vertical curb and gutter would remain. The current project budget and resource levels will not allow for construction of new sidewalks along Middle Avenue as part of this project, however accessible curb ramps where sidewalks exist and crossing improvements at intersections will be incorporated. In addition, striping modifications to include bicycle facilities are being considered which would require parking removal on at least one side of the street. This is currently identified in the draft Transportation Master Plan project list as project number 118.

As part of separate grant funded improvement project, a Rectangular Rapid Flashing Beacon (RRFB) is scheduled to be installed at the intersection of Middle Avenue and San Mateo Drive concurrently with this resurfacing project. Staff is also evaluating if a stop sign is warranted at this intersection. If so, staff will bring back a separate request to the Commission and Council later this year

There are a number of ongoing, complementary projects along and connecting to Middle Avenue including work by the City and requirements of Stanford University's Middle Plaza development project (500 El Camino Real). To summarize these efforts and the coordination required between them, a map of the various projects along Middle Avenue between Olive Street and El Camino Real is included in Attachment B. Additionally, the Complete Streets Commission presented a request for a new priority project to the City Council in December 2018, and on February 2, 2019, as part of the City Council's consideration of the 2019 work plan.

The Commission's proposal recommends installing bicycle facilities and pedestrian improvements on Middle Avenue between El Camino Real and Olive Street and on Olive Street between Santa Cruz Avenue and Bay Laurel Drive to enhance safe access between the proposed Middle Avenue Pedestrian and Bicycle Rail Crossing at Caltrain and Hillview Middle School. The proposed resurfacing project could implement a portion of the Commission's proposal between San Mateo Drive and Olive Street. The definition of the scope of work for the other sections of Middle Avenue and Olive Street are scheduled as a separate item on the April 10, 2019 Commission agenda for recommendation to the City Council.

Below is the anticipated schedule for future improvements on Middle Avenue:

Middle Avenue Segment	Planning	Design	Construction
Olive Street to San Mateo Drive	Spring 2019	Fall 2019	Summer 2020
San Mateo Drive to University Drive	2020	2021	2022
University Drive to El Camino Real	2020	2021	2022

Alta Planning and Design has been working with staff on the proposed Middle Avenue Pedestrian and Bicycle Rail Crossing and have been retained to provide alternatives and conceptual designs for the installation of bike facilities along this section using the current roadway width of 42 feet. Three alternatives were considered, with all options accommodating buffered bike lanes on both sides of the street.

- Alternative 1A – Remove approximately 67 on-street parking spaces from the *north side* of the street to accommodate parking on the south side, two-5 foot bicycle lanes,two-2 foot buffers and two-10 foot travel lanes;
- Alternative 1B – Remove approximately 51 on-street parking on the *south side* of the street to accommodate parking on the north side, two-5 foot bicycle lanes,two-2 foot buffers and two-10 foot travel lanes; and
- Alternative 2 – Remove parking on the north and south sides of the street to accommodate two-8 foot bicycle lanes, two-3 foot buffers and two-10 foot travel lanes.

A summary of the advantages and disadvantages of each follows:

Alt 1	Pros	Cons
Remove parking on **one side** of the street to accommodate for 5-foot bike lanes on both sides with 2-foot buffers (Attachment C)	Accommodates buffered bike lanes on both sides of the street while providing a clear path of travel for children on routes to school	Eliminates residential on-street parking on one side of the road
	Does not require eliminating on-street parking entirely	
	Would not allow vehicles to pass in bicycle lanes, since combined width of bike lane and buffer is too narrow	
	Provides room for vehicles to pull over for passing emergency vehicles	
Alt 2	**Pros**	**Cons**
Remove parking on both sides of the road to accommodate for 8-foot bike lanes on both sides of the road with buffers (Attachment D)	Allows for a wider bike lane and buffer between vehicles and bicyclists, which could allow for parents to ride alongside elementary-age children.	Eliminates all on-street parking along Middle Avenue between Olive Street and Windsor Avenue
	Eliminates all on-street parking maneuvers across the bike lanes	Could provide an opportunity for vehicles to use the bike lane and buffer area to pass a turning vehicle or be mistaken for an additional

		vehicle travel lanes
	Provides more room for vehicles to pull over for passing emergency vehicles. This would need to be done in the bike lane.	With the removal of parking, roadway will appear wider causing a potential for increased vehicle speeds.

Alta Planning and Design has prepared a cross-section diagram illustrating the proposed alternatives. (Attachment E).

After weighing the benefits versus impacts of removing on-street parking on one side of the street or both sides of the street, staff is recommending that the Commission recommend Alternative 1B to remove parking on the south side of Middle Avenue between Olive Avenue and San Mateo to install 5 foot bike lanes with 2 foot buffers.

On March 21, 2019, staff sent out a letter to residents along Middle Avenue between Olive Street and San Mateo to inform them of the project and the striping modification to allow for bike lanes, which would require parking removal on one side of the street or possibly both sides and advising them to contact staff with any questions. Staff also sent out a postcard to the residents that front the street as well as residents within 500 feet of the project, notifying them of the project two weeks prior to the Commission meeting. As of April 3, 2019, staff has received four comments on the project. Two comments were in favor of the project and two had questions/concerns about parking removal and speeding vehicles.

Below is the proposed project schedule summarizing the anticipated next steps and installation timing:

Task	Schedule
Complete Streets Commission review and recommendation to the City Council	April 10, 2019
Complete conceptual designs and cost estimates	May 2019
City Council review and approval of alternative for project	July 2019
Completion of resurfacing and permanent striping	Summer 2020

Impact on City Resources

Funds to complete the design phase of the project are included in the FY17-18 CIP. Funds to complete construction of this project are programmed for FY19-20, which includes funds from the One Bay Area Grant program as described in the Background section above.

Environmental Review

The project is categorically exempt under Class 1 of the California Environmental Quality Act. Class 1 allows for minor alterations of existing facilities, including highways and streets, sidewalks, gutters, bicycle and pedestrian access, and similar facilities, as long as there is negligible or no expansion of use.

Public Notice

Public Notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting. Staff also sent out a postcard to the residents that front the street as well as residents within 500 feet of the project, notifying them of the project and the April 10, 2019, Complete

Streets Commission meeting.

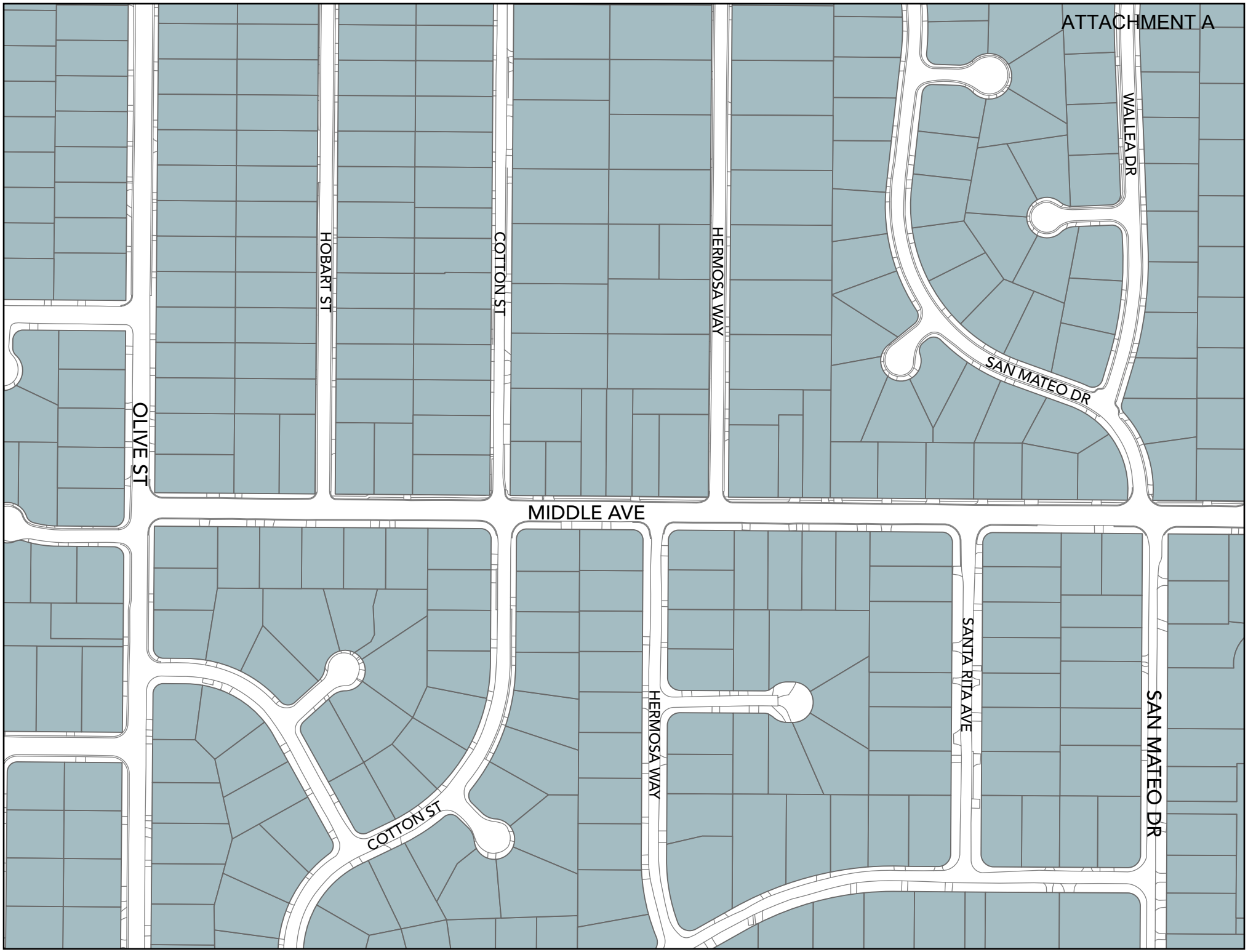
Attachments

A. Map of Project Area –Middle Avenue Resurfacing Project
B. Middle Avenue Projects Map
C. Proposed Alternative 1
D. Proposed Alternative 2
E. Cross-section of Alternatives

Report prepared by:
Richard F. Angulo, Assistant Engineer

Report reviewed by:
Nikki Nagaya, Assistant Public Works Director

THIS PAGE INTENTIONALLY LEFT BLANK


ATTACHMENT A
WALLEA DR
HOBART ST
COTTON ST
HERMOSA WAY
SAN MATEO DR
OLIVE ST
MIDDLE AVE
COTTON ST
HERMOSA WAY
SANTA RITA AVE
SAN MATEO DR

THIS PAGE INTENTIONALLY LEFT BLANK

ATTACHMENT B

Middle Avenue - Ongoing Project Efforts
February 2019

Repaving Summer 2020 through one Bay Area Grant program

Signing and striping modifications; San Mateo County Transportation Authority Measure A grant funded

Add rapid flashing beacon and crosswalk enhancements; San Mateo County Transportation Authority Measure A grant funded

Signing and striping modifications; Stanford University's General Use Permit

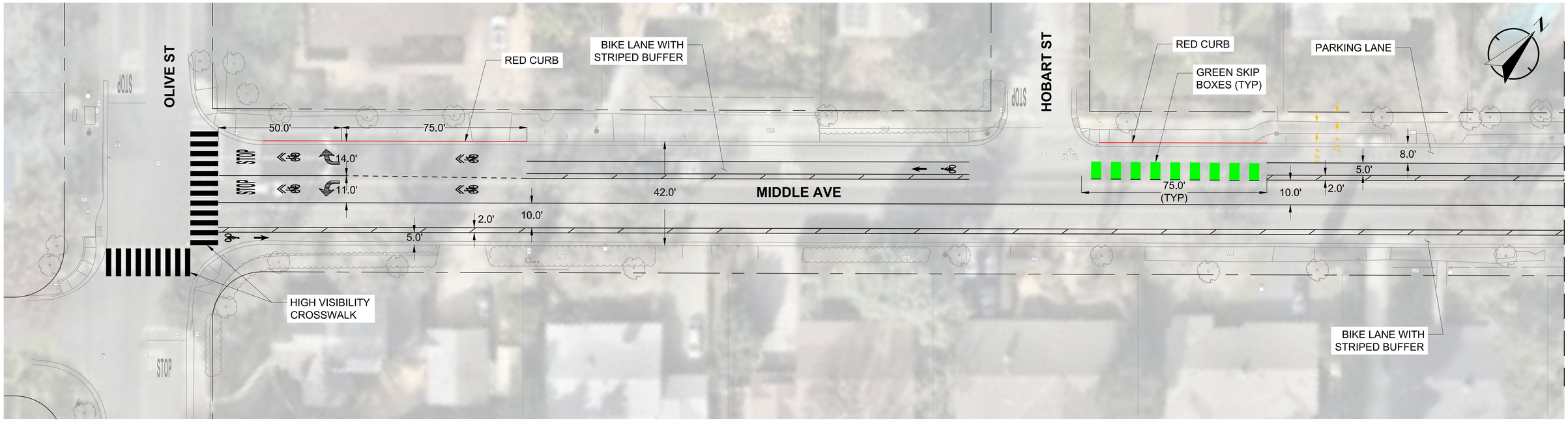
Intersection and traffic signal modifications; Stanford University's Middle Plaza Project requirement

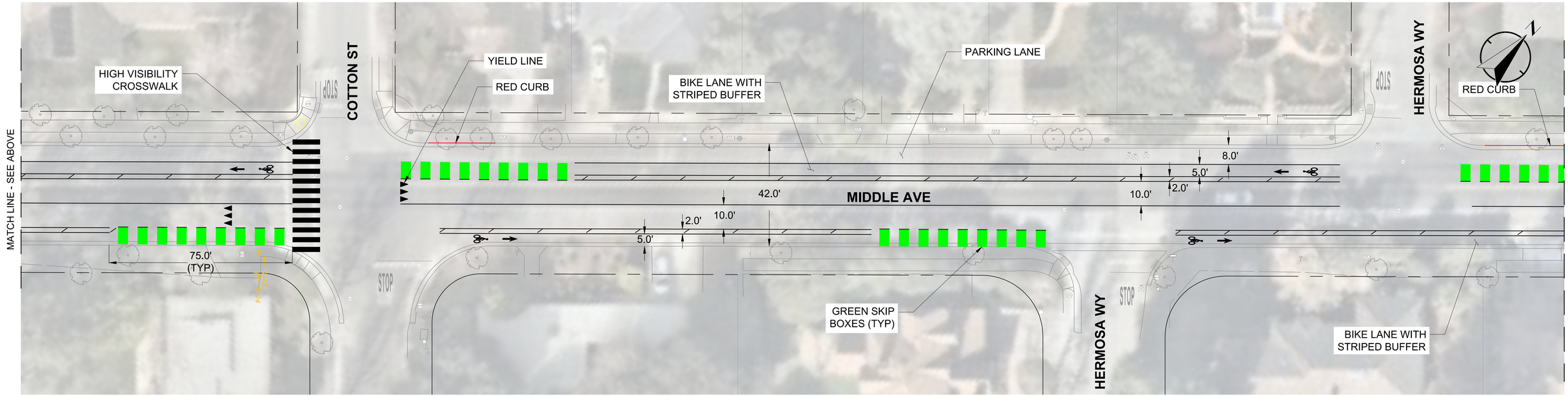
Signing and striping modifications; Stanford University's Middle Plaza Project requirement

- Signing and Striping Modifications
- Resurfacing and Repairs (2020)
- Pedestrian and Bicycle Crossing
- Middle Plaza Project Site

0 230 460 920 1,380 Feet

THIS PAGE INTENTIONALLY LEFT BLANK





NOTE: FINAL RED CURB LENGTH WILL BE DETERMINED DURING FINAL DESIGN AND WILL BE CONSISTANT WITH MUTCD STANDARDS

MIDDLE AVE: CONCEPT DESIGN WITH PARKING

MENLO PARK, CA

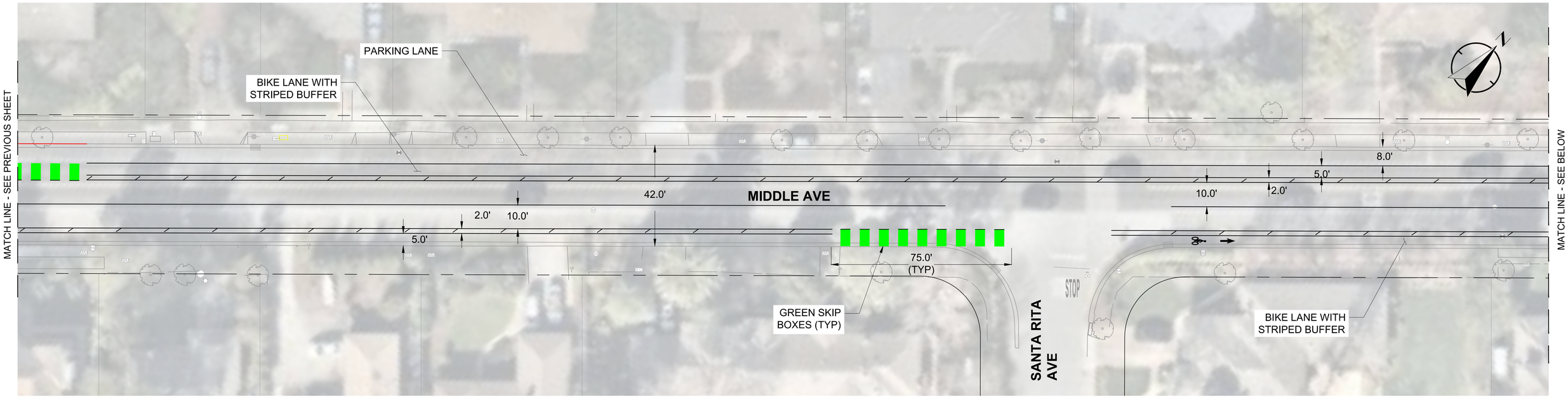
SHEET 1 OF 2

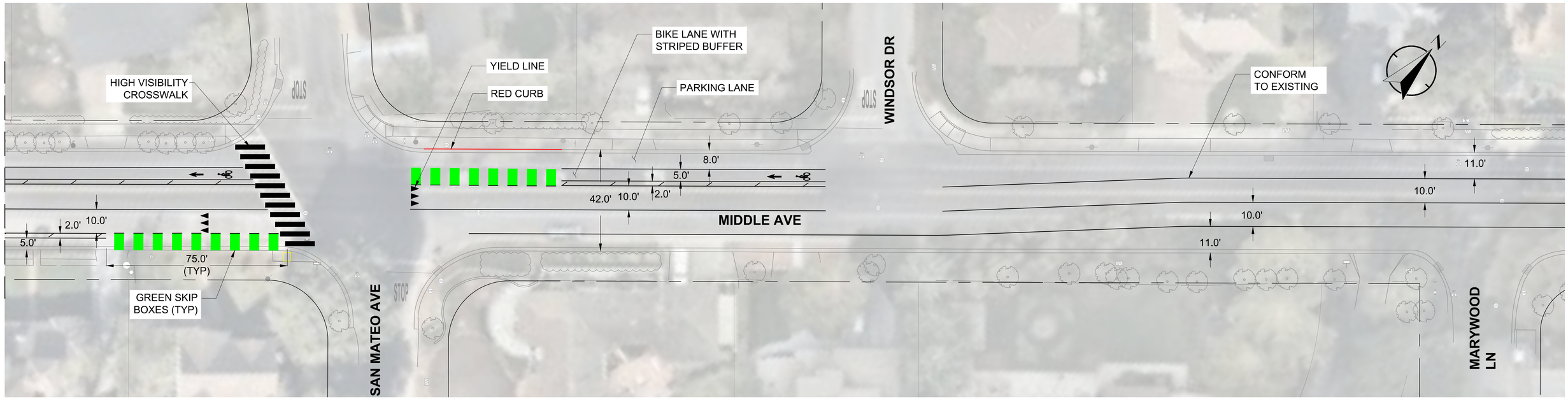
SCALE: 1" = 20'

0 10 20 40

MARCH 2019

alta PLANNING + DESIGN





NOTE: FINAL RED CURB LENGTH WILL BE DETERMINED DURING FINAL DESIGN AND WILL BE CONSISTANT WITH MUTCD STANDARDS

MIDDLE AVE: CONCEPT DESIGN WITH PARKING

MENLO PARK, CA

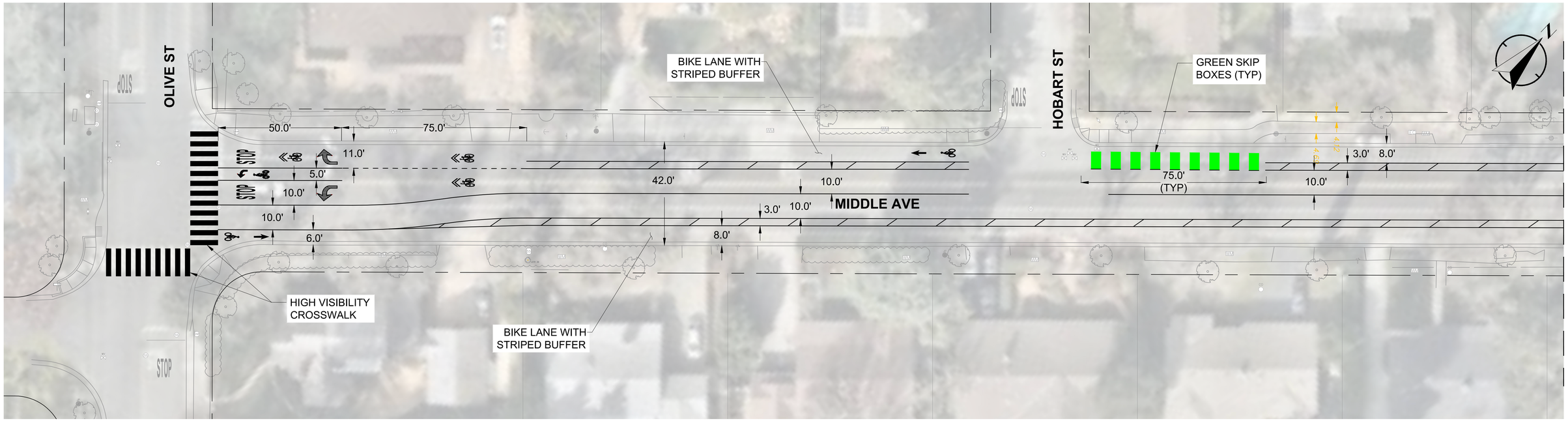
SHEET 2 OF 2

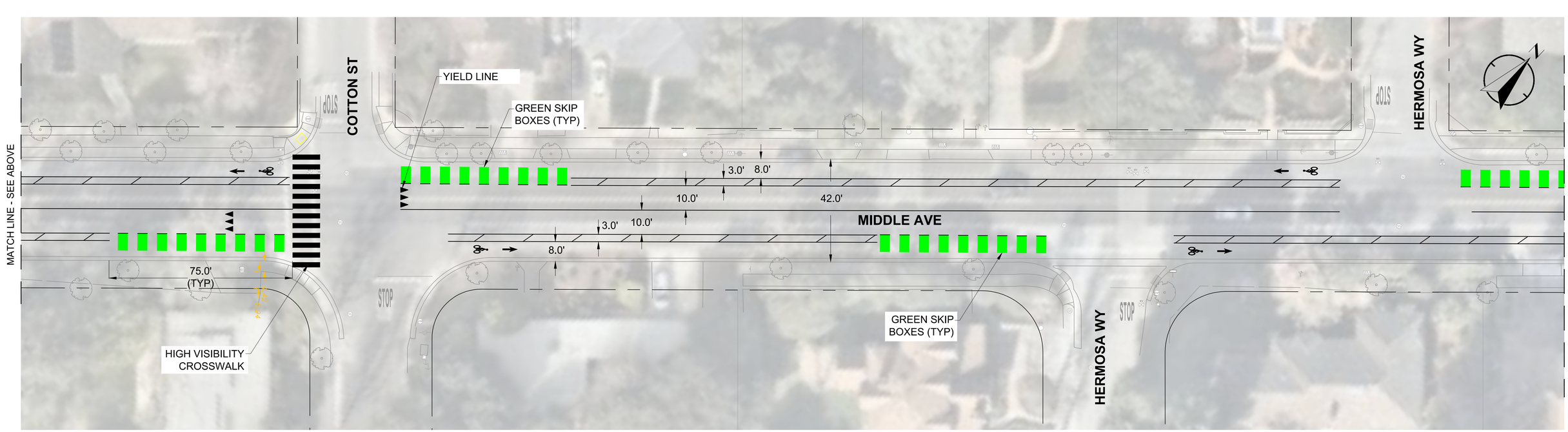
SCALE: 1" = 20'

0 10 20 40

MARCH 2019

alta PLANNING + DESIGN





MIDDLE AVE: CONCEPT DESIGN WITHOUT PARKING

MENLO PARK, CA

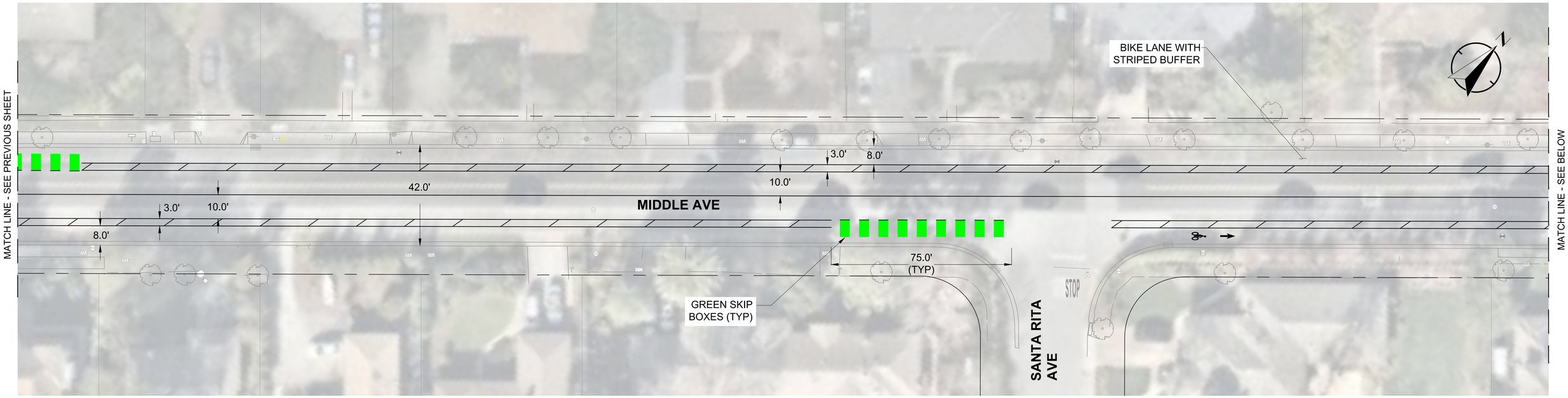
SHEET 1 OF 2

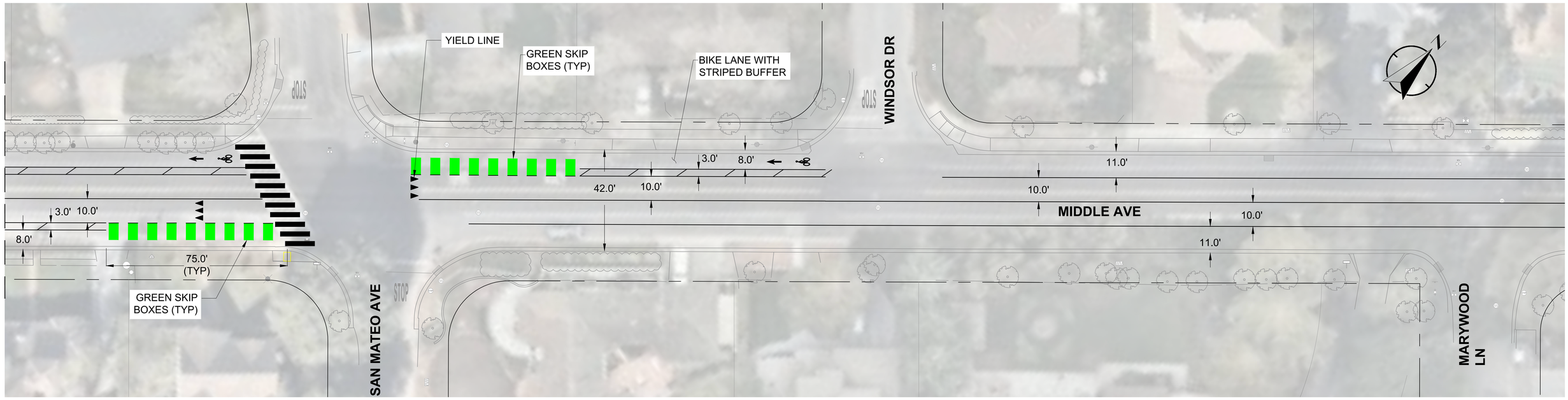
SCALE: 1" = 20'

0 10 20 40

MARCH 2019

alta PLANNING + DESIGN





MIDDLE AVE: CONCEPT DESIGN WITHOUT PARKING

MENLO PARK, CA

SHEET 2 OF 2

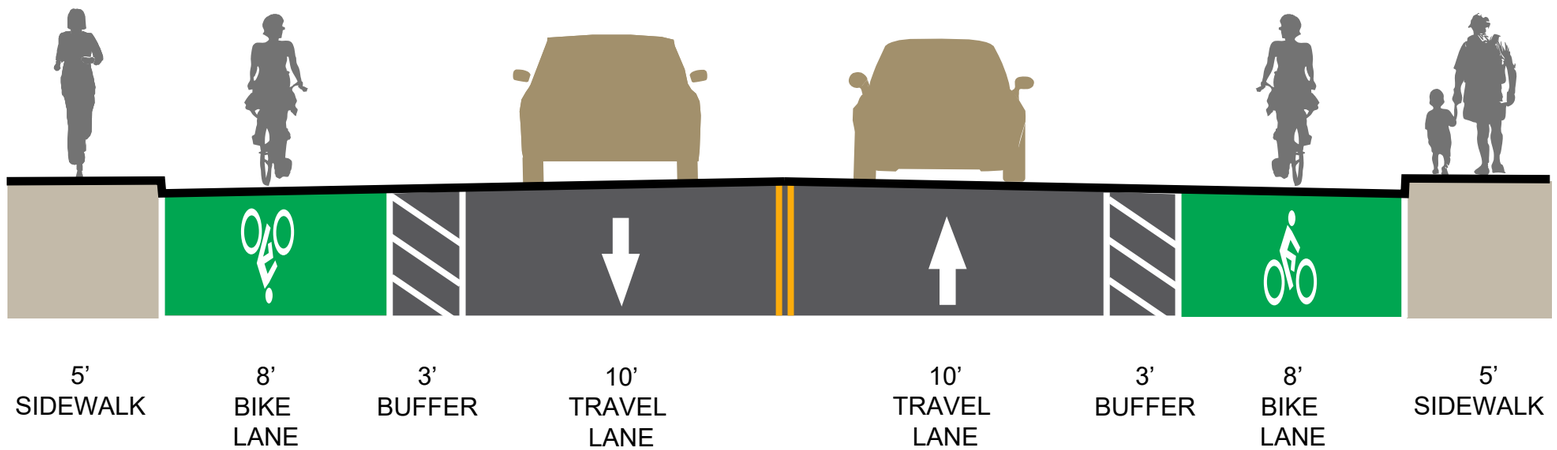
SCALE: 1" = 20'

0 10 20 40

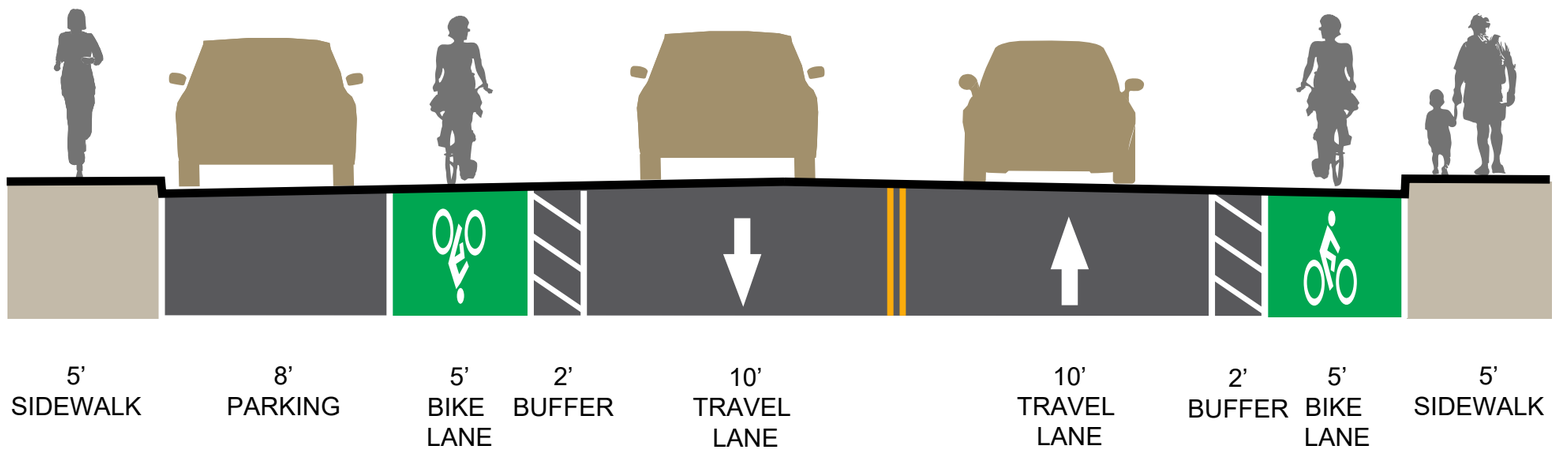
MARCH 2019

alta PLANNING + DESIGN

MIDDLE AVE
MIDBLOCK CROSS SECTIONS | 1”=5’



WITHOUT PARKING
42’ (CURB TO CURB)



WITH PARKING
42’ (CURB TO CURB)

THIS PAGE INTENTIONALLY LEFT BLANK

STAFF REPORT

Complete Streets Commission
Meeting Date: **4/10/2019**
Staff Report Number: **19-004-CSC**

Regular Business: **Recommend to City Council to approve the removal of on-street parking on Santa Cruz Avenue between Olive Street and Avy/Orange Avenue and a preferred conceptual design to accommodate the installation of bike lanes and sidewalks**

Recommendation

Recommend to City Council to approve removal of on-street parking on Santa Cruz Avenue between Olive Street and Avy/Orange Avenue and a preferred conceptual design to accommodate the installation of bike lanes and sidewalks

Policy Issues

The Santa Cruz Avenue Resurfacing project (project) was included in the City's 2017-18 Capital Improvement Program (CIP). The project is also consistent with policies stated in the 2016 General Plan Circulation Element and the El Camino Real and Downtown Specific Plan. These policies seek to maintain a safe, efficient, attractive, user-friendly circulation system that promotes a healthy, safe and active community and quality of life throughout Menlo Park.

Background

On January 24, 2017, City Council adopted Resolution No. 6366 authorizing the City to file an application to secure One Bay Area Grant (OBAG) program funds for the Santa Cruz and Middle Avenues Resurfacing Project. The (OBAG) program is a 5-year, $800 million regional transportation funding program administered by the Metropolitan Transportation Commission (MTC). This program supports local street and road maintenance, streetscape enhancements, bicycle and pedestrian improvements, transportation planning and safe routes to school projects. Its focus is funding projects that improve access to and within Priority Development Areas (PDAs), which are targeted growth areas within existing communities, typically with frequent transit service, near established job centers, shopping districts and other services. Within the City of Menlo Park, the City Council designated the El Camino Real/Downtown Specific Plan area as a PDA in 2013.

Santa Cruz and Middle Avenues were chosen due to their proximity and role in providing access to the City's PDA, the need for repaving, and their role in providing access to local schools, including students at Hillview Middle School and Oak Knoll Elementary School. In 2017, the MTC adopted Resolution 4202 that defines the regional funding commitment for this project and outlines availability of these funds in fiscal year 2019-20.

Analysis

The scope of the project area includes Santa Cruz Avenue between Olive Street and Avy Avenue/Orange Avenue, as shown on the map provided in (Attachment A) and described in more detail below.

Santa Cruz Avenue (Olive Street to Avy Avenue/Orange Avenue)

The section on Santa Cruz Avenue is directly adjacent to the area of work for the Santa Cruz Avenue Sidewalks Project, between University Drive and Olive Street, completed by the City in the summer of 2017. As part of this project, the street will be repaved, asphalt curbs and gutters will be replaced with concrete, sidewalks will be installed on both sides of the street, and modifications to existing striping will be incorporated to install bicycle lanes with painted buffers where feasible. This approach is generally consistent with the prior 2017 Santa Cruz Avenue Sidewalks Project; however, there are several distinct factors and new constraints due to the narrower roadway width between Olive Street and Avy Avenue/Orange Avenue that necessitate clarifying the general approach to this project, as described in the table below.

Table 1: Project approach

Project element	2017 Santa Cruz Sidewalk Project (University Dr to Olive St)	Proposed Santa Cruz & Middle Resurfacing Project (Olive St to Avy/Orange Ave)
Sidewalk installation	Both sides. Preferred six feet wide, but allowable reductions to five feet for tree preservation and installation of buffered bicycle lanes if needed. Minimum four feet wide.	Both sides. Narrower roadway width limits sidewalk width between to four to five feet for tree preservation and installation of buffered bicycle lanes.
On-street parking	Removed all on-street parking to accommodate sidewalk installation and preserve trees and landscaping.	Propose removal of all on-street parking to accommodate sidewalk installation, bicycle lanes, and preserve trees and landscaping. Minimal on-street parking currently exists: • Some parking occurs on the south side of the street in wide bicycle lanes near Elder Avenue, Hidden Oaks Drive, and Lemon Street even though adequate widths for parking and bicycle lanes are not provided. • On the north side of the street, roadway widths do not accommodate parking today, although parking restrictions are not present.

Table 1: Project approach

Project element	2017 Santa Cruz Sidewalk Project (University Dr to Olive St)	Proposed Santa Cruz & Middle Resurfacing Project (Olive St to Avy/Orange Ave)
Vehicle travel lanes	Preserved one lane each direction (11' wide) plus center turn lane (10' wide).	Preserve one lane each direction plus turn pockets at intersections. Narrower roadway width cannot accommodate center turn lane. Lane widths are expected to vary between 10-11', similar to existing conditions in this section.
Bicycle lanes	Preserved Class II (painted) bicycle lanes and added painted buffer and green treatments at intersections.	Preserve Class II (painted) bicycle lanes. Add green treatments at intersections. Add painted buffers where feasible, in order to preserve minimum sidewalk widths and heritage trees.
Tree preservation	Preserved all heritage trees. No non-heritage trees existed in this area.	All heritage trees are expected to be preserved; however, existing trees along 1095 Lemon Street frontage may preclude sidewalk installation. Conceptual design phase ahead would evaluate the condition and life expectancy of the trees along this property to assess deferred sidewalk installation versus tree removal as part of this project.
Privately installed landscaping/ monuments in City right-of-way	Preserved significant landscaping (e.g., hedges) and monuments. Minor landscaping and ground cover removed.	Preserve significant landscaping (e.g., hedges) and monuments as feasible to install minimum sidewalk widths and buffered bicycle lanes.
Utility coordination	Coordinated with Cal Water to replace water main and services. Coordinated with West Bay Sanitary District to provide residents opportunity to replace their deteriorated sanitary sewer lateral in advance of street work. Explored undergrounding power lines with PG&E; did not align with project schedule.	Coordinate with Cal Water to replace water main and services, if warranted. Coordinate with West Bay Sanitary District to provide residents opportunity to replace deteriorated sanitary sewer laterals in advance of street work.

The consulting firms of Wilsey-Ham and Alta Planning + Design were retained by the City to assist with analysis of the corridor to define potential alternatives and to prepare conceptual designs. Staff requested that Wilsey-Ham conduct a brief analysis of the possible impacts and improvements for consideration to install new curb and gutter on both sides of the street to accommodate either a 40-foot roadway or a 42-foot roadway and include possible impacts and key challenges. The difference in a 40-foot versus 42-foot roadway includes the ability to provide consistent buffered bike lanes along the corridor; since at 40 feet

buffers would have to be dropped at intersections where existing turn pockets are provided (Elder Avenue, Lemon Street, and Orange Avenue/Avy Avenue). Currently there is a 10-11 toot wide parking/bike lane across from Hillview School. The minimum required width to provide for parallel parking and a bike lane is 12 feet. Approximately 17 parking spaces would be remove with either alternative.

The following list summarizes the possible impacts of each alternative:

Table 2A: Project Alternative 1A- 40 ft. curb-to-curb, moving Southern curb
Possible Impacts
Relocate 10 PG&E poles (Not feasible to be completed in timeframe of project)
Relocate 1 Communication pole
Possible removal of 5 trees
Relocate 5 signs

Table 2B: Project Alternative 1B – 40 ft. curb-to-curb, moving Northern curb
Possible Impacts
Relocate 1 Anchoring pole
Relocate 4 signs
re-grade 6 driveways

Table 2C: Project Alternative 2 – 42 ft. curb-to-curb
Possible Impacts
Relocate 10 PG&E poles (Not feasible to be completed in timeframe of project)
Relocate traffic signal poles at Elder Avenue
Removal of trees
Re-grading of driveways
Redesign of bus stops
Relocation of signs

Due to the severe impacts, anticipated additional expenses and delay of the project to relocate utility poles, staff is recommending alternative 1B, the installation of a 40 foot curb-to curb roadway by retaining the southern curb line and adjusting the northern curb line. Also, some portions of the northern side of the street have existing sidewalk and curb and gutter. These sidewalks would be retained where possible. Alta Planning + Design has prepared cross-section diagram illustrating a proposed striping plan for both alternatives (Attachments B and C)

On March 18, 2019, staff sent out a letter to residents along Santa Cruz Avenue between Olive Street and Avy Avenue/Orange Avenue to inform them of the project to resurface the street, install sidewalks and

install bike lanes with buffers where available. Staff stated that they would send a follow up notice with conceptual plans once they become available and to contact staff if they had any questions. As of April 3, 2019 staff has received three calls/emails regarding the project. One was from a resident that lives on Santa Cruz Avenue that requested we keep parking in front of his residents, two that supported the project and requested we extend it to Alameda de las Pulgas and one resident that does not live on Santa Cruz Avenue that would like to retain parking.

Staff is seeking the Complete Streets Commission's recommendation to the City Council on the following items:

- Approve the removal of on-street parking on Santa Cruz Avenue between Olive Street and Avy/Orange Avenue; and
- Identify a preferred conceptual design alternative

Below is the proposed project schedule and anticipated next steps:

Table 3: Project Schedule

Task	Schedule
Complete Streets Commission review and recommendation to the City Council	April 10, 2019
Complete conceptual designs and cost estimates	May 2019
City Council approval of preferred alternative	July 2019
Complete final engineering design to secure grant funds for installation	Fall 2019
Advertise project, award construction contract	Spring 2020
Completion of resurfacing and permanent striping	Summer 2020

Impact on City Resources

Funds to complete the design phase of the project were included in the Capital Improvement Program during FY2017-18. Funds to complete construction of this project are programmed for FY2019-20, which includes funds from the One Bay Area Grant program as described in the Background section above**.**

Public Notice

Public Notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting. Staff also sent out a postcard to the residents that front the street as well as residents within 500 feet of the project, notifying them of the project and the April 10th Complete Streets Commission meeting.

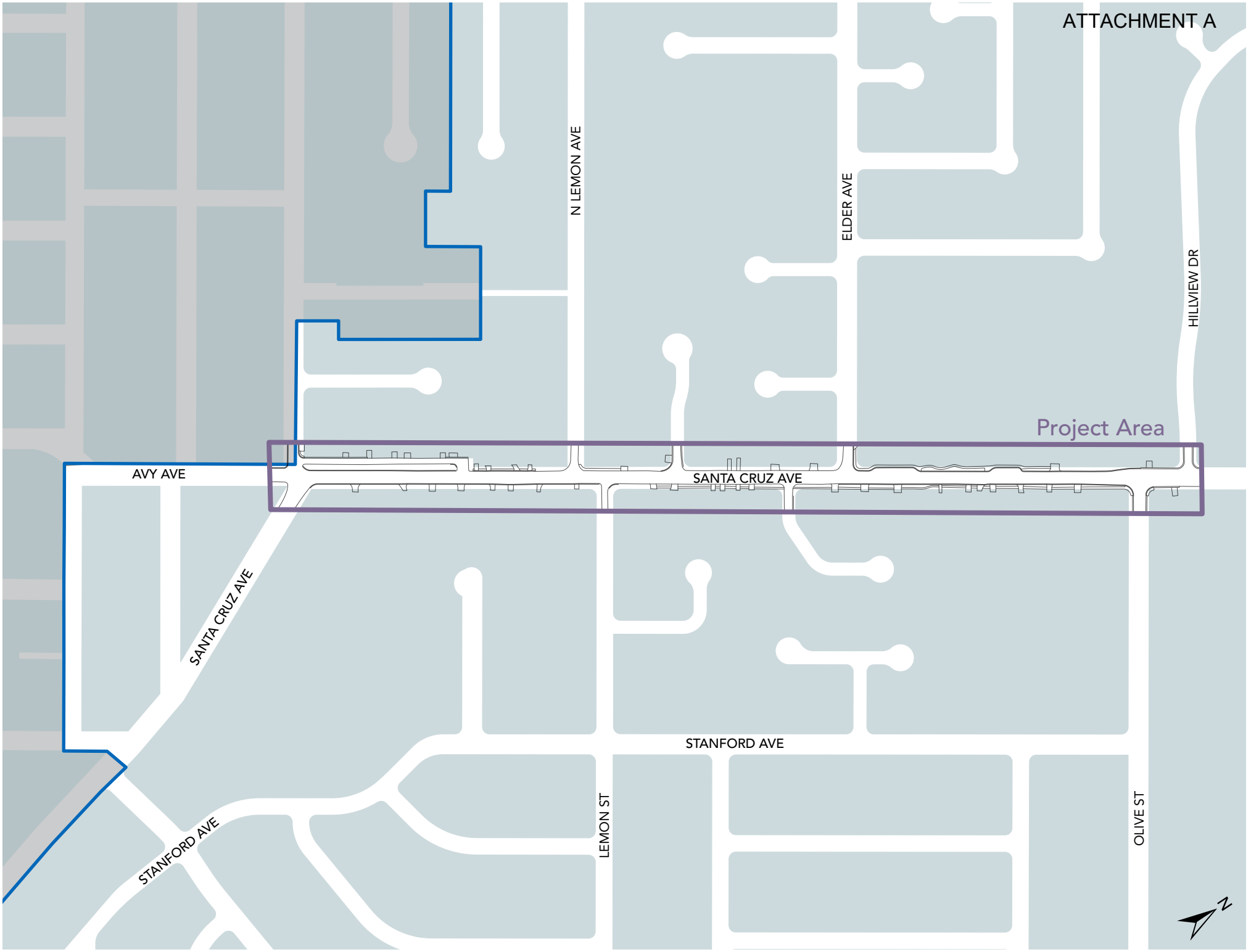
Attachments

A. Map of Project Area
B. Cross-section Illustration Alternative 1 (40 feet)
C. Cross-section Illustration Alternative 1 (42 feet)

Report prepared by:
Richard F Angulo, Assistant Engineer

Report Reviewed by:
Nikki Nagaya, Assistant Public Works Director

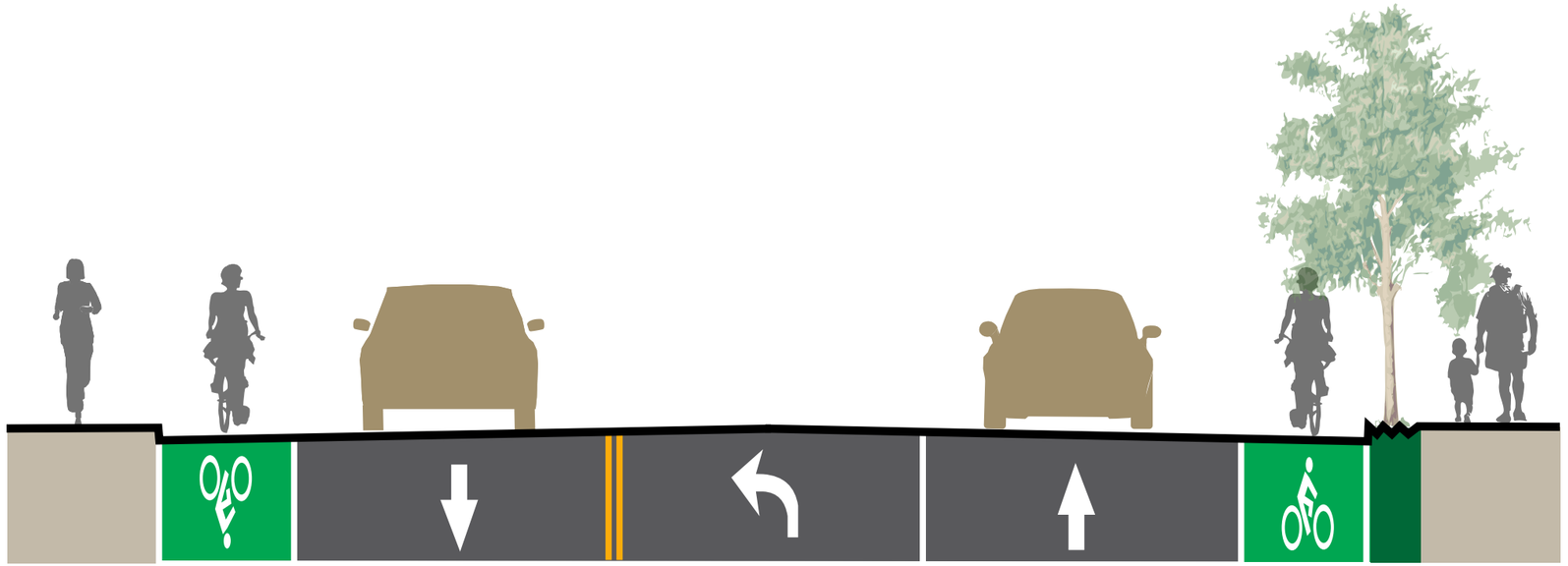
ATTACHMENT A



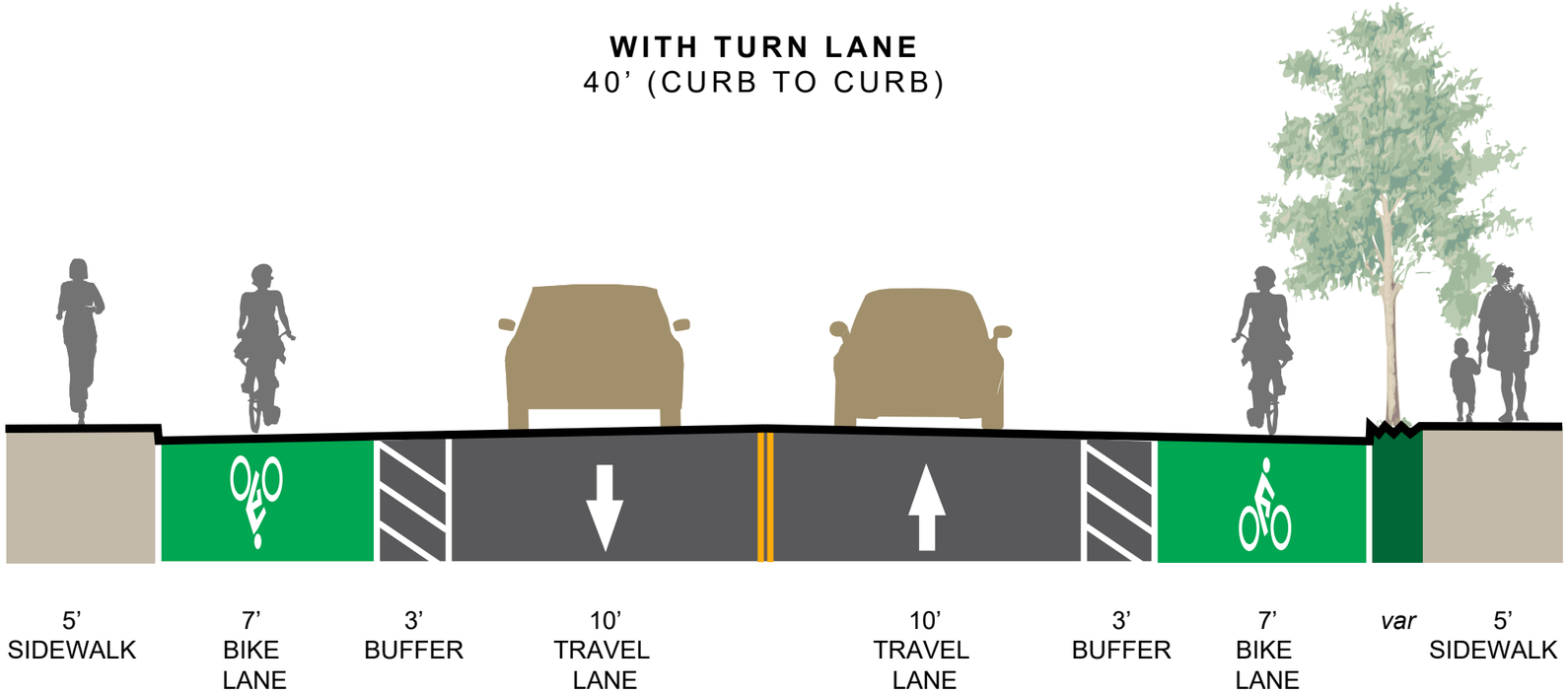
THIS PAGE INTENTIONALLY LEFT BLANK

SANTA CRUZ AVE
40’ CROSS SECTIONS | 1”=5’

WITH TURN LANE
40’ (CURB TO CURB)

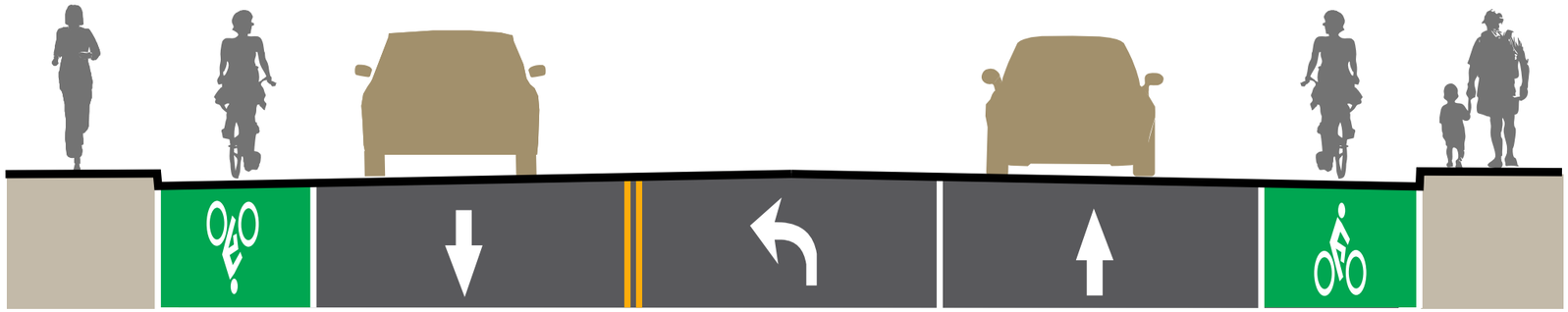


NO TURN LANE
40’ (CURB TO CURB)



THIS PAGE INTENTIONALLY LEFT BLANK

SANTA CRUZ AVE
42’ CROSS SECTIONS | 1”=5’



5’ SIDEWALK	5.5’ BIKE LANE	10’ TRAVEL LANE	11’ LEFT TURN LANE	10’ TRAVEL LANE	5.5’ BIKE LANE	5’ SIDEWALK

WITH TURN LANE
42’ (CURB TO CURB)

THIS PAGE INTENTIONALLY LEFT BLANK

CITY OF MENLO PARK

STAFF REPORT

Complete Streets Commission
Meeting Date: **4/10/2019**
Staff Report Number: **19-006-CSC**

Regular Business: **Recommend to City Council to approve the Commission goals and priorities for 2019-2020**

Recommendation
Staff recommends that the Complete Streets Commission recommend to City Council to approve the Commission's mission statement, goals and priorities, and near-term actionable tasks for 2019-2020 (Attachment A).

Policy Issues
The proposed action is consistent with City Council Policy CC-19-0004, Commissions/Committees policies and procedures and roles and responsibilities.

Background
On February 28, 2017, the City Council adopted a resolution (No. 6377) to merge the former Transportation Commission and Bicycle Commission to form the Complete Streets Commission, as a pilot program. Additionally, the City Council elected to defer the development of a new Commission mission statement and work plan after a full evaluation of the program.

On December 12, 2018, the Complete Streets Commission evaluated and recommended to the City Council to continue the Complete Streets Commission permanently as a 9-member body.

On January 9, 2019, the Complete Streets Commission initiated a brief discussion on the Commission's mission statement and goals and priorities.

On March 5, 2019, the City Council adopted a resolution (No. 6477) to continue the Complete Streets Commission permanently as a 9-member body.

On March 13, 2019, the Complete Streets Commission held an extensive discussion on the Commission's mission statement and goals and priorities. Additionally, the Commission also identified and discussed near-term actionable tasks for each goals and priorities. After the discussions, the Commission asked staff to refine the verbiage based on the Commission feedback, for a final Commission recommendation at a future meeting.

Analysis
After the March 13, 2019, Complete Streets Commission meeting, staff worked with individual Commissioners to finalize the draft Commission's mission statement, goals and priorities, and near-term actionable tasks (Attachment A).

As a result, staff recommends that the Commission recommend to the City Council to approve the Commission's mission statement, goals and priorities, and near-term actionable tasks.

Impact on City Resources

Resources expended for the completion of this item is considered part of the City baseline operation.

Environmental Review

This action is not a project within the meaning of the California Environmental Quality Act (CEQA) Guidelines §§ 15378. Any projects identified through the Commission's pursuit of these goals and priorities would be subject to environmental review under CEQA in the future.

Public Notice

Public Notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting.

Attachments

A. Commission's mission statement, goals and priorities, and near-term actionable tasks

Report prepared by:
Kevin Chen, Associate Transportation Engineer

Report reviewed by:
Nikki Nagaya, Assistant Public Works Director

Mission Statement:

"The Complete Streets Commission shall advise the City Council on realizing the City's adopted goals for Complete Streets, Vision Zero, clear air and carbon reduction."

Goals/Priorities (and near-term actionable tasks):

- Continue to advocate for and advise the Council on the planning and installation of the Middle Avenue crossing, and safe cycling/pedestrian infrastructure connecting the Burgess complex to the Middle corridor to Olive, and north on Olive to Hillview School.
    - Submit to City Council a project on a page (PoP) outlining the Middle Avenue scope and next steps.
    - Recommend a preferred design alternative for the Middle Avenue crossing to the City Council.
    - Recommend preferred design alternative on Middle Ave from San Mateo Drive to Olive Street in spring 2019 in anticipation of the tentative 2020 repaving of the same street segment

- Continue to support the implementation of the Safe Routes to School strategy and advocate for community engagement, program continuity and engineering implementation.
    - Provide guidance to the city's temporary Safe Routes to School Coordinator and advocate to the Council to institutionalize the role.

- Support City Council's role as a stakeholder with regard to regional multi-modal projects and to increase sustainable transportation for Menlo Park.
    - Advise City Council on the continuing development of the Dumbarton Corridor projects and Caltrain modernization through its Business Plan development and construction of the Peninsula Corridor electrification project.

- Support City Council in developing a network of active transportation routes, and prioritize segments for future development.
    - Advise City Council on the development of the Transportation Master Plan (TMP), including:
        - Work with staff and consultants to frame the planning in a way that will foster robust and productive community input – e.g. grouping individual projects in terms of bike routes and/or multimodal corridors.
        - Support council/community outreach efforts around effective, safe, and sustainable multimodal transportation.
        - Review design standards in TMP and provide input.

- Support City Council in developing policy to encourage alternative transportation modes that encourage zero emission.
    - Advise City Council in developing alternative transportation mode sharing programs.

- Support City Council and provide community education in developing plans to improve access to downtown through improved parking management and increased use of equitable and sustainable transportation.
    - Advise City Council in developing and implementing near-term downtown parking strategies.

THIS PAGE INTENTIONALLY LEFT BLANK