Environmental Quality Commission

REGULAR MEETING AGENDA

Date: 6/21/2017
Time: 6:30 p.m.
City Hall/Administration Building
701 Laurel St., Menlo Park, CA 94025

A. Call To Order

B. Roll Call – Bedwell, DeCardy, Dickerson, Chair London, Marshall, Vice Chair Martin, Smolke

C. 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.

D. Regular Business

D1. Discuss and make a recommendation to the City Council in support of a renewable water heating model ordinance (Attachment) – 45 min

D2. Discuss the creation of a parking policy to minimize vehicle emissions (Attachment) – 30 min

D3. Discuss the Climate Action Plan progress and update on greenhouse gas emissions inventory (Attachment) – 45 min

D4. Discuss Environmental Quality Commission meeting schedule (Attachment) – 15 min

D5. Approve the May 17, 2017, Environmental Quality Commission meeting minutes (Attachment) – 5 mins

E. Reports and Announcements

E1. Commissioner reports – 10 min

E2. Staff update and announcements (Attachment) – 10 min

E3. Future agenda items – 5 min

F. Adjournment

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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.

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STAFF REPORT

Environmental Quality Commission
Meeting Date: **6/21/2017**
Staff Report Number: **17-008-EQC**

Regular Business: Discuss and make a recommendation to the City Council in support of a renewable water heating model ordinance

Recommendation

Staff recommends the Environmental Quality Commission discuss and recommend to the City Council that it draft a letter of support to the California Energy Commission for inclusion of a renewable water heating model ordinance to complement the CEC's efforts on a model solar photovoltaic ordinance.

Policy Issues

City Council has taken progressive sustainability stances in the past and this item is consistent with the goals of the adopted climate action plan. In accordance with its procedures manual, there is a process for the City Council to consider and approve direction to staff to draft letters in support or opposition of legislation and other agency activities.

Background

On April 20, 2017, the California Energy Commission presented a proposal for a solar photovoltaic model ordinance to help California cities interested in clean energy and climate leadership adopt a local "reach" building energy code, helping pave the way toward zero-net energy homes. The CEC has asked for comments before it finalizes and publishes its final version of this model ordinance.

The Natural Resources Defense Council, a nonprofit tax-exempt environmental advocacy organization, has provided comments supportive of the CEC's draft solar photovoltaic model ordinance and requested that the CEC consider including an optional add-on provision to include renewable water heating (Attachment A). The NRDC states that this would allow cities to consider both options, and either adopt the solar photovoltaic ordinance alone or both options together depending on the local community's individual situation and priorities.

In May 2017, the City received a request from Menlo Spark to consider supporting this initiative.

Analysis

The City of Menlo Park has often supported, participated in and benefited by efforts to create model ordinances that local jurisdictions can review, modify and adopt. It greatly speeds the municipal code amendment process and saves city resources in terms of staff time, legal review and consulting resources.

This model ordinance effort, if approved, would allow the City to minimize resources necessary to comply with California Energy Commission requirements calling for a cost-effectiveness study to be conducted and

filed in the case of a local (e.g., reach code) amendment to the California Energy Code. It is required that the City demonstrate to the California Energy Commission, using a cost-effectiveness study, that the local amendments to the code are financially responsible to the public.

A renewable water heating model ordinance, developed in coordination with the California Energy Commission and its model solar photovoltaic ordinance, would allow interested cities to consider both options at the same time and therefore maximize potential energy efficiency benefits.

Staff have created a draft support letter to the California Energy Commission (Attachment B).

Impact on City Resources

There is no impact on city resources related to this item.

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. Natural Resources Defense Council comment letter and renewable water heating model ordinance proposal
B. Draft support letter to the California Energy Commission

Report prepared by:
Clay J. Curtin, Assistant to the City Manager/Interim Sustainability Manager

NRDC et. al. Comments on CEC Proposed Model Solar PV Ordinance and Proposal for a "Renewable Water Heating" Model Ordinance

May 5, 2017

Submitted by: Pierre Delforge (Natural Resources Defense Council), Adam Stern (Acterra), Andy Brooks (Association for Energy Affordability), Kelly Knutsen (CALSEIA), Timothy Burroughs (City of Berkeley), Bruce Hodge (Carbon Free Palo Alto), Ann V. Edminster (Design AVEnues LLC), Steve Schmidt (Home Energy Analytics), Diane Bailey (MenloSpark), John Miles (Sanden International), Rachel Golden (Sierra Club), Cordel Stillman (Sonoma Clean Power), Nehemiah Stone (SEA), and Michael Cohen (Union of Concerned Scientists).

On April 20, 2017, the California Energy Commission (CEC) presented a proposal for a solar photovoltaic model ordinance to help California cities interested in clean energy and climate leadership adopt a local "reach" building energy code, helping pave the way toward zero-net energy (ZNE) homes.

We very much appreciate the presentation of this proposal and the opportunity to provide comments before the CEC finalizes and publishes this model ordinance. This letter submits comments on this draft model ordinance on behalf of the Natural Resources Defense Council (NRDC) and our more than 380,000 members and online activists in California, Acterra, the Association for Energy Affordability, the California Solar Energy Industries Association, the City of Berkeley, Carbon Free Palo Alto, Design

AVEnues LLC, Home Energy Analytics, MenloSpark, Sanden International, the Sierra Club, Stone Energy Associates, and the Union of Concerned Scientists.

We strongly support CEC's initiative to develop a model solar photovoltaic (PV) ordinance. It provides an opportunity for city leadership and a glide path toward ZNE homes in California. The proposed ordinance is cost-effective for home owners, and an opportunity to reduce greenhouse gas (GHG) emissions in a way that will save bill payers money, increase their disposable income and help the state's economy.

We propose that CEC also adopts an optional add-on "renewable water heating" model ordinance. This would allow cities to consider both options, and either adopt the solar PV ordinance alone or both options together depending on their situation and priorities.

CEC's proposal aims to offset most of the electricity use in a dual-fuel building, but it does not address the energy used for thermal end uses such as water heating and space heating. Direct use of fossil fuels, primarily natural gas, for thermal end uses in residential buildings is responsible for a roughly equivalent amount of GHG emissions in California as all electricity used in these buildings.[1]

This is an overlooked opportunity to save energy and reduce GHG emissions, as several technologies are available today that can provide significantly lower-carbon hot water in buildings than with current natural gas systems. These include electric heat pump water heaters (HPWH), and solar thermal water heating.

Renewable water heating model ordinance requirements: A renewable water heating local ordinance would require that newly constructed single-family and low-rise multifamily buildings use a renewable water heating solution which is either a heat pump water heater and associated PV, or a solar thermal water heater and its backup electric or gas water heater, or that the whole building achieves the CALGreen "**PV-Plus**" package as defined in the 2016 Energy Efficiency Ordinance Cost Effectiveness Study.

The heat pump option would consist of a high-efficiency electric HPWH instead of a gas tankless water heater, combined with enough additional PV panels to cover 80% of the annual energy use of the HPWH.

Benefits: The combination of HPWH and PV provides a unique opportunity to make the HPWH more cost-effective for home owners: by taking advantage of the fact that PV electricity is cheaper than grid electricity, our preliminary analysis indicates home owners can **save around 13 percent of lifecycle water heating costs**. HPWHs would also **reduce source energy use by over 30 percent** and **GHGs by nearly 50 percent**. In addition, HPWHs would help address the duck curve and the grid impacts of rooftop PV exports, through their capability to increase self-consumption of rooftop PV electricity, and absorb and store excess PV generation.

Our proposal is focused on water heating instead of all-electric buildings, because it provides a lower barrier to entry to heat pump technology than all-electric buildings, and it avoids potential customer

[1] Jones C., Kammen D., "Bay Area Consumption-Based Greenhouse Gas Emissions Inventory", Jan. 2016, http://www.baaqmd.gov/research-and-data/emission-inventory/consumption-based-ghg-emissions-inventory

acceptance issues with all-electric buildings (especially with electric cooking) which do not exist with water heating. However, builders would be able to build all-electric if they choose to. Choosing an all-electric building would be even more cost-effective than electrifying water heating only, because of avoiding gas connection costs and using a single heat pump appliance for both space heating and cooling instead of a separate furnace and A/C.

Our detailed proposal in presented in Appendix A. We are working with the Statewide Codes and Standards team to refine our cost analysis and develop model ordinance language.

We ask CEC to consider this opportunity to cut GHG emissions from energy use in buildings through reach codes and local government leadership.

NRDC recommends that CEC adopt the renewable water heating ordinance as soon as possible - At the April 20 workshop, CEC asked stakeholders to comment on whether to hold off on the solar PV ordinance until this renewable water heating ordinance is ready and can be published at the same time. NRDC does not recommend delaying the PV ordinance in case the renewable water heating ordinance takes longer to finalize than anticipated, but we recommend that CEC adopt the renewable water heating ordinance as soon as possible, i.e. within a matter of weeks not months. This will help cities consider both options at the same time, and CEC and other parties to promote them together.

The renewable water heating ordinance is under development and close to completion: the language is being developed, and the cost-effectiveness analysis finalized. We expect to complete these two tasks by mid-May, allowing for stakeholder comments and any changes by mid-June.
We appreciate the opportunity to provide this input to the CEC, and thank CEC for its careful consideration of our comments.

Respectfully submitted,

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Appendix A - Proposal for Renewable Water Heating Model Ordinance

Background

CEC has proposed a model solar ordinance to help cities looking for climate leadership opportunities to adopt a local building code ordinance that would require rooftop photovoltaic (PV) and higher energy efficiency than the California 2016 building code for new construction. Specifically, the proposed model ordinance would require:

1. Rooftop PV covering at least 80% of projected electrical use (with exemptions)
2. Energy efficiency in line with 2016 code requirements without the PV credit.

Opportunity: Extend solar requirements from covering just electricity to including water heating energy (through electric heat pump or solar thermal)

Why include water heating in a solar PV ordinance? - Water heating already represents roughly half of all residential gas use in CA, and is responsible for approximately a quarter of residential emissions from energy use today. This share is set to increase as California's electricity becomes increasingly renewable, and heating energy use decreases thanks to higher building efficiency, while the potential for reduction of water heating loads is more limited.

High-efficiency electric heat pump water heaters (HPWH) offer an alternative solution to meet household hot water needs using less source energy and, when powered by increasingly clean electricity, with much lower GHG emissions than the most efficient gas water heaters on the market (even from a system perspective, including power plants emissions and distribution losses).

In addition, HPWH have the potential to help integrate solar electricity into the grid by leveraging their thermal storage capacity to pre-heat water off-peak and shed load on-peak. While grid-connectivity and utility and 3rd-party programs will be required to dispatch this capability, it is important to start by scaling the market share of HPWH to make these programs viable.

PV makes HPWH more cost-effective – The combination of HPWH with rooftop PV allows the use of lower PV electricity costs instead of grid electricity prices (as modeled by time dependent valuation or TDV) for HPWH operation. This significantly improves the cost-effectiveness of HPWH vs. gas water heating, and leverages the customer investment in solar PV to decarbonize both electricity and water heating energy use in a cost-effective manner.

Climate policy benefits - Beyond the immediate emissions and cost reduction benefits, including water heating in this solar ordinance also presents the following policy benefits:

1) It will drive demand for heat pumps and **build capacity in the HPWH market in CA in the short-term**, allowing heat pumps to become a significant pathway to help meet the state's ambitious energy efficiency and climate goals such as SB 350 Doubling Energy Efficiency goal, and SB 32 40% reduction in GHGs by 2030;
2) It will give leading cities an opportunity to pave the way for extending this approach to the statewide building code in the future.

Scope: Same as CEC's proposed ordinance: newly constructed single-family buildings and low-rise residential structures

Proposed solar hot water requirements - We propose adding the following requirements to the ordinance:

- **Compliance option 1, prescriptive method**: the domestic hot water shall be delivered by a **heat pump water heater** that is compliant with the Tier 3 requirements of the NEEA Advanced Water Heater Specification and listed on the NEEA Qualified Product List located at http://neea.org/advancedwaterheaterspec, and the rooftop PV system shall be sized to meet 80% of the annual heat pump water heating load in addition to the currently proposed sizing requirements.

- **Compliance option 2, prescriptive method**: the domestic hot water shall be delivered by a **solar thermal** water heating system with a solar fraction of 60%.

- **Compliance option 3, performance method**: The building shall meet the requirements of the CALGreen "PV-Plus" package as defined in the 2016 Energy Efficiency Ordinance Cost Effectiveness Study. Buildings that are not suitable for solar as determined by the Building Official shall meet the requirements of the CALGreen "Tier 1 Efficiency-only" package instead.

Table 14: Single Family Reach Code Package Recommendations

Packages	Climate Zones	T-24 Compliance Target	QII	PVCC Allowed	PV	Solar Ready
Tier 1 Efficiency Only Package	1-3, 11-16	15%	Yes	No	n/a	Yes
	5, 9-10	15%	Yes	No	n/a	No
	4	10%	Yes	No	n/a	No
PV-Plus Package	1,2,4, 8-16	30%	Yes	Yes	Yes	n/a
	3,5	20%	Yes	Yes	Yes	n/a
	6-7	10%	Yes	n/a	Yes	n/a

Table 15: Multifamily Reach Code Package Recommendations

Packages	Climate Zones	T-24 Compliance Target	QII	PVCC Allowed	PV
Tier 1 Efficiency Only Package	1, 11-16	15%	Yes	No	n/a
	10	10%	Yes	No	n/a
	2	QII	Yes	No	n/a
PV-Plus Package	4, 9-16	25%	Yes	Yes	Yes
	1-2, 8	20%	Yes	Yes	Yes
	3	15%	Yes	Yes	Yes
	5	10%	Yes	Yes	Yes
	6-7	10%	Yes	n/a	Yes

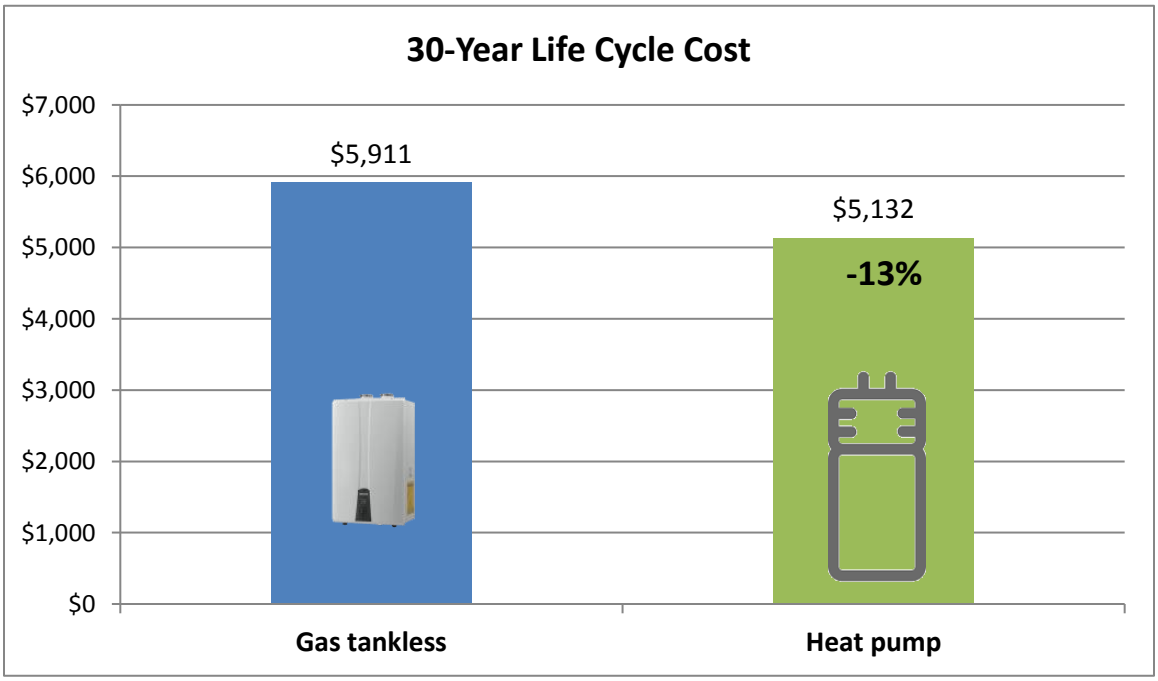
Avoiding pre-emption –The proposed approach allows an option with a gas water heater when combined with a solar thermal system, as well as an envelope efficiency option. Neither of those requires appliances that exceed federal efficiency standards. The solar thermal option may not be cost-effective today but could become cost-effective with increased adoption. Both the HPWH and efficiency options are cost-effective (see below for the HPWH+PV option. The cost-effectiveness of the CALGreen PV-Plus and tier 1 efficiency-only packages was already demonstrated in the 2016 Energy Efficiency Ordinance Cost Effectiveness Study).

Why not include space heating? – While it is tempting to include renewable space heating in the ordinance too because it can even be more cost-effective than HPWH in new construction (heat pump space heating and cooling requires only one heat pump system instead of a separate furnace and A/C, as well as saving on gas access and combustion venting costs), we don't propose to include it in this ordinance because this could raise the barrier to adoption. However, builders may choose to build all-electric as a cost-effective way to achieve this water heating requirement.

Cost-Effectiveness

A preliminary analysis of the cost difference of installing a HPWH and additional PV to cover 80% of the HPWH's annual load (on top of what the PV already required by the model solar ordinance), instead of a 0.82 EF instantaneous (tankless) gas water heater in a new construction single family home, indicates that a HPWH + PV would cost roughly 13% less than a 0.82 EF gas tankless equivalent, on a 30-year lifecycle basis.

This preliminary analysis uses average values for California (not by climate zone), a 50-gal, 66-gal, and 80-gal HPWH (3.5 EF) depending on the household size. A separate analysis by climate zone is being developed by the Statewide Codes and Standards team.



Data and assumptions uses in the analysis are detailed in the last section of this document. The analysis does not account for the lower marginal cost of PV: adding a few PV panels to those already required in

the solar PV ordinance costs a lot less than the first PV panels, because the additional panels leverage the fixed costs such as getting a crew on-site.

GHG Emissions and Source Energy

The source energy and GHG emissions of a HPWH depend on the generation resources at the margin at the time of operation: when operating during peak time, the marginal resource is more likely to be a gas peaker plant, and when operating during PV generation, the marginal resource is the home's PV system (since the additional PV was installed specifically to serve the HPWH).

To estimate the GHG emissions and source energy use of a HPWH, three scenarios are considered:

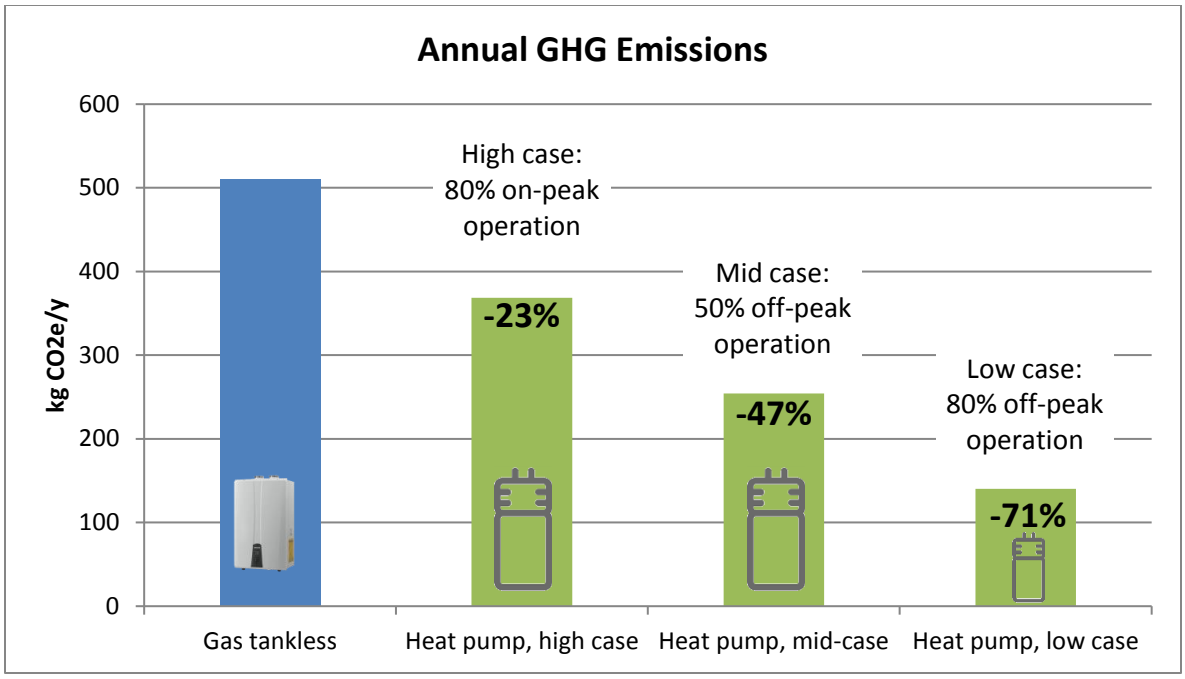
1. **High-emissions case**: HPWH operated 80% on-peak, 10% during solar hours, and 10% off-peak outside of solar hours (e.g. at night)
2. **Mid-emissions case**: HPWH operated 50% on-peak, 30% during solar hours, and 20% off-peak outside of solar hours
3. **Low-emissions case**: HPWH controlled to operate mostly off-peak: 20% on peak, 50% during solar hours, and 30% off-peak outside of solar hours.

The emissions and source energy factors of peak and off-peak grid electricity were then estimated (see last section of this document for detailed data and assumptions).

A "long-run marginal" or "build marginal" accounting methodology is used: this considers the generation resources which will be built/procured over the long-term to serve this new load, not the long-term operational margin which would be there anyway even without the new HPWH load. For renewables, the long-run margin includes mostly solar, wind and gas, since no new large hydro or nuclear is expected to be built in California.

The analysis indicates a GHG emissions reduction ranging from 23% in the high-emissions case, to 71% in the low-emissions case, with a mid-case of 47%. The magnitude of these numbers reflects a number of things:

1. Even with a gas peaker plant on the margin, recent heat pump water heaters outperform 0.82 EF gas tankless water heaters on GHG emissions
2. Even without being combined with PV, heat pump water heaters will operate partially off-peak where they benefit from an increasing share of renewables on the build margin, per California's renewable portfolio standard (RPS). This is increased when combining the HPWH with PV as the solar-coincident part of the load is emissions-free.
3. Controlling HPWH offers an opportunity to use their inherent thermal storage capacity to shift most of the HPWH operation off-peak, helping absorb renewables and reduce peak load.

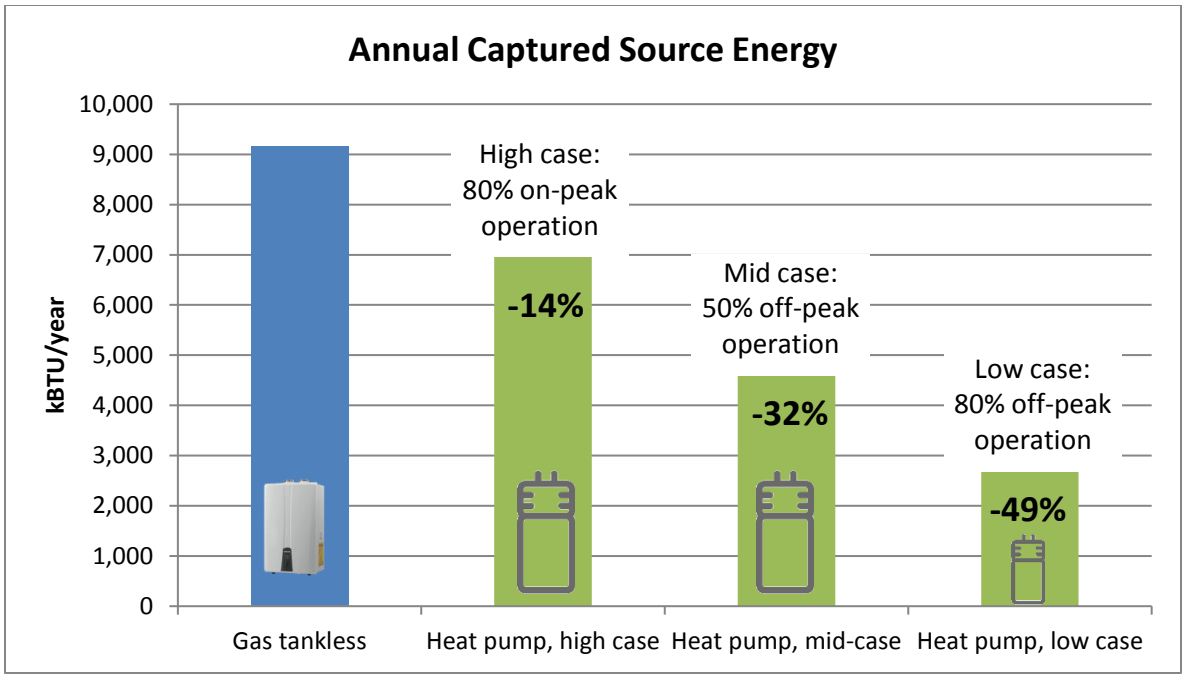


Source Energy (Captured)

Source energy considers the upstream losses in the production, transmission and distribution of electricity and natural gas to the site. In this analysis, DOE's "captured source energy" methodology[2] was used to estimate source energy for electricity. The difference with the conventional source energy methodology is that Captured Source accounts for renewables by attributing a thermal efficiency of 100% to renewable electricity generation, and only counting transmission and distribution (T&D) losses for these resources. Captured Source only counts the energy that is "captured" by solar and wind generators. Apart from T&D losses, renewable electricity is essentially considered site electricity. The traditional source energy methodology which considers all electricity to be generated from fossil power plants is no longer appropriate in California given the significance of state's renewable electricity policies.

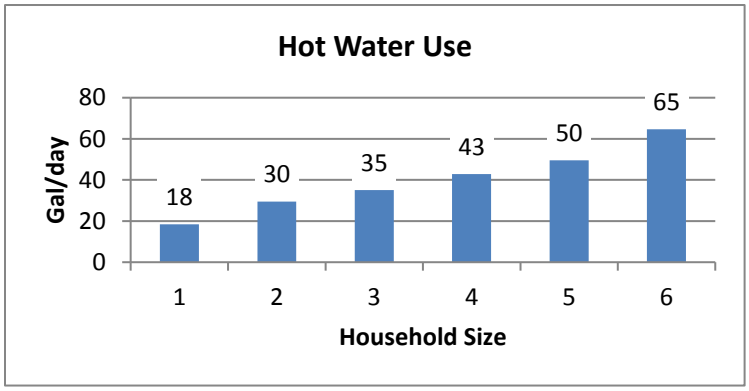
The Captured Source Energy analysis indicates that HPWH + PV uses on average one third less source energy than an 0.82 EF gas tankless water heater, with source energy savings ranging from 14% in the high case to 49% in the low case.

[2] U.S. DOE, "Accounting Methodology for Source Energy of Non-Combustible Renewable Electricity Generation," Oct. 2016, https://www.energy.gov/sites/prod/files/2016/10/f33/Source%20Energy%20Report%20-%20Final%20-%2010.21.16.pdf


Annual Captured Source Energy
kBTU/year
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
High case:
80% on-peak
operation
-14%
Mid case:
50% off-peak
operation
-32%
Low case:
80% off-peak
operation
-49%
Gas tankless
Heat pump, high case
Heat pump, mid-case
Heat pump, low case

Data and Assumptions for Cost Analysis

- Discount rate: 3%
- **Average CA residential gas rate**: $1.28/therm (EIA, Jan. 2017, https://www.eia.gov/dnav/ng/hist/n3010ca3m.htm)
- **30-year discounted cost of photovoltaic in single family**: $0.114/kWh ($3.02/watt installed), Davis Energy Group, Enercomp, Misti Bruceri and Ass., "Local PV Ordinance Cost Effectiveness Study", https://fremont.gov/DocumentCenter/View/33146, updated to focus on new construction costs, and to correct overhead and margin costs.
- **Hot water usage**: NRDC calculation based on Kruis et al., California Residential Domestic Hot Water Draw Profiles, May 2016 (Draft), http://www.bwilcox.com/BEES/docs/Kruis%20-%20Dhw%20Analysis%205.docx



- **Gas tankless equipment list price**: $1,042 for 8 GPM, $1,221 for 10 GPM, per www.homedepot.com on 4/14/2014. Energy factor: 0.82 EF
- **Gas tankless installation cost**: Gas supply line: $200, water heater installation: $346 (2014 Itron Measure Cost study adjusted for inflation). Combustion venting: $50 equipment and $178 equipment cost per 2011 DWH CASE report. Combustion testing costs not included.
- **Gas tankless lifetime and replacements:** 20 years (per DOE and 2016 DWH CASE report). The cost of one replacement is included in the calculation.
- **HPWH equipment list price**: $1,200 for 50-gal, $1,400 for 80-gal, per www.lowes.com on 4/14/2017. Energy factor 3. 5, COP per NRDC-Ecotope 2016 study, https://www.nrdc.org/experts/pierre-delforge/very-cool-heat-pump-water-heaters-save-energy-and-money, scaled by 7% to account for performance improvements since 2014 (ratio of 3.5 EF and 3.25 EF)
- **HPWH installation:** $497 (2014 Itron Measure Cost study adjusted for inflation) + $200 for 240V conduit cost per online search.
- **HPWH lifetime and replacements:** 13 years (per DOE and 2016 DWH CASE report for storage water heaters). The cost of two replacements is included in the calculation.

Data and Assumptions for GHG Emissions and Source Energy Analysis

- **Natural gas source to site ratio**: 1.05, Energy Star Portfolio Manager - Technical Reference, https://portfoliomanager.energystar.gov/pdf/reference/Source%20Energy.pdf
- **Electricity T&D losses**: 1.047, EIA, 2015, , http://www.eia.gov/tools/faqs/faq.cfm?id=105&t=3
- **Natural gas emissions factor**: 5.302, kg CO2/th, , http://www.epa.gov/energy/ghg-equivalencies-calculator-calculations-and-references
- **Emissions factors**: Table 10, "CEC Draft Staff Report: ESTIMATED COST OF NEW RENEWABLE AND FOSSIL GENERATION IN CALIFORNIA (May 2014)", http://www.energy.ca.gov/2014publications/CEC-200-2014-003/CEC-200-2014-003-SD.pdf

	lbs/MWH	kg CO2/kWh
Single cycle	1,239.3	0.5621
Combined cycle	823.1	0.3734

- **Source-to-site ratios and heat rates**: Table 39, "CEC Draft Staff Report: ESTIMATED COST OF NEW RENEWABLE AND FOSSIL GENERATION IN CALIFORNIA (May 2014)", http://www.energy.ca.gov/2014publications/CEC-200-2014-003/CEC-200-2014-003-SD.pdf

	Heat rate Btu/kWh	Thermal efficiency	Source-to-site
Single cycle	10,585	32%	3.10
Combined cycle	7,250	47%	2.12

<<<Date>>>

Mr. Christopher Meyer
Building Standards Office
California Energy Commission
1516 Ninth St.
Sacramento, CA 95814

Re: Support for the renewable water heating model ordinance proposed by the Natural Resources Defense Council

Dear Mr. Meyer,

The City of Menlo Park supports the recommendations to include analysis of renewable water heating along with the model solar ordinance, as proposed by the National Resources Defense Council at the April 20, 2017, Zero Net Energy staff workshop, and submitted to the California Energy Commission's docket May 5, 2017 (Docket No. 17-BSTD-01).

As one of the first cities in San Mateo County to adopt and regularly update its climate action plan, the City of Menlo Park has been at the forefront of progressive environmental change and action at the local level. The City continues to work toward positioning itself as a model of sustainability in its work to reduce greenhouse gas emissions, improve energy efficiencies and implement renewable energy technologies. Menlo Park joins in this effort with other leading California agencies, including the City of Berkeley, City of Chula Vista, City of Hayward, City of Los Angeles, City of Manhattan Beach, Marin County, City of Palo Alto, City of Richmond, City of San Diego, City of San Francisco, City of San Jose, City of Santa Barbara, and the City of Santa Monica.

We support the California Energy Commission's initiative to develop a model solar photovoltaic ordinance, and encourage the California Energy Commission to support the cost effectiveness analysis that provides an option for a "renewable water heating" requirement. Water heating is one of the largest energy uses and source of greenhouse gas emissions in the California residential sector. The proposed inclusion of renewable water heating requirements will enable California's communities to achieve larger greenhouse gas emissions reductions necessary to meet the State's AB 32 goals.

We encourage the California Energy Commission to develop options that will help reduce GHGs from electricity consumption AND natural gas consumption for residential water and space heating. The Natural Resources Defense Council's "renewable water heating" model reach code proposal presents an important opportunity to reduce greenhouse gas emissions from water heating by approximately half, and achieve cost reductions over the life of the systems. The combination of heat pump water heaters and rooftop photovoltaic systems is more cost-effective due to the lower cost of on-site photovoltaic electricity generation relative to grid electricity. The California Energy Commission should recognize this cost-effectiveness in its comprehensive strategy to reduce utility costs to ratepayers.

The City of Menlo Park commends the California Energy Commission's commitment to reduce energy costs and environmental impacts of energy use - such as greenhouse gas emissions - while ensuring a safe, resilient and reliable supply of energy. The inclusion of the cost effectiveness of distributed energy resources, including on-site solar photovoltaic, is a critical

step in furthering mutual energy goals and provides a pathway to zero-net energy homes in California.

The Natural Resources Defense Council's proposed ordinance provides a framework that is cost-effective for homeowners, and represents an opportunity to reduce greenhouse gas emissions and pollution burdens impacting the health of California communities.

We strongly encourage the California Energy Commission to finalize and adopt the Natural Resources Defense Council's proposal to allow cities and developers in California to continue a pathway to zero net energy homes.

We appreciate the opportunity to provide this input to the California Energy Commission.

Sincerely,

Mayor
City of Menlo Park

STAFF REPORT

Environmental Quality Commission
Meeting Date: **6/21/2017**
Staff Report Number: **17-009-EQC**

Regular Business: Discuss creation of a sustainable parking policy to minimize vehicle trips and emissions

Recommendation

Staff recommends the Environmental Quality Commission review and provide feedback on possible creation of a sustainable parking policy to minimize vehicle trips and emissions.

Policy Issues

This topic can fall under the sustainable development focus of the commission's 2016-2018 work plan. The stated priority focus includes "ensuring the sustainability of the City's Planning, Zoning, and Building Code regulations consistent with the EQC mission and City Council priorities (with focus on land use, buildings and transportation)."

Background

Most recent efforts to improve parking in Menlo Park have focused on the downtown area. In 2011, the City implemented recommendations from the 2010 Downtown Menlo Park Parking Plan. This study was developed to address the perception that parking assets in the downtown area were not efficiently timed to make parking available for visitors or customers when they need it. Community members indicated that parking time limits were too short to support the commercial and retail uses that exist on Santa Cruz Avenue, Menlo Avenue and Oak Grove Avenue.

The plan was developed to include a detailed analysis of current parking usage and to utilize extensive outreach to the downtown community. The plan made recommendations to better manage the current parking supply which could be implemented quickly such as providing paid parking options at parking plazas 1 and 5 and converting two-hour parking spaces on Santa Cruz Avenue to one-hour parking spaces.

In June 2013 and March 2015, the City Council hosted public study sessions to evaluate and discuss potential modifications to the Downtown Parking Program to better serve downtown patrons. On Oct. 20, 2015, the City Council considered staff recommendations for potential changes and took action at the Nov. 10, 2015, City Council meeting to adjust parking time limits in the downtown public parking lots and some of the street parking.

Analysis

While most often, parking discussions in Menlo Park have focused on downtown street and surface parking lot operations, it is also timely to review parking requirements as identified in the El Camino Real/Downtown Specific Plan and the latest General Plan and M-2 Area Zoning Update.

El Camino Real/Downtown Specific Plan

The Specific Plan proposed new minimum parking standards consistent with the mixed-use nature of the area, proximity of the Caltrain station and bus routes and the high use of walking and biking modes by Menlo Park residents. For more information, please review sections F.7 Parking and F.8 Parking Standards of the Circulation chapter of the Specific Plan (Attachment A).

General Plan Circulation Element

The General Plan Circulation Element (Attachment B) addresses parking as follows:

> Encouraging the development of an efficient and adequate parking supply can reduce the negative effects of parking on the pedestrian environment and surrounding neighborhoods, and support the City's goals for complete streets, walkability, bikeability and effective transit. The cost of providing parking can significantly affect the economic feasibility of both private development and City projects. Allowing appropriately sized parking requirements can reduce barriers to new development and renovation of existing buildings while creating a healthy market for parking where parking spaces may be bought, sold, rented, and leased like any other commodity.
>
> New developments can be encouraged to provide appropriate parking ratios with "unbundled" (separately costed) spaces while also making space for car sharing and electric-vehicle charging stations. A shared public parking approach and "park-once" strategies allow motorists to complete multiple daily tasks before moving their vehicle, thereby reducing both vehicle trips and parking demand, particularly in mixed-use areas. With decreased parking demand and establishment of public parking management strategies, the on- and off-street parking supply can be used more efficiently, ensuring that adequate parking is available for short-term and nearby uses. The inclusion of parking pricing at new developments or public parking facilities may be considered as part of a public parking management strategy to further manage this resource.

The commission may choose to review this topic further on its own or in collaboration with the City's new Complete Streets commission. Any requests for staff or consultant resources to support this effort would have to be approved by the City Council.

Impact on City Resources

There is no impact on city resources related to this discussion item.

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. El Camino Real/Downtown Specific Plan - Chapter F. Circulation
B. General Plan Circulation Element

Report prepared by:
Clay J. Curtin, Assistant to the City Manager/Interim Sustainability Manager

F.

CIRCULATION

F.1 OVERVIEW

The Menlo Park El Camino Real/Downtown Specific Plan accommodates all travel modes, with an emphasis on pedestrians, bicyclists and transit users. Focusing new development in an area well served by transit and with a mix of uses in close proximity reduces the reliance on private motor vehicles, helping to minimize traffic congestion, the amount of land dedicated to parking and greenhouse gas emissions.

The Specific Plan envisions the following:

- A vehicular circulation system that accommodates both local traffic and north/south through traffic on El Camino Real.
- An integrated pedestrian network of expansive sidewalks, promenades and paseos along El Camino Real and within downtown. The network provides opportunities for safe crossing of El Camino Real and the railroad tracks and connects the east and west sides of town, including the City's civic center with downtown.
- A bicycle network that builds upon existing plans and integrates more fully with downtown and proposed public space improvements in the area.
- An integrated circulation plan that supports transit use.
- A public parking strategy and management plan that efficiently accommodates downtown visitors and supports downtown businesses.
- Modified parking rates for private development based on current industry standards.

F.2 VEHICULAR CIRCULATION

The Specific Plan generally retains the existing vehicular circulation system and travel patterns, with some minor modifications to better accommodate pedestrian and bicycle movement. Figure F1 shows the classification of roadways in the Specific Plan area and surroundings. The vehicular circulation system is consistent with the City's General Plan.

El Camino Real

El Camino Real is the primary north-south roadway in the Specific Plan area. From south to north, El Camino Real enters the City of Menlo Park as a six-lane arterial, becomes a four-lane "main street" near downtown Menlo Park, and exits the City as a five-lane arterial (three southbound lanes and two northbound lanes) north of Valparaiso Avenue. (The outside southbound through lane becomes a right-turn lane at Valparaiso Avenue.) Figure F1 shows the number of through-lanes on El Camino Real through the study area. The Specific Plan retains this general lane configuration for El Camino Real.

The average daily traffic (ADT) volume on El Camino Real is approximately 38,000 vehicles. The vehicular volumes are highest south of Menlo Avenue/Ravenswood Avenue and north of Valparaiso Avenue/Glenwood Avenue. Between Menlo Avenue/Ravenswood Avenue and Valparaiso Avenue/Glenwood Avenue in the downtown area, the through movement volumes decrease by approximately 25% (based on the peak hour intersection turning movement data, with some northbound vehicles turning right onto Ravenswood Avenue, heading east, and southbound vehicles turning right onto Valparaiso Avenue).

Although the number of through lanes striped on El Camino Real decreases through the downtown core, the curb-to-curb width of the street remains fairly consistent through the city. The right-most (curb-side) lanes in the downtown core accommodate on-street parking and pullouts for bus stops. At intersections, the parking lanes transition to right-turn pockets.

Regarding the southern part of the plan area, the Specific Plan provides access to new development, particularly at the Stanford University property, via existing median breaks and traffic signals and, potentially, additional ones as needed.

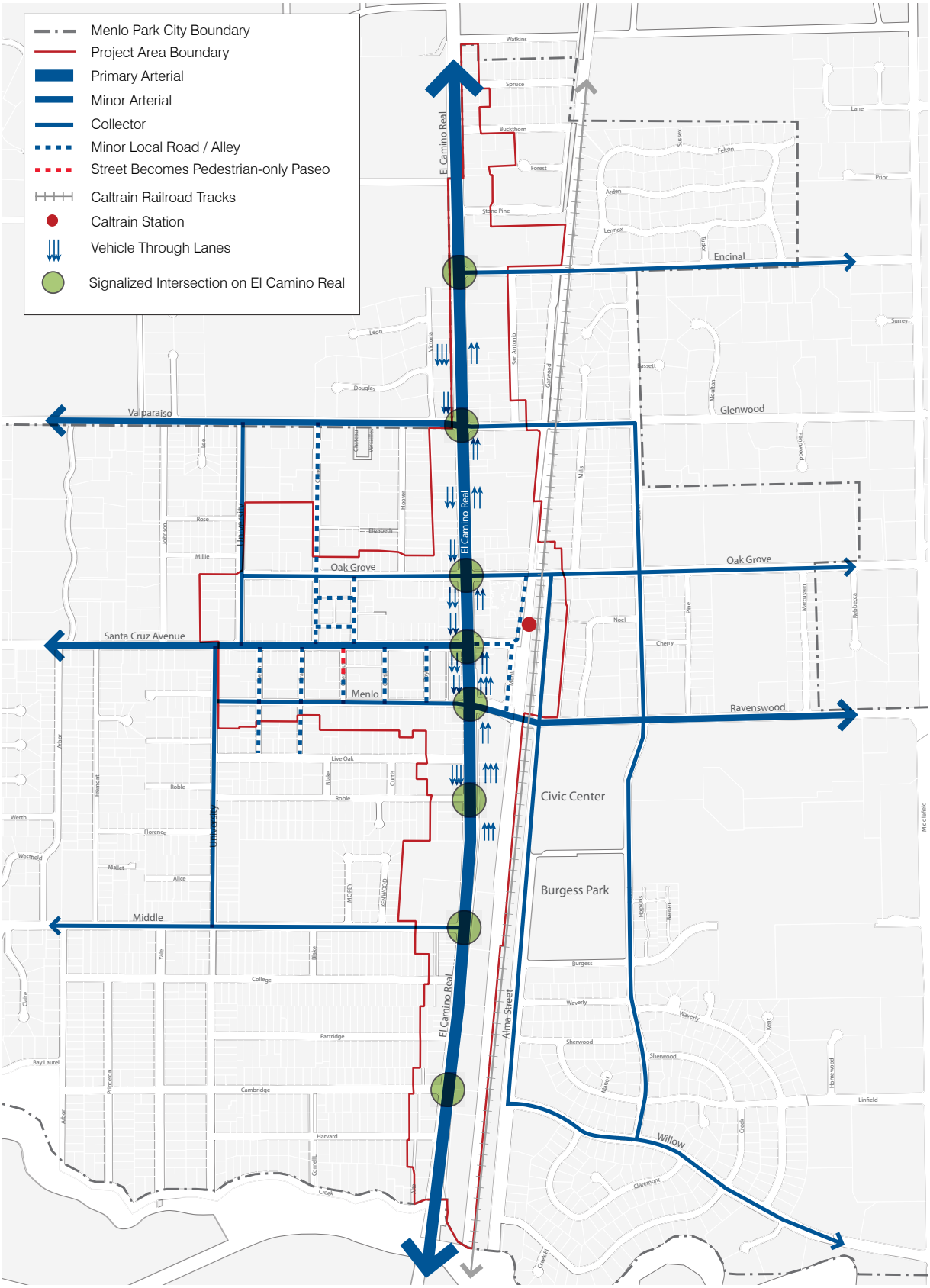


Figure F1. *Vehicular Circulation*

Sidewalk Extensions at Right-Turn Pockets

El Camino Real acts as a significant barrier to east-west pedestrian travel in the plan area. The Specific Plan endeavors to improve connectivity by reducing the pedestrian crossing distance across El Camino Real by allowing for curb extensions at key locations, as discussed below under El Camino Real Pedestrian Circulation.

Curb extensions could, in some cases, require the removal of a right-turn lane. Only locations with low right-turn volumes are considered, such as the southbound right-turn lanes at Oak Grove, Santa Cruz, and Menlo Avenues. Implementation of curb extensions shall require separate project-specific outreach and review.

Improvements on Downtown Streets

The Specific Plan proposes improvements on Santa Cruz Avenue in the downtown area, in particular wider sidewalks and relocated parking spaces. It converts a portion of Chestnut Street south of Santa Cruz Avenue to pedestrian-only. The Specific Plan makes Oak Grove Avenue a bicycle-priority street with added bicycle lanes (discussed in section F4 “Bicycle Facilities”).

Public Safety Facility Street Improvements

The Specific Plan currently has one public safety facility, the Menlo Park Fire Protection District Station 6 at 700 Oak Grove Avenue. However, the Specific Plan conditionally permits public safety facilities in the El Camino Real Mixed Use, El Camino Real Mixed Use/Residential and Downtown Adjacent Office/ Residential land use designations, so additional such facilities may be developed in the future. In addition, the Fire District has discussed reconstruction of the existing Station 6.

In order to ensure that public safety facilities operate with maximum efficiency, the Specific Plan requires that new such facilities, or significant reconstructions/renovations, shall incorporate appropriate street modifications, such as additional street markings, signage and emergency signaling.

F.3 PEDESTRIAN IMPROVEMENTS

The Specific Plan anticipates that new development and redevelopment will increase the number of pedestrians in the plan area. With a more pedestrian-friendly environment along El Camino Real and in the station area and downtown, the Specific Plan encourages more travel to be made on foot, thus reducing the number of vehicles and their associated parking needs.

Figure F2 illustrates proposed pedestrian improvements in the plan area. On El Camino Real, the plan proposes two types of pedestrian crossing treatments:

- Basic Crossing Treatment, which generally includes marked crosswalks and accessible pedestrian signals, and which may include sidewalk extensions subject to additional project-specific outreach and review; and
- Special Crossing Treatment, which generally includes high visibility crosswalks with enhanced pavement, accessible pedestrian signals, countdown pedestrian signals and median islands/pedestrian refuges, and which may include sidewalk extensions subject to additional project-specific outreach and review.

The sidewalk extensions could require the removal of right-turn lanes, such as the southbound right-turn lanes at Oak Grove, Santa Cruz, and Menlo Avenues. The number of through lanes will not be affected by the extensions.

The Specific Plan’s pedestrian enhancements are described below and in Chapter D “Public Space” where more specifics regarding design character and guidelines may be found.

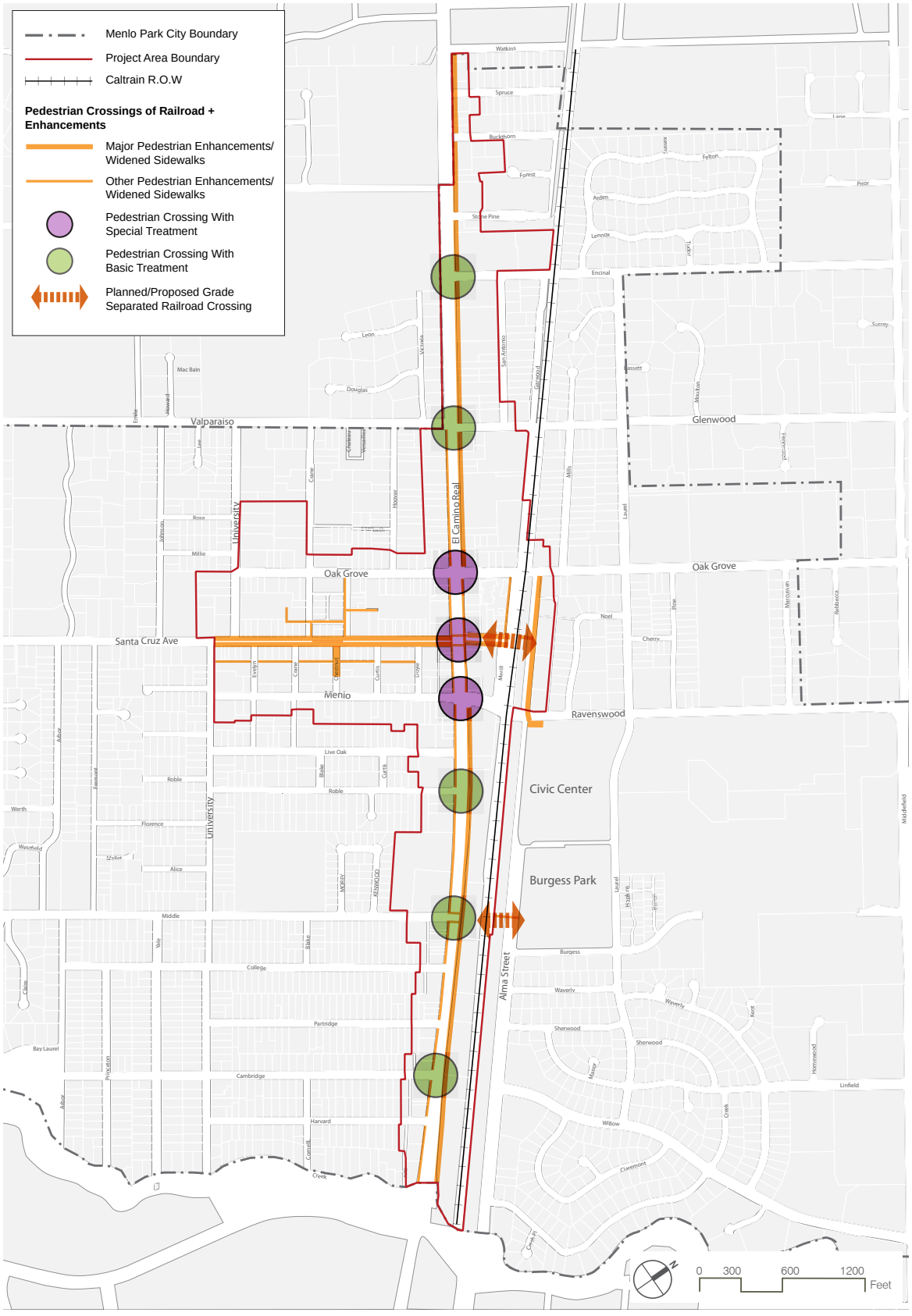


Figure F2. *Pedestrian Improvements*

El Camino Real Pedestrian Circulation

The Specific Plan retains the existing number of through lanes and their location on El Camino Real to accommodate through traffic. Although the overall vehicle capacity is not changed, the Specific Plan improves the quality of pedestrian facilities along El Camino Real by adding amenities, widening sidewalks and improving the ease of crossing El Camino Real.

East-West Connectivity

El Camino Real is a critical north-south transportation corridor for the City of Menlo Park and other cities on the Peninsula, but it also acts as a significant barrier to east-west connectivity in the plan area. The sidewalk network along El Camino Real is complete; however, the sidewalk widths vary considerably. The rail tracks are also a significant barrier to east-west travel.

The Specific Plan proposes two primary approaches to improve east-west pedestrian connectivity:

- Improve pedestrian comfort and accommodation; and
- Add track-separated pedestrian/bicycle access across the railroad tracks.

Comfortable pedestrian environment (Santa Cruz, California)

In addition, the Specific Plan allows for curb extensions, which would improve east-west pedestrian connectivity as follows:

- Reduce the pedestrian crossing distance across El Camino Real

Improve pedestrian comfort and accommodation

The Specific Plan proposes improving pedestrian comfort and accommodation by implementing the following:

- Countdown timers for all pedestrian signal heads in the downtown area;
- High visibility crosswalks to more clearly delineate pedestrian crossing areas, including colored pavement and standard parallel white lines at signalized intersections to enhance crosswalk visibility and the pedestrian environment;
- Extended time for pedestrians to cross El Camino Real, particularly at Santa Cruz Avenue, during off-peak periods; and
- Pedestrian way-finding signage.

Add track-separated pedestrian/bicycle crossings across the railroad tracks

The Specific Plan proposes adding track-separated pedestrian/bicycle passageways beneath (or above) the railroad tracks at the train station and in the vicinity of Burgess Park. Such passageways may go beneath or above the railroad tracks depending on the final alignment for the proposed high speed rail (i.e., underground or elevated).

Reduce the pedestrian crossing distance across El Camino Real

The Specific Plan allows for the reduction of pedestrian crossing distance across El Camino Real by adding curb extensions at key locations. Curb extensions could in some cases require the removal of a right-turn lane, particularly those intersections with low traffic volume (discussed above under Vehicular Circulation).

Sidewalk with clear zone and furnishings zone (Santa Cruz, California)

Sidewalk with clear zone and planting zone (Santa Cruz, California)

North-South Connectivity

North and south of Downtown, the Specific Plan proposes minimum 15-foot-wide sidewalks on the east side of El Camino Real, inclusive of a 10-foot clear pedestrian through zone. The 10-foot clear zone would be buffered by a five-foot-wide furnishings zone (as part of the sidewalk section) and a parking lane (where possible). The furnishing zone provides a place for plantings (e.g., planter strip) as well as street lamps, trees, hydrants and other street furnishings. Likewise, the Specific Plan proposes a minimum 12-foot sidewalk on the west side of El Camino Real, inclusive of an eight-foot wide clear pedestrian through zone and a four-foot wide furnishings zone. The plan proposes a narrower sidewalk on the west side, due to the tighter site conditions and narrower parcels on the west side of the corridor. The improvements would be implemented by private developers; the gains in sidewalk widths will be achieved over time by moving building frontages back as sites redevelop.

Within the Downtown area on El Camino Real (between Oak Grove and Menlo Avenues), the Specific Plan proposes 12-foot wide sidewalks separated from travel lanes by on-street parking and future bicycle lanes. The sidewalks would consist of an eight-foot wide clear pedestrian zone and a four-foot wide furnishings zone. The gains in sidewalk widths, implemented by private developers, would be achieved over time by moving building frontages back as sites redevelop.

Downtown Pedestrian Circulation

The Specific Plan proposes a number of pedestrian circulation improvements. The provision of streetscape improvements, promenades, pedestrian paseos, plazas, pocket parks and conversion of surface parking lots to serve as a more flexible space all contribute to a more complete pedestrian realm in the downtown. Described in detail in Chapter D “Public Space,” these improvements are consistent with the City’s Sidewalk Master Plan, which calls for improved pedestrian facilities in and around downtown.

Ravenswood Avenue and Alma Street Intersection

The Specific Plan proposes safety enhancements at the intersection of Ravenswood Avenue and Alma Street. In particular, the Alma Street Civic Walk and Ravenswood Gateway are proposed to be connected by a safe and upgraded pedestrian crossing. Improvements to this intersection could include: enhanced pavement markings, additional warning lights, new or extended turn limitations, and “quad gates” at the Caltrain tracks. Such changes may be expedited in advance of other Specific Plan improvements, if desired.

F.4 BICYCLE FACILITIES

Class I Bikeway (Bike Path)

Menlo Park has an ideal environment for bicycling due to the mild climate, relatively flat terrain and proximity of many recreational and non-recreational destinations. Approximately 4% of Menlo Park residents commute to work by bicycle[1], a rate that is four times higher than the rates for both San Mateo County and California and ten times higher than the national rate. This indicates that bicycling is actively used by residents and comprises an important mode of transportation for the City. Enhancing and improving bicycle travel for all types and experience levels of cyclists is a key component of the Specific Plan.

Bicycle Facilities Types

Consistent with the *Menlo Park Comprehensive Bicycle Development Plan, 2005 (Bicycle Development Plan)*, the Specific Plan establishes a comprehensive bicycle network for the plan area, recommending a combination of bicycle paths, bicycle lanes and bicycle routes. Consistent with Caltrans standards, the definitions for such bicycle facilities follow:

- *Class I Bikeway (Bike Path)* provides a completely separate right-of-way and is designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian cross-flow minimized.
- *Class II Bikeway (Bike Lane)* provides a restricted right-of-way and is designated for the use of bicycles with a striped lane on a street or highway. Bicycle lanes are generally five (5) feet wide. Adjacent vehicle parking and vehicle/pedestrian cross-flow are permitted.
- *Class III Bikeway (Bike Route)* provides for a right-of-way designated by signs or pavement markings for shared use with pedestrians or motor vehicles.

[1] 2000 Census; 2010 Census data is not available at time of publication.

The Specific Plan also contains a "*Future Class II/ Minimum Class III*" designation for locations where bicycle lanes are desired but may be infeasible in the near-term because they would require parking removal or right-of-way acquisition. These facilities would be designated Class III facilities in the short-term, which may include the striping of shared use pavement markings (sharrows) as appropriate, but would have the long-term goal of Class II bicycle lanes. Thresholds/triggers for implementation could include:

- Bicycle lanes in proximity to Downtown may be considered for implementation after development of a parking garage, which would increase the overall parking supply and make removal of on-street parking more reasonable.
- Construction of the Middle Avenue grade-separated railroad crossing may be considered a trigger for implementation of the Middle Avenue bicycle lanes.
- A certain percentage of residents and/ or commercial property owners adjacent to proposed bicycle lanes may petition the City for implementation.
- Redevelopment of a significant continuous stretch of private property may justify implementing lanes along that stretch.

Recommended Bicycle Facilities

Figure F3 depicts the location for existing and recommended bicycle facilities. The recommended facilities include those planned in the City's *Bicycle Development Plan*. The facilities in *italics* listed below are not included in the *Bicycle Development Plan,* but are recommended as a part of the Specific Plan. Some of these recommendations are an upgrade to a recommendation (such as recommending Class II lanes instead of Class III routes), while others are new recommendations.

Recommendations for new east-west facilities include:

- Bicycle route on Encinal Avenue between El Camino Real and the railroad tracks;
- *Bicycle lanes on Oak Grove Avenue between University Drive and Laurel Street. This improvement requires removal of parking on one side of the street. The Specific Plan recommends the north side;*
- Bicycle route on Santa Cruz Avenue between University Drive north and south;
- *Future Class II/Minimum Class III on Menlo Avenue between University Drive and El Camino Real with additional striping modifications near the El Camino Real and Menlo Avenue intersection*;
- *Future Class II/Minimum Class III on westbound Ravenswood Avenue between the railroad tracks and El Camino Real;*
- Bicycle route on Middle Avenue west of University Drive;
- *Future Class II/Minimum Class III on Middle Avenue between University Drive and El Camino Real with additional striping modifications at the El Camino Real and Middle Avenue intersection;* and
- Bicycle/pedestrian grade-separated crossing of the railroad tracks at the train station and near Middle Avenue, with the ultimate configuration depending on the future configuration of Caltrain and/or high speed rail.

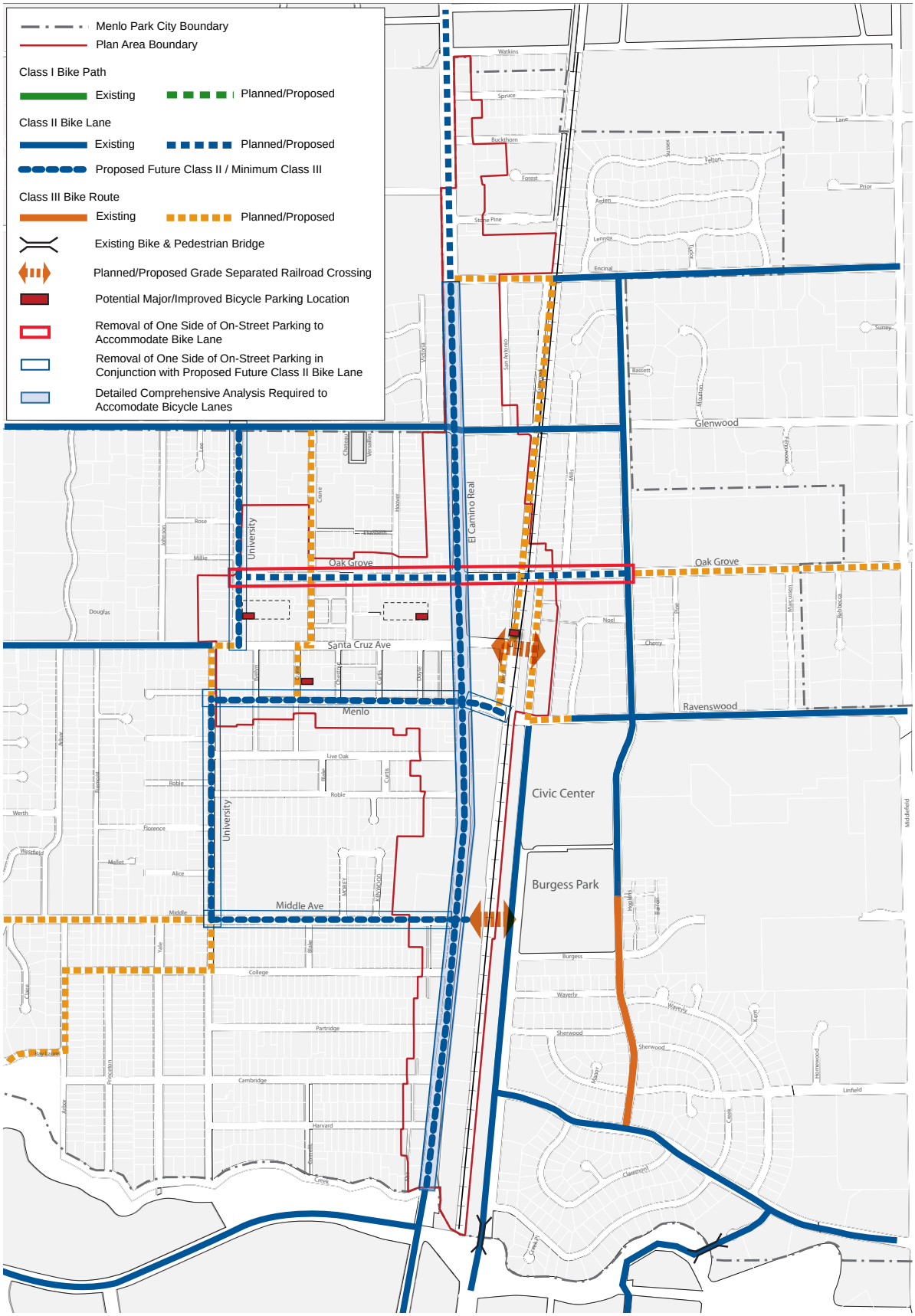


Figure F3. *Bicycle Facilities*

Recommendations for north-south facilities include:

- Bicycle route on University Drive between Santa Cruz Avenue and Menlo Avenue *with new combined striped bicycle lane/left-turn lane from southbound University Drive to eastbound Menlo Avenue*;
- *Future Class II/Minimum Class III on University Drive north of Santa Cruz Avenue to Valparaiso Avenue and south of Menlo Avenue to Middle Avenue;*
- *Bicycle route on Crane Street between Valparaiso Avenue and Menlo Avenue;*
- Bicycle lanes on El Camino Real north of Encinal Avenue;
- *Future Class II/Minimum Class III on El Camino Real south of Encinal Avenue to Palo Alto border*;
- *Bicycle route along Garwood Way from Encinal Avenue to Oak Grove Avenue; and*
- *Bicycle route on Alma Street between Oak Grove Avenue and Ravenswood Avenue.*

Other recommendations include:

- Sharrows, as shown in the photo, implemented based on street configuration and safety to supplement pavement markings on Class III facilities. Sharrows are painted street markings that indicate where bicyclists should ride to avoid the “door zone” next to parked vehicles;
- New major bicycle parking facilities in the proposed parking garages;
- New bicycle parking racks in the plan area in new pocket parks, on the Chestnut Paseo, and along Santa Cruz Avenue; and
- Bicycle way-finding signage in any future downtown signage plan.

Sharrows indicating where bicyclists should ride on Class III facilities

Bicycle parking racks

F.5 BICYCLE STORAGE STANDARDS AND GUIDELINES

In addition to proposed bicycle facilities in the previous section, the Specific Plan supports bicycle use through standards and guidelines for bicycle storage. Many of the standards and guidelines are consistent with the requirements of Leadership in Energy and Environmental Design, Neighborhood Design (LEED ND) and the Association of Bicycle and Pedestrian Professionals (APBP).

Standards

F.5.01 Outside downtown, new commercial and residential development shall provide secure bicycle storage facilities for long-term occupants (e.g., employees and residents) on-site.

LONG-TERM AND SHORT-TERM BICYCLE PARKING REQUIREMENTS BY LAND USE TYPE		
Land Use	**Long-Term Bicycle Parking Requirement (Employees and Residents)**	**Short-Term Bicycle Parking Requirement (Visitors and Guests)**
Residential		
Single Family Dwelling	No spaces required.	No spaces required.
Multi-Family Dwelling - with private garage for each unit[1]	No spaces required	1 space for every 10 units
Multi-Family Dwelling - without private garage for each unit	1 space per unit	1 space for every 10 units
Commercial		
Office and Medical Office	1 space for each 10,000 SF of floor area. Minimum requirement 2 spaces	1 space for each 20,000 SF of floor area. Minimum requirement 2 spaces
Retail and Personal Service	1 space for each 12,000 SF of floor area. Minimum requirement 2 spaces	1 space for each 5,000 SF of floor area. Minimum requirement 2 spaces.
Supermarket and Restaurant	1 space for each 12,000 SF of floor area. Minimum requirement 2 spaces.	1 space for each 2,000 SF of floor area. Minimum requirement 2 spaces
Hotel	1 space for every 20 rooms. Minimum requirement 2 spaces.	1 space for every 20 rooms. Minimum requirement 2 spaces.
Automotive sales, rental, and delivery; automotive servicing; automotive repair and cleaning	1 space for each 12,000 SF of floor area. Minimum requirement 2 spaces	1 space for each 20,000 SF of floor area. Minimum requirement 2 spaces
Off-street parking lots and garages available to the general public (with or without fee)	1 space for each 20 automobile spaces. Minimum requirement is 2 spaces. Unattended surface parking lots excepted	Minimum of 6 spaces or 1 per 20 auto spaces. Unattended surface parking lots excepted

1. A private locked storage unit may be considered as a private garage if a bicycle can fit in it.

Source: Association of Bicycle and Pedestrian Professionals (APBP), *Bicycle Parking Guidelines*, 2010.

Table F1. *Bicycle Parking Requirements*

F.5.02 Outside downtown, new commercial and residential development shall provide bicycle parking spaces for long-term occupants and short-term visitors (e.g., employees and guests, respectively), per the requirements in Table F1.

F.5.03 In downtown, new commercial and residential development shall provide secure bicycle storages facilities for long-term occupants and bicycle parking spaces for long-term occupants and short-term visitors, per the requirements in Table F1 and as follows:

- Bicycle parking for the first 1.0 FAR can be accommodated in public facilities; and
- Bicycle parking for additional FAR, up to the zoning district maximum, can be accommodated either/both on-site and/or in public facilities if the City has established an in-lieu off-site bicycle parking program and the required number of spaces is available; in-lieu fee may be required.

Guidelines

F.5.04 Visitor and customer bicycle racks should be positioned in areas with active visual surveillance and night lighting, and protected from damage from nearby vehicles.

F.5.05 Outside downtown, bicycle racks should be located within 50 feet of each building's main entries. For retail buildings or other buildings with multiple main entries, bicycle racks should be proportionally distributed within 50 feet of business or other main entries.

F.6 TRANSIT SERVICE

The plan area is well served by Caltrain, San Mateo County Transit District (SamTrans) bus service, and local shuttles. SamTrans provides local and regional bus service, and Caltrain provides commuter rail service. Local shuttles are also provided in Menlo Park for free during commute hours by Caltrain and during mid-day hours by the City. Both shuttles are operated during the week (Monday through Friday) only. Figure F4 illustrates major transit service in the Specific Plan area.

More people will be traveling along El Camino Real and to, from and around downtown Menlo Park as the land uses intensify. As there is little to no opportunity to increase the vehicle-carrying capacity of the transportation system, transit must play an important role in accommodating this increased travel. Bus rapid transit (BRT) is currently being considered for El Camino Real as part of the Grand Boulevard Initiative.

The Specific Plan supports transit improvements by recommending the following:

- Accommodate potential BRT service in accordance with the Grand Boulevard Initiative to serve added travelers on El Camino Real;
- Increase shuttle service to serve added travel demand, improve east-west connectivity and reduce demand for parking in the plan area based on available funding; and
- Continue employer-sponsored programs that support and increase transit use (see Section F.10 "Transportation Demand Management" (TDM)).

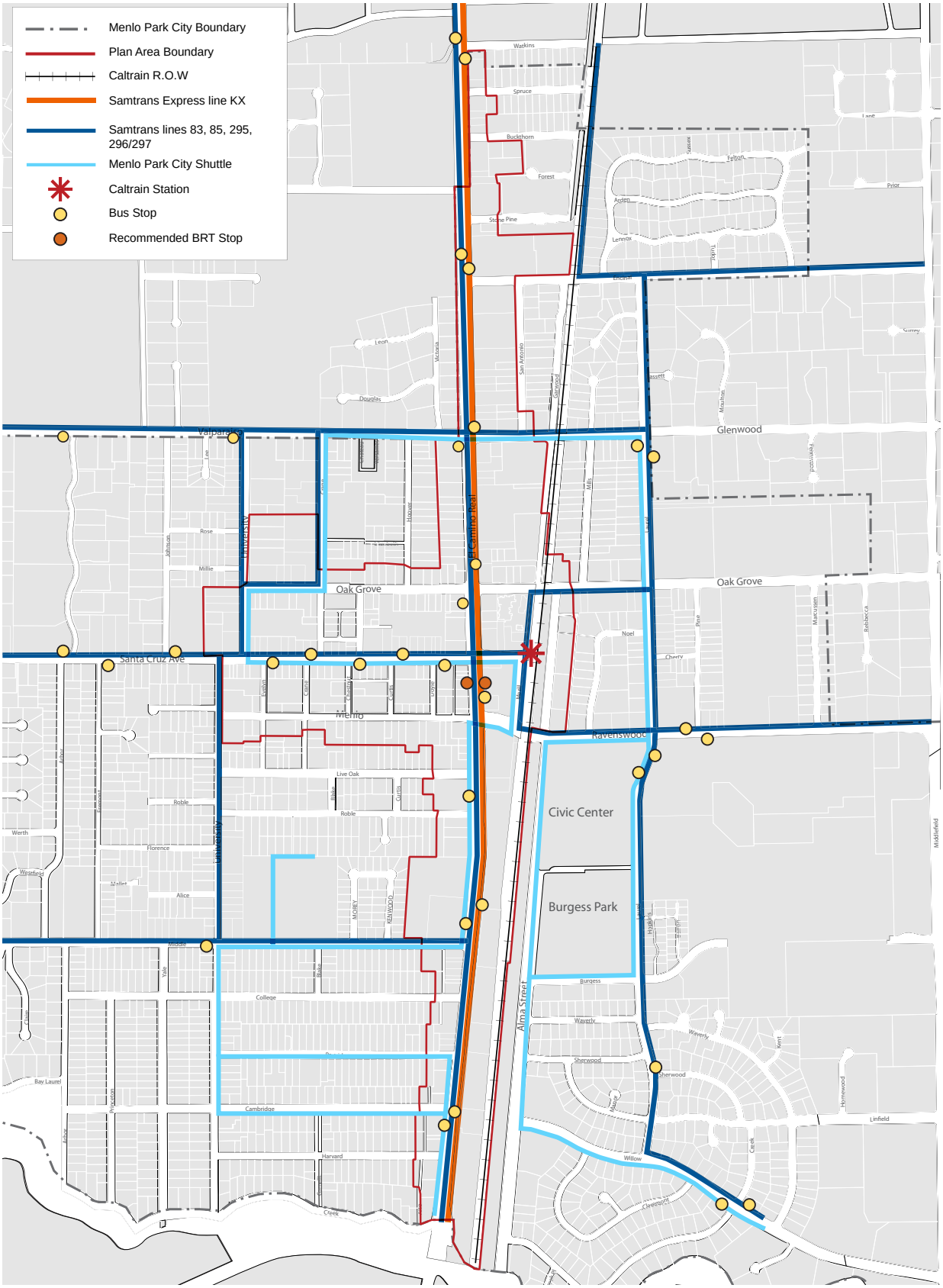


Figure F4. *Transit Service*

Grand Boulevard Initiative and BRT

The Grand Boulevard Initiative is a collaboration of 19 cities, two counties, and several regional and local agencies and other stakeholders with a goal of transforming the El Camino Real corridor from Daly City to San Jose. The initiative seeks to balance the need for cars and parking with viable options for transit, walking, and biking. The improvement of transit service along the corridor with BRT service is a major component of the initiative.

The Specific Plan supports BRT with identification of a potential BRT stop at Menlo Center for northbound service and another south of Santa Cruz Avenue for southbound service. Both are within walking distance of downtown and the Caltrain station. A bus pullout is already provided for northbound service. A pullout for southbound service could be implemented by replacing on-street parking with a bus stop. These stops would be the responsibility of the transit agency providing BRT service.

City of Menlo Park Shuttles

Free shuttles[2] are currently provided via the Menlo Park Mid-day Shuttle service within Menlo Park and adjacent cities. These shuttles serve the Stanford Medical Center, Stanford Shopping Center, downtown Menlo Park, Menlo Park Caltrain Station, Menlo Park Library, Veteran's Administration (VA) Medical Center and Menlo Park Senior Center. The shuttles are open to the public. Headways are approximately 60 minutes and the shuttles operate during mid-day hours on weekdays only.

The Specific Plan recommends adding additional shuttle buses to reduce the headways to 15 minutes and lengthening service hours to include morning and evening hours as well as weekends. Shuttle routes should be modified to match evolving travel patterns, including increased service to eastern and western reaches of the city to bring residents and employees to downtown. These service improvements will make the shuttles more convenient to use, thereby increasing ridership and reducing automobile travel. The pace at which shuttles are added and routes are modified will be dependent on the pace of development and available funding (discussed in more detail in Chapter G "Implementation").

[2] These shuttles are funded by City/County Association of Governments (C/CAG), San Mateo Transportation Authority (SMCTA), the Peninsula Joint Powers Board (JPB), and the City of Menlo Park.

F.7 PARKING

Parking in the Specific Plan area is currently provided on private lots, on the street and in downtown public parking plazas. New developments in areas outside of the downtown provide parking on-site, based on the size, land use type and requirements herein. Parking for new downtown developments of up to 100% floor area ratio (FAR) is provided in the public parking plazas (with the exception of a limited number of parcels associated with private parking lots that have been zoned to be part of the P (Parking) zoning district). Parking for the portion of downtown developments over 100% floor area ratio must be accommodated on-site or, potentially, off-site.

Results of parking surveys recently completed by Wilbur Smith Associates for the *2010 Downtown Menlo Park Parking Study* show that approximately 80 percent of the downtown parking spaces are full during peak times (i.e., the weekday lunch period). Capacity differs by plaza and block face, as some areas have more activity than others. The "practical" capacity, the capacity at which a new patron can find a parking space with relative ease, is considered to be 85 to 90 percent. Therefore, there is some, but relatively little, capacity at this time to accommodate parking displaced by public space improvements (such as the Santa Cruz Avenue Central Plaza) or parking demand generated by new development. In addition, because the surveys were done during a period of economic downturn they may underestimate the parking demands that would occur under more robust economic conditions when there would be even less excess capacity.

In order to realize the full public space improvements and to achieve the vitality associated with new development, the Specific Plan recommends new off-street parking rates and a revised policy for shared/unbundled parking in the downtown. In addition, the Specific Plan recommends improving the downtown parking supply by constructing up to two parking garages, discussed in more detail in Section F.8 "Downtown Parking."

With regard to parking rates, the existing City code requirements were reviewed to determine whether they are appropriate for current and future development types, due to their infill and mixed-use nature, and to account for the proximity to other travel modes, such as transit (especially the Caltrain station), walking and biking. These standards are discussed first, followed by a discussion of downtown parking, including new facilities, financing and parking management strategies.

F.8 PARKING STANDARDS

The Specific Plan proposes new minimum parking standards consistent with the mixed-use nature of the area, proximity of the Caltrain station and bus routes and the high use of walking and biking modes by Menlo Park residents. Households in mixed-use developments near transit stations and in mixed-use downtowns own fewer vehicles[3], reducing the demand for residential parking in these areas. Similarly, commercial and retail developments near transit and in downtowns support a greater percentage of trip making by modes other than private automobile, reducing the need to provide dedicated parking for all customers or employees[4]. In addition, some of the parking spaces used by retail customers and employees during the day can be used by residents and their visitors in the evening, further reducing the number of spaces needed to be provided.[5] These types of shared parking reductions are not included in the City's existing rates, although individual developments can currently request parking reductions based on specific factors.

Table F2 summarizes the Specific Plan's proposed minimum (and in one case, maximum) parking rates and the references used to generate the recommendation. Sources used in the rate selection include City of Menlo Park *Municipal Code*, Title 16 Zoning, Chapter 16.72.; City of Menlo Park *Parking Reduction Policy;* Institute of Transportation Engineers (ITE), *Parking Generation* (3rd Edition, 2004); Urban Land Institute (ULI), *Shared Parking* (2nd Edition, 2005); and Metropolitan Transportation Commission (MTC), *Reforming Parking Policies to Support Smart Growth*, 2007. The City's Zoning Ordinance requirements are at the high end of the range of rates for many of the uses. Reducing the rates, with adequate support, is recommended for the reasons cited above.

[3] Transportation Research Board, Transit Cooperative Research Program, TCRP Report 95, *Traveler Response to Transportation System Changes,* 2007.

[4] Lund et al, *Travel Characteristics of Transit-Oriented Development in California*, January 2004.

[5] Urban Land Institute, *Shared Parking*.

The ULI rates have been selected as the basis for the Specific Plan Area rates, with the exception of residential and restaurant uses. Both ULI and ITE present rates for suburban locations with little transit service or few nearby uses within walking distance and, as such, provide a relatively conservative base.

Rates for residential developments in the Station Area reflect MTC recommendations with a minimum rate of 1.0 space per unit and a maximum rate of 1.5 spaces per unit. These rates support transit use and lower vehicles ownership for sites near rail stations. A minimum rate of 1.0 space per unit also applies to residential developments in the Station Sphere of Influence (SOI), or sites within walking distance of the Caltrain station (approximately ¼ mile). A minimum rate of 1.85 spaces per unit applies to residential developments in other Specific Plan areas. Figure F5 illustrates the areas designated as Station Area and Station Area Sphere of Influence.

Restaurant uses have been kept at the existing rate, in part because the ULI/ITE rates are so high as to potentially discourage this type of use, but also because existing, conforming restaurants in the Specific Plan Area appear to function adequately with parking at the current rate.

Developments outside downtown will be required to provide parking on-site, while in the downtown area, properties will continue to be able to rely in part on facilities in the public parking plaza parcels, discussed in more detail in Section F.9 "Downtown Parking".

Shared Parking Reductions

In addition to the proposed rates, an individual development proposal may incorporate a shared parking study that proposes additional ULI credits to account for the mixture of uses, either on-site or within a reasonable distance. By virtue of the existing diversity of nearby uses, parcels in the downtown area would effectively have lower parking rates. However, the precise credit would be subject to review and approval based on the specific design and site conditions.

Parking Rates						
Land Use	Existing City Requirements		Industry Sources		Local Sources	Specific Plan Rates[6]
	Zoning Ordinance[1]	Use Based Guidelines[2]	ITE[3]	ULI[4]	MTC[5]	
Multi-Family Dwelling (per unit)	2.0	-	1.68	1.85 / 1.85 [5]	1.0 - 1.5	
Station Area	-	-			-	**1.0 min - 1.5 max** [8]
Station Area Sphere of Influence						**1.0** [9] **min**
Other	-	-			-	**1.85** [9] **min**
General Office (per 1,000 sf gfa)	6	3.3	3.27	3.8 / 0.38 [5]	2.0 - 3.0	**3.8 min**
Medical Office (per 1,000 sf gfa)	6	5	4.06	4.5 / 4.5 [5]	-	**4.5 min**
Retail and Personal Service (per 1,000 sf gla)	6	5	3.05 / 3.42 [7]	3.6 / 4.0 [5]	1.5 - 2.5	**4.0 min**
Supermarket (per 1,000 sf gfa)	6	-	5.01 / 5.46 [5]	-	-	**5.5 min**
Restaurants (per 1,000 sf gfa/gla)	6	6	-	-	3.0 - 5.0	**6.0 min**
Quality	-	-	17.7 / 19.78 [7]	18.0 / 20.0 [7]	-	-
High Turnover	-	-	11.6 / 15.53 [7]	10.5 / 15.0 [7]	-	-
With Lounge	-	-	15.3 / 18.75 [7]	-	-	-
Hotel (per room)	-	1.1	1.05	1.25 / 1.18 [7]	-	**1.25 min**

Notes: du = dwelling unit, sf = square feet, gfa = gross floor area, gla = gross leasable area.

1 City of Menlo Park Municipal Code, Title 16 Zoning, Chapter 16.72. Parking requirements for zoning districts. The listed rates do not vary by use - the C-3 and C-4 (ECR) districts have a standard 6 spaces per 1,000 sf gfa rate. Residential units have a 2 spaces/dwelling unit rate in all districts except for the R-4 district, which allows different rates by unit type.

2 City of Menlo Park Parking Reduction Policy, http://www.menlopark.org/departments/pln/parkredpolicy.pdf. Parking reductions through administrative permits.

3 ITE parking supply rates derived from parking demand rates in Institute of Transportation Engineers Parking Generation (3rd Edition, 2004). The parking supply rates are derived from the parking demand rates by increasing the parking demand rates by 15%. This industry standard increase is used to ensure that the parking supply is slightly higher than the demand to allow for vehicles to find available spaces without having to circulate through the entire parking facility.

4 ULI parking supply rates taken from Urban Land Institute ,Shared Parking (2nd Edition, 2005).

5 MTC parking requirements taken from Reforming Parking Policies to Support Smart Growth, 2007.

6 If a use is not listed in this table, a project applicant may propose a rate from ULI Shared Parking or other appropriate source or survey for the review and approval of the Transportation Manager. If ULI Shared Parking is updated with a new edition, the Transportation Manager may consider new rates.

7 Weekday/weekend parking rates. Weekend data shown where available.

8 Residential developments in the station area have a minimum rate of 1.0 space per unit and a maximum rate of 1.5 spaces per unit. See Figure F5 for areas where these rates apply.

9 See Figure F5 for areas where this minimum parking rate applies.

Table F2. *Parking Rates*

F.9 DOWNTOWN PARKING

The Specific Plan fully accommodates the parking demand associated with the development levels permitted by the Specific Plan. Although new public space improvements and limited new development would otherwise result in some loss of existing parking, the Specific Plan fully addresses this by increasing the parking supply and by improving the management of existing and new parking spaces. With the approaches outlined in the Specific Plan, the downtown builds parking capacity for the future.

Figure F5 shows the downtown area, where parcels may locate at least some of the required parking in public parking facilities.

Parking Supply and Demand

According to the *2010 Downtown Menlo Park Parking Study*, by Wilbur Smith Associates, the existing public parking supply in the downtown area (bounded by El Camino Real, Oak Grove Avenue, University Drive and Menlo Avenue) consists of 1,186 spaces on the public parking plazas and 409 spaces on-street, for a total of 1,595 public spaces. Additional spaces are provided in private parking lots.

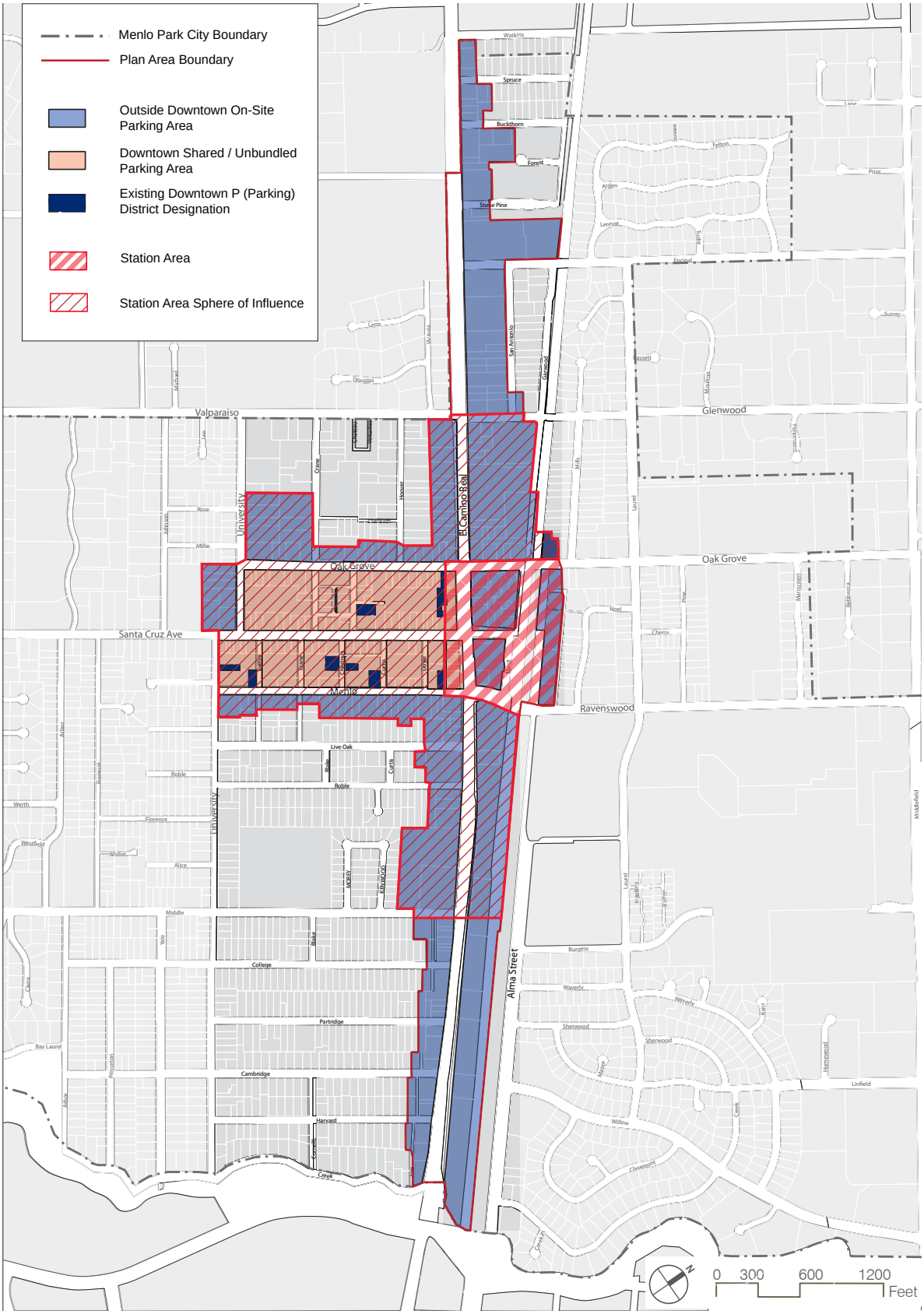


Figure F5. *Parking Areas*

Parking Supply

The Specific Plan's proposed parking supply reflects the increase in supply from the construction of up to two new parking garages on a combination of Parking Plazas 1, 2, and 3 and the relocation of parking spaces for public space improvements, such as widened sidewalks. For Parking Plaza 1, the Specific Plan proposes a 5-level garage – one level below ground and four above – with 650 publicly accessible spaces. For Parking Plaza 2, the Specific Plan also allows for a 5-level garage – one level below and four above – for a total of 250 publicly accessible spaces, or 310 spaces without the proposed pocket park at Chestnut Street and Oak Grove Avenue. For Parking Plaza 3, the Specific Plan proposes a 5-level parking garage – one level below ground and four above – providing 650 publicly accessible spaces. A decision on which garages to build will require further evaluation at the time of implementation, to consider parking space needs, available budget, the redevelopment of surrounding properties and community outreach, among other factors.

Table F3 and Figure F6 summarize and depict the existing and future parking supply in downtown Menlo Park. The table indicates the number of existing parking spaces in each parking plaza and on each block face in the downtown core area. It also describes the types of changes that are proposed by the Specific Plan, the resulting change in number of spaces and the resulting future supply.

An alternative parking garage near the Caltrain station was suggested during the public engagement process. The objective for this garage was to provide parking for downtown employees, to free up spaces in the parking plazas for customers of both existing and new developments, as well as potentially provide parking for Caltrain patrons. A parking garage near the train station was not moved forward due to the lack of an available site. The existing Caltrain station parking lots are under the control of the Joint Powers Board, not the City, and are too narrow to serve as an effective garage site, due to design requirements for ramps and access. In addition, these sites could potentially get smaller depending on the final High Speed Rail design.

Balancing Parking Demand and Supply

The Specific Plan recognizes that balancing parking supply with demand will be an ongoing challenge in downtown. The public parking facilities, including up to two new parking garages, must accommodate parking displaced by public amenity improvements (e.g., widened sidewalks on Santa Cruz Avenue) and some of the parking demand from existing and new development.

The Specific Plan proposes the following approach, and new policies, for balancing parking demand and supply.

1. City to set up system to monitor parking supply and demand, including the number of spaces that must be accommodated by those displaced by public amenity improvements.
2. For parcels that are not associated with private parking lots that are currently part of the P (Parking) district:
    a. Parking for the first 1.0 FAR can be accommodated in public parking plazas, consistent with current policy; no in-lieu fee required; and
    b. Parking for additional FAR, up to the zoning district maximum, can be accommodated either/both:
        i. On-site; and/or
        ii. In public parking plazas if the required number of spaces is available; in-lieu fee required.
3. For parcels that are associated with private parking lots that are currently part of the P (Parking) district (see Figure F5):
    a. If a P parcel is redeveloped, parking for the first 1.0 FAR can be satisfied by accommodating the parking provided by the P district parcel either/both:
        i. On-site (e.g. underground); and/or
        ii. In public parking plazas if the required number of spaces is available; in-lieu fee required.
    b. Parking for additional FAR, up to the zoning district maximum, can be accommodated either/both:
        i. On-site; and/or
        ii. In public parking plazas if the required number of spaces is available; in-lieu fee required.

The phasing of public parking facilities downtown is discussed in more detail in Chapter G “Implementation”. The cost of the in-lieu fee would be established to correspond to the cost of providing a structured parking space.

Existing and Future Downtown Parking Supply				
Parking Location	**Existing Supply[1]**	**Specific Plan Change**	**Change in Spaces**	**Future Supply**
Parking Plazas				
Parking Plaza 1	249	Added Parking Garage [2]	446	695 [3]
Parking Plaza 2	95	Added Parking Garage and Pocket Park [4]	155	250
Parking Plaza 3	212	Added Parking Garage and Pocket Park [5]	438	650
Parking Plaza 4	105	Pedestrian Link	-19	86
Parking Plaza 5	150	Pedestrian Link	-16	134
Parking Plaza 6	136	Pedestrian Link, Market Place	-32	104
Parking Plaza 7	94	Pedestrian Link, Market Place	-36	58
Parking Plaza 8	145	Pedestrian Link	-7	138
Total	**1,186**		**929**	**2,115**
Total with 2 Parking Garages	**1,186**		**483 - 774**	**1669 - 1960 [6]**
On-Street Spaces				
Santa Cruz Avenue	116	Sidewalk Widening	-48	68
Chestnut Street North	26	Sidewalk Widening	-11	15
Chestnut Street South	17	Chestnut Paseo	-11	6
Oak Grove Avenue	80	Added Bike Lanes	-35	45
Other Streets	170	No Change	0	170
Total	**409**		**-105**	**304 [7]**
Downtown Core Area Total	**1,595**		**824**	**2,419**
Total with 2 Parking Garages	**1,595**		**378 - 669**	**1973 - 2264 [6]**

Notes:

[1] *2009-2010 Downtown Menlo Park Parking Study*, Wilbur Smith Associates.

[2] A new parking garage at Parking Plaza 1 would displace 204 existing spaces.

[3] Future parking supply for Parking Plaza 1 includes a 650-space parking garage + 45 surface spaces remaining.

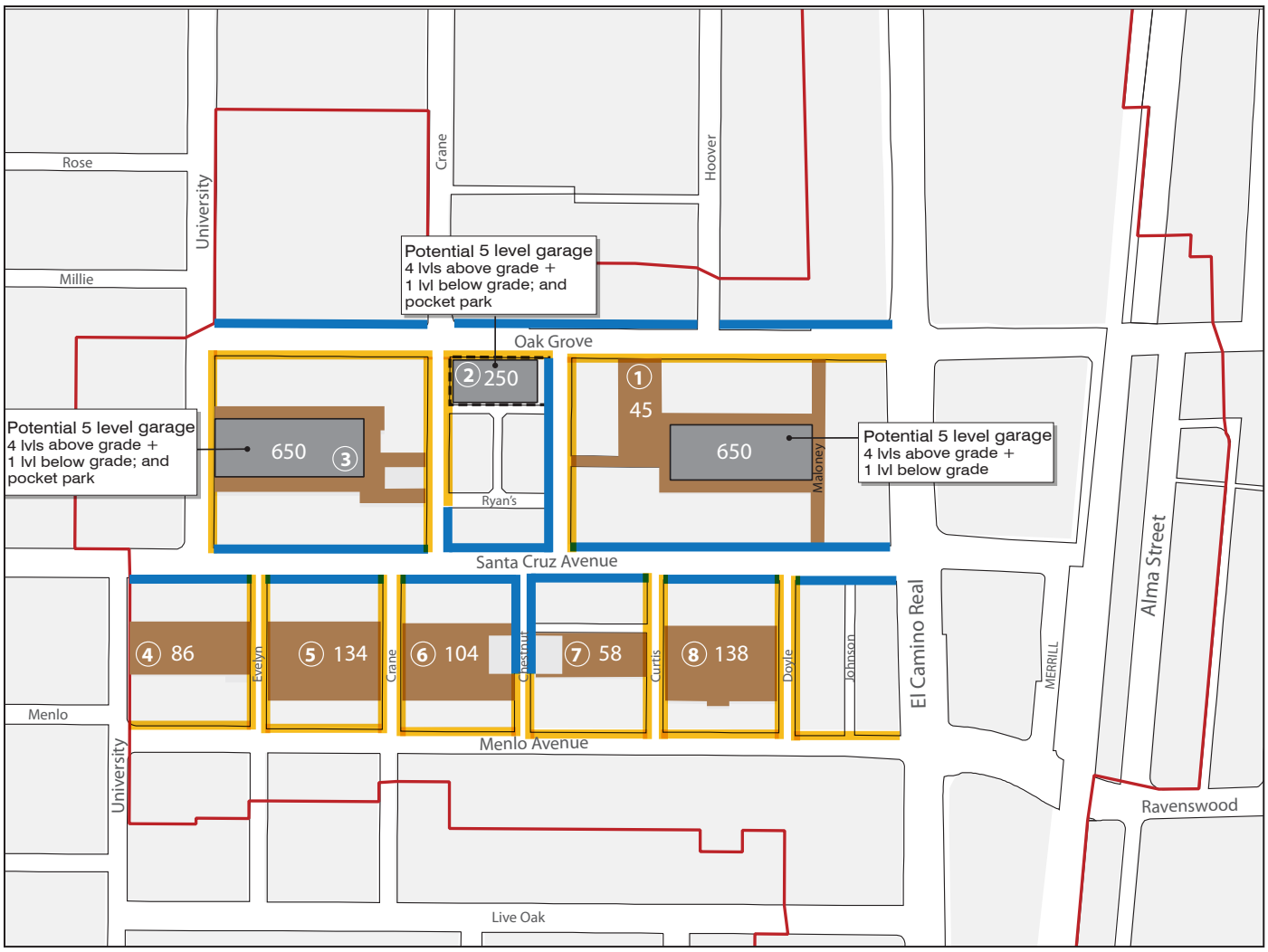
[4] A new parking garage and pocket park at parking plaza 2 would displace 95 existing spaces.

[5] A new parking garage and pocket park at Parking Plaza 3 would displace 212 existing spaces.

[6] Although three parking garages are shown, the Specific Plan assumes that up to two parking garages will be built in downtown Menlo Park. The parking total reflects the range of parking spaces that could be provided if only two garages were built, rather than three.

[7] On street parking space could be affected with proposed future Class II / Minimum Class III improvements.

Table F3. *Existing and Future Downtown Parking Supply*



	Parking Spaces
Public Parking Plazas	1,669 - 1,960 [2]
On-street Parking	304
Total	**1,973 - 2,264**

Project Area Boundary

Public Parking Plazas

Parking Garages [1]

Surface Parking

On-street Parking Spaces

Affected by Specific Plan Improvements

Unaffected by Specific Plan Improvements [3]

① Downtown Parking Plaza Number

Notes:

1 Although three parking garages are shown, the Specific Plan assumes that up to two parking garages will be built in downtown Menlo Park.

2 The parking total reflects the range of parking spaces that could be provided if only two garages were built, rather than three.

3 Additional on street parking could be affected with proposed future Class II / Minimum Class III improvements. See Figure F3.

Figure F6. *Proposed Public Parking Downtown*

Benefits of Garaged Parking

The Specific Plan proposes up to two new parking garages to accommodate increased parking demand. Parking garages can have a number of benefits including increased parking efficiencies, enhanced urban design and improvements to traffic circulation.

Because the parking garages will be shared by multiple uses, the individual spaces can be shared by different users throughout the course of the day. This allows for providing fewer total parking spaces in a mixed-use area, allowing more land to be dedicated to other non-parking uses. Other benefits of parking garages include the following.

- Garages provide the parking supply for new downtown development, which can allow for the development of smaller or oddly shaped parcels where providing required on-site parking is infeasible.
- The consolidation of parking to a single location creates a more cohesive urban fabric that is not broken up by numerous surface parking lots.
- Construction of parking garages can be a good opportunity to underground utilities and provide centralized and covered garbage locations, as well as provide facilities for car-sharing services and potentially electric car charging stations.
- Garages can accommodate the increased development intensities needed to support and enhance a viable transit system.
- Garages provide a concentrated and remote location for all day employee parking for downtown businesses, helping free up spaces in surface lots for customers.
- Parking garages consolidate traffic at fewer access points, which can lead to more orderly circulation patterns.

Parking garages can be equipped to provide real-time information on the number of available spaces, thereby reducing traffic related to drivers “cruising” for available spaces, which has been found to constitute up to 30% of traffic in some downtown areas[6].

[6] Donald Shoup, The High Cost of Free Parking

Public parking garage wrapped with retail use (Mountain View, California)

> *“You could use the parking plazas to create a small park if you built a classy parking garage on a parking plaza”*
>
> *- Workshop #3 Participant*

Cost of Garaged Parking

The benefits above must be considered in the context of the higher construction costs of garaged parking when compared to surface parking. The recommended sites for new parking garages in Downtown Menlo Park are the existing City-owned surface parking lots, so land acquisition will not be required.

Assuming a five-level 650-space parking garage, with one level of parking underground and 4 levels above, the magnitude of cost estimate for the parking garage is $28,800 to $32,400 per parking stall, in 2012 dollars, which equates to between $18,700,000 and $21,000,000 total cost. The magnitude of cost estimate consists of construction costs and soft costs. The probable construction cost covers the base construction cost; miscellaneous costs; general contractor overhead and insurance costs; design contingency; and escalation costs, which comes to $24,000 to $27,000 per parking stall[7]. The soft costs, estimated at 20% of the construction cost, include design services, environmental review, surveying, building permits, utility connections and construction administration. For a less efficient, smaller garage with a smaller floor plate on a more constrained site, such as the one suggested for Parking Plaza 2, the probable construction cost is significantly higher at $33,000 to $43,000 per parking stall[7].

[7] Watry Design, Inc. On-Line Parking Structure Cost Calculator (www.watrydesign.com), March 2010.

Parking Garage Funding

The Specific Plan proposes several options for financing the parking garages. The most direct option for funding the construction, operations and maintenance of the garage is to charge for parking in the garage. The parking rates needed to cover all of these costs may be too high for the Menlo Park market to accommodate given the amount of free (or low cost) parking in nearby communities. Under this option, existing (and new) businesses would not be required to pay directly. However, they may choose to subsidize employee parking and validate customer parking.

A second funding option, often used in conjunction with charging for parking, is the payment of in-lieu fees where a new business pays a fee instead of providing parking on their site. This requires the creation of a parking district to collect the fees and manage the supply of parking in the area. The in-lieu fees are often lower than the cost of providing parking spaces on-site in small site-specific garages.

Many cities partially subsidize the cost of new garages, based on the overall economic benefit of the new land uses supported by the garage. Another option is a public-private partnership where a private entity finances a portion of the garage, and typically has a portion of the spaces dedicated for their use either all the time or for selected hours.

A combination of in-lieu fees for new development and charging for parking, and possibly a public-private partnership, could provide a viable funding program for the parking garages.

Parking Management Plan

The Specific Plan recommends that the City prepare a Parking Management Plan to improve the management and utilization of existing parking spaces downtown. Consideration of commencement of a Parking Management Plan shall be added to the yearly Capital Improvement Program (CIP) process, so that implementation of such a plan can be timed appropriately with Plan-related changes in parking. In addition, development of a parking management plan, as well as discussion of related parking topics, should be informed by a Downtown Parking Task Force. The membership composition, objectives and typical meeting schedule of such an advisory group shall be separately established and regularly updated by the City Council.

The Parking Management Plan aims to utilize the City of Menlo Park's parking supply within the downtown area to its fullest extent possible and to create a Park Once and Walk strategy where downtown visitors can park in one location and visit numerous destinations without fear of receiving a parking ticket. With a successful management plan, the number of new parking spaces needed may be reduced and the timing for constructing a parking garage may be postponed. A successful plan is based on an 85 percent targeted occupancy rate, considered the optimal parking level because it provides for full use of the parking supply while providing sufficient vacancy so that vehicles trying to park can find a space without excessive searching. (This goal of 85 percent occupancy is a typical threshold in evaluating parking supply and demand. It is supported by Professor Donald Shoup of UCLA, author of *The High Cost of Free Parking*, who states that 85 percent occupancy accomplishes the goal of managing the supply of parking while making parking reasonably available when and where needed).

The Parking Management Plan could encompass the following strategies:

- Vary time limits for parking to enhance turnover of the most convenient spaces;
- Implement pricing for parking to control parking occupancies;
- Unbundle parking to demonstrate the true cost of parking spaces, reduce the amount of parking needed and minimize underutilized parking (discussed in more detail later);
- Establish a Parking Benefits District to capture parking revenues and finance public improvements downtown; and
- Prepare a Parking Implementation Plan.

Other Parking Management Plan strategies include:

- Create well-designed pedestrian-friendly linkages between the major parking areas (lots and garages) and downtown destinations (addressed in Public Space chapter); and
- Accommodate car-share programs to provide vehicles to those who need them infrequently.

Time Limits

Time limits can be used to manage the parking supply. Short time limits should be used to encourage turnover (e.g., spaces in front of a dry cleaners so that patrons can drop off or pick up their cleaning). Alternatively, longer time limits can be used to encourage employees to park in more distant locations (such as the parking garages), freeing-up nearby spaces for customers. Longer term parking can also accommodate multi-purpose trips such as shopping and dining. This will increase patron convenience since they will not need to be concerned about moving their vehicle and reduce the number of parking tickets.

The City recently undertook a parking study to select appropriate time limits for the current supply of parking. This study resulted in Council approval to change Santa Cruz Avenue on-street parking time limits to one hour, with a number of 15-minute zones for convenience stops. The Council retained two-hour free parking in the parking plazas, but allowed for paid parking above those time limits on Parking Plazas 1 and 5. These actions have been put into effect, and are consistent with the Specific Plan goals.

Parking meters

Metered Parking/Parking Pricing

Charging for parking (with associated appropriate time limits) can be used to manage the parking supply by encouraging turnover in highly desirable spaces (e.g., those on Santa Cruz Avenue). The key characteristics of successful paid parking programs are listed below.

- Price the most convenient/desirable spaces (typically curbside spaces) at a higher rate than less convenient spaces.
- Set, manage and review the parking price so that 85% of curbside spaces are occupied during peak periods. This helps businesses by increasing the availability of the most convenient parking spaces.
- Create a “Parking Benefits District” (discussed below) which invests meter revenues into streetscape and parking lot improvements like benches, street trees, street sweeping and other public amenities for the areas served by the metered parking.

The City could consider implementing a metered parking system for existing spaces in the plan area (both on parking plazas and on-street), preferably using spaced, pay-by-space parking meters to allow visitors to pay with cash, credit card or, perhaps, through cell phones/smart phones/ PDAs. This will increase the convenience of metered parking and allow visitors flexibility in how they pay for parking. Spaces in the parking garages should be free of charge for the first hour or two and then charged a fee for the subsequent hours; thus increasing the desirability of spaces in parking garages.

One of the initial impediments to parking pricing is the perception that charging for parking will reduce the number of visitors to the downtown. However, if pricing strategies are set up so that convenient spaces are available and the chance of getting a parking ticket is minimized, the number of visitors to the downtown would not be reduced and may increase. Burlingame and Redwood City are nearby cities that charge for parking. Redwood City has also implemented metered parking with varied pricing strategies in its downtown. The City reports that the combination of removing both free parking and time restrictions has resulted in better parking compliance and issuance of fewer parking tickets.

Unbundled Parking

When parking is included in tenant leases, the true cost of parking is hidden. For example the price for an apartment with two parking spaces may be rented for $1,500 per month. However, if the parking spaces were unbundled, the price for rent for the apartment would be $1,300 per month, plus $100 per month for each space. Unbundled parking helps tenants to understand the true cost of parking, and may influence a resident's decision to own a car (Reforming Parking Policies to Support Smart Growth, MTC, 2007).

The Specific Plan recommends unbundled parking – the renting or selling of parking spaces separately, rather than automatically including them with building space – in all residential developments in the plan area. Unbundling parking makes particular sense in mixed-use development areas within walking distance to transit, because people are less likely to need a car. Available parking spaces created by unbundling parking could also be set aside for car sharing providers such as ZipCar or CityCarShare. (These services allow members to reserve a vehicle by the day or by the hour for a fee inclusive of mileage, gas, maintenance, and insurance. The services can support households or businesses that choose not to own a car).

Parking Benefits District

Other cities in California that have implemented parking meters/pricing strategies, such as West Hollywood, Pasadena, Santa Monica and San Francisco, have been able to do so successfully through the creation of a Parking Benefit District where all or portions of parking revenues are returned to the district where the revenues are collected. The revenues can be used to provide improvements such as benches, street trees, street sweeping and other public amenities serving the plan area or to potentially fund shuttle service enhancements.

Parking Implementation Plan

Once the City of Menlo Park decides to implement a Parking Management Plan, it will be vital to the plan's success to prepare a detailed implementation plan to ensure that the parking strategies are implemented in a strategic and cost-effective way and are monitored for effectiveness.

In the first phase of the Parking Implementation Plan, the City should analyze existing and future parking demand patterns and identify specific parking management strategies to accommodate those demand patterns. Once the City has identified appropriate strategies, it should consider forming a Parking Benefits District as a second phase of the implementation plan. The formation of the benefits district should include clear guidelines on the operating principles of the parking plan, define a monitoring plan to ensure that the parking pricing strategies are appropriate and meet the City's goal of maintaining the recommended 85 percent parking occupancy. As part of the Parking Benefits District formation, the City should also create an in-lieu parking fee program (further discussed in "Costs of Garaged Parking" section) and set up a residential parking permit program, if needed. It is assumed that the City would have revised its parking regulations to reduce the current minimum parking requirement to those recommended in the plan, as discussed above.

In the long-term the plan should include ongoing monitoring of a Parking Management Plan and evaluation of how the parking revenue is used for amenities, parking and shuttles within the plan area.

F.10 TRANSPORTATION DEMAND MANAGEMENT

The Specific Plan encourages Transportation Demand Management (TDM) programs for all new developments, including those that generate fewer than 100 peak hour trips. (Currently, only projects generating over 100 peak hour trips are required by C/CAG (San Mateo City/County Association of Governments) to pay an impact fee or develop TDM program.) The purpose of TDM programs is to reduce vehicle trips to mitigate impacts on roadway segments and intersections, and to reduce associated parking demand, by encouraging the use of modes other than single-occupant vehicles for travel.

TDM strategies that could be implemented by individual developments in the plan area include:

- Commute alternative information;
- Bicycle storage facilities;
- Showers and changing rooms;
- Pedestrian and bicycle subsidies;
- Operating dedicated shuttle service (or buying into a shuttle consortium);
- Subsidizing transit tickets;
- Preferential parking for carpoolers;
- Provide child care services and convenience shopping within new developments;
- Van pool programs;
- Guaranteed ride home program for those who use alternative modes;
- Parking cash-out programs and discounts for persons who carpool, vanpool, bicycle or use public transit;
- Imposing charges for parking rather than providing free parking;
- Providing shuttles for customers and visitors; and/or
- Car share programs.

Funding of an area wide TDM program could be provided through annual assessments on new development or by the in-lieu parking fees. Some of the recommended implementation policies discussed in the previous sections, such as bicycle parking, unbundled parking, and reduced parking rates are also TDM measures commonly considered in programs to reduce vehicle travel.

Caltrain GO Pass – An Employer-Sponsored Program

New and existing qualified employers in the plan area should be encouraged to participate in the GO Pass program to encourage Caltrain use, reduce automobile use and reduce vehicle parking needs. GO Pass is an employer-sponsored annual pass that offers unlimited rides on Caltrain seven days a week through all zones. The GO Pass is purchased by employers for all full-time employees. Employers pay an annual fee to provide the pass to each full-time employee regardless of how many employees use the pass, and employees must have photo ID badges to participate in the program.

CIRCULATION
ELEMENT

PUBLIC HEARING DRAFT

NOVEMBER 2016

CONNECTMENLO

menlo park land use & mobility update

FIGURES

TABLES

OVERVIEW

The Circulation Element describes distinct issues and opportunities the Menlo Park community is likely to face during the 2040 horizon of the General Plan, as well as key strategies for addressing them. The focus of the goals, policies, and programs in this Element will create the most functional circulation system possible for the full range of users and travel modes.

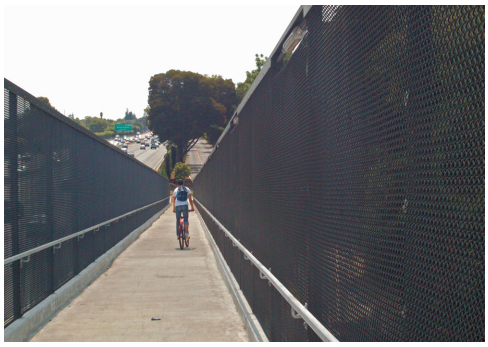
Menlo Park has a high-quality transportation system connecting well internally and to the region, but can be overmatched at times by the volume of vehicle traffic, most commonly due to regional commute traffic at peak travel times. Shifting some of that volume into other travel modes, such as walking, biking, transit, and high-occupancy vehicles, can reduce vehicle travel demand and help establish more vibrant, sustainable, comfortable, safe, and economically productive streets.

The community's mobility vision includes an important focus on walking, bicycling, and public transit in an effort to provide residents and employees transportation options and reduce the dependency on private automobiles. These travel modes improve street safety, reduce greenhouse gas emissions, and improve Menlo Park's overall health and livability. By making corridors and neighborhoods more pleasant and attractive places, improving access for all modes of travel can significantly support environmental and economic sustainability.

The Menlo Park Circulation Element meets State requirements, containing "the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, any military airports and ports, and other local public utilities and facilities, all correlated with the land use element of the plan" per Government Code Section 65302(b). Further, it satisfies additional "complete streets" requirements (effective 2011), of "planning for a balanced, multi-modal transportation network that meets the needs of all users of streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the general plan."

SAFETY FOR ALL

Menlo Park has a diverse circulation system used for local and regional travel. It consists of a network of roadways, transit routes, bicycle facilities, sidewalks, and pathways for bicycle and pedestrian use. The top transportation-related priority for the community is safety. The geography of the city inherently creates potential safety issues, as the



Pedestrian and bicycle Highway 101 overpass

relatively narrow band that comprises Menlo Park traverses a major freeway and two rail arteries, and depends on several thoroughfares to serve school, commercial, neighborhood, crosstown, and regional traffic.

The City has installed a range of features promoting safety for pedestrians and bicyclists, from vehicle turn barriers to rail crossing gates, crosswalk lighting and pedestrian visibility flags, a bicycle/ pedestrian freeway overpass, bicycle and pedestrian paths, and on-street bicycle lanes. The City also has installed speed tables, traffic circles, medians, landscaping, and other streetscape features to not only promote pedestrian and bicycle safety but also encourage slower driving to reduce collisions.

VISION ZERO

Still, transportation safety can always be improved. "Vision Zero" is the simple notion that any loss of life on city streets is unacceptable. Humans, by nature make mistakes, and Vision Zero includes design practices to keep road networks safe and protect all users of the street and adjacent spaces. Menlo Park has established a Vision Zero goal incorporating four key efforts: (1) project prioritization through Capital Improvement Plan projects, (2) engineering, (3) education, and (4) enforcement to create safer streets by slowing vehicle traffic and reducing the impacts associated with vehicle travel.

Bicyclist navigating traffic

Project prioritization through the City's Capital Improvement Plan promotes review of projects to ensure that the needs of non-motorized travelers are met in all stages of the design and implementation process. This effort also aims to upgrade existing infrastructure before incurring the costs associated with building new infrastructure. By using data driven findings, engineering efforts can more easily focus on critical safety components.

Education and enforcement addresses human behavior on roadways. The City of Menlo Park promotes education efforts introducing safety programs for adults and youth to educate road users on their responsibilities. Enforcement encourages safety and reduces unsafe behavior among pedestrians, bicyclists, and drivers.

Emergency Services

Emergency response coordination is also part of planning for a safe transportation system. The Emergency Routes map in Figure 1 shows routes identified by the Menlo Park Fire Protection District. These routes are used in response to emergency medical calls, vehicle collisions, hazardous material incidents, and fire incidents.

STREET NETWORK

As measured in land coverage and usage, the primary component of the Menlo Park circulation system is the city street network. Streets consist of more than just the pavement over which cars travel. Streets and the spaces adjacent to them can be environments for all kinds of activity, from fairs and block parties, to dog walking, ad hoc sidewalk conversations with neighbors, and even comfortable places to enjoy a meal. The significance of streets in determining the quality of neighborhoods and commercial areas depends on them being "complete," by providing safe, convenient, and attractive transportation options for all users and all travel modes.

Complete Streets

First adopted in 2013, the complete streets policy of the City of Menlo Park expresses the City's commitment to create and maintain streets that are routinely planned, designed, operated, and maintained with consideration of the needs and safety of all travelers along and across the entire public right of way. This includes people of all ages and abilities who are walking, bicycling, using transit, traveling with mobility aids, driving vehicles, and transporting commercial freight.

Complete streets establish comprehensive, integrated transportation networks and allow users to move easily around the City using multiple modes of transportation. Successful design of complete streets involves "livable street" design practices to preserve and enhance the aesthetics of the city. Carefully crafted design components can also support equity within Menlo Park by identifying low-income and transit-dependent areas and establishing attractive pedestrian and bicycle facilities to, from, and within these neighborhoods.

"Develop a cycling network of connected infrastructure to make bicycling a safe and viable option to help mitigate traffic congestion."

Land Use Survey Response, January 2015

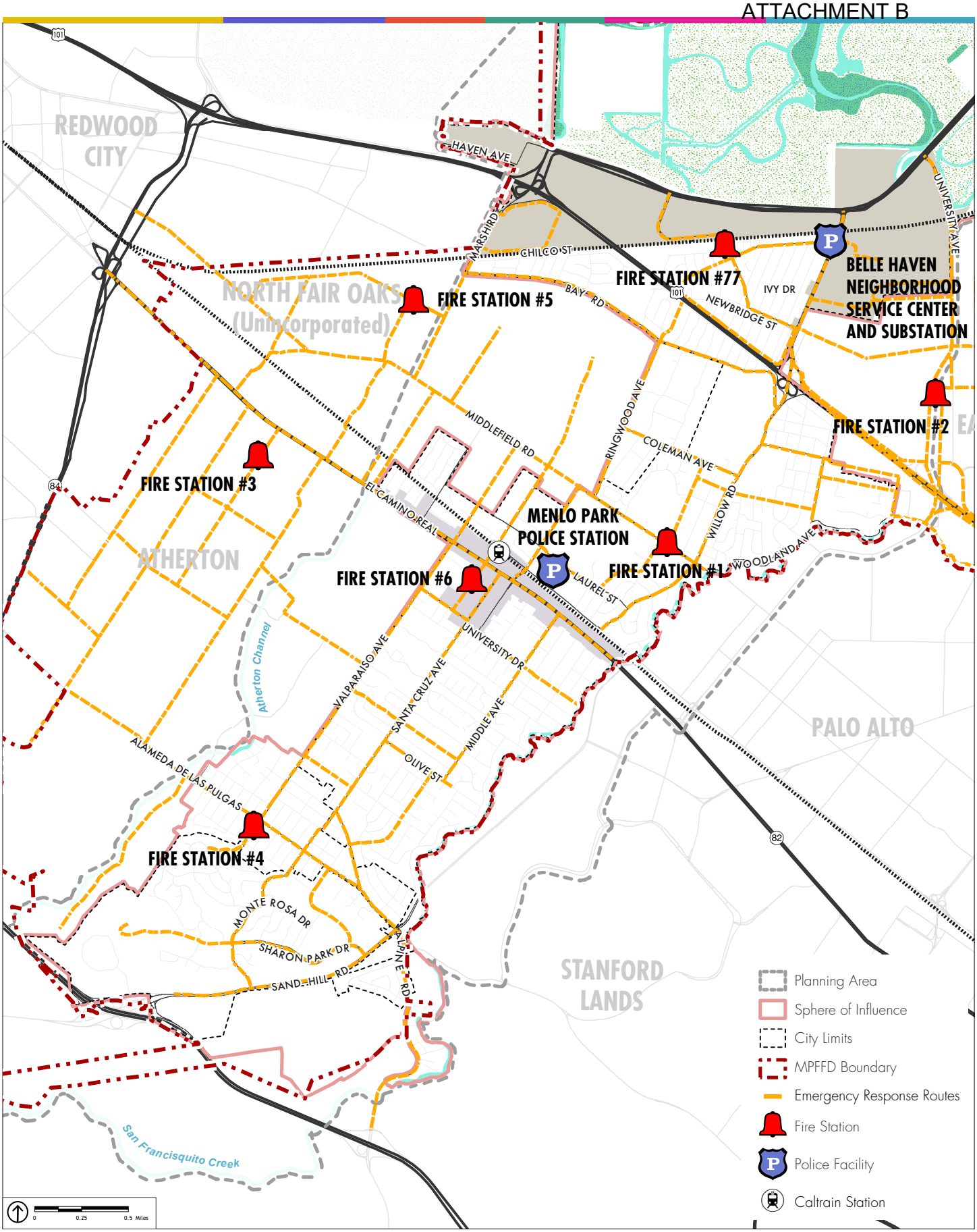


FIGURE 1: EMERGENCY ROUTES

In addition to completing the streets, Menlo Park has the opportunity to incorporate "green street" designs when retrofitting and designing streets. Green streets contain environmental features like trees, rain gardens, and infiltration planters to slow the course of runoff and filter it naturally before it reaches major waterways and sensitive plant and animal life.

Street Classifications

Another key component of providing complete streets is establishing and promoting the suitability of streets for various travel modes and adjacent land uses. The Street Classifications map in Figure 2 and Table 1 depict and explain how the classifications are applied to the Menlo Park roadway network and define objectives to be met when the City resurfaces or redesigns a specific street.

The list of objectives in the Street Classifications Table 1 is one means of ensuring the City fulfills its complete streets mission. Prior to the adoption of this multi-modal approach, Menlo Park, like most cities, relied on classifications required by the Federal Highway Administration (FHWA) for projects seeking federal funding. This system is primarily automobile focused and does not take into consideration local context, land use, or built form. The Street Classifications table retains a correlation to the FHWA classification to ensure that Menlo Park remains eligible for federal transportation funds.

Some uses are independent of a street's normal form and function, such as routes for emergency vehicles, streets adjacent to major transit stations or school zones, and bicycle priority streets. These uses do not necessarily dictate the specific design of a street, but instead encourage design flexibility to better serve the specific purposes. For example, local access streets that can best serve bicycles should be clearly identified so that roadway and intersection features that would discourage bicyclists are not emphasized in their design. Similarly, emergency routes may require width and design exceptions to accommodate movements of emergency vehicles; for example, where a roundabout is appropriate for a particular intersection, its edges may need to be rounded so that large fire trucks can roll over rather than have to swerve around them.

Appropriate classifications lead to context-sensitive street infrastructure for existing and new neighborhoods

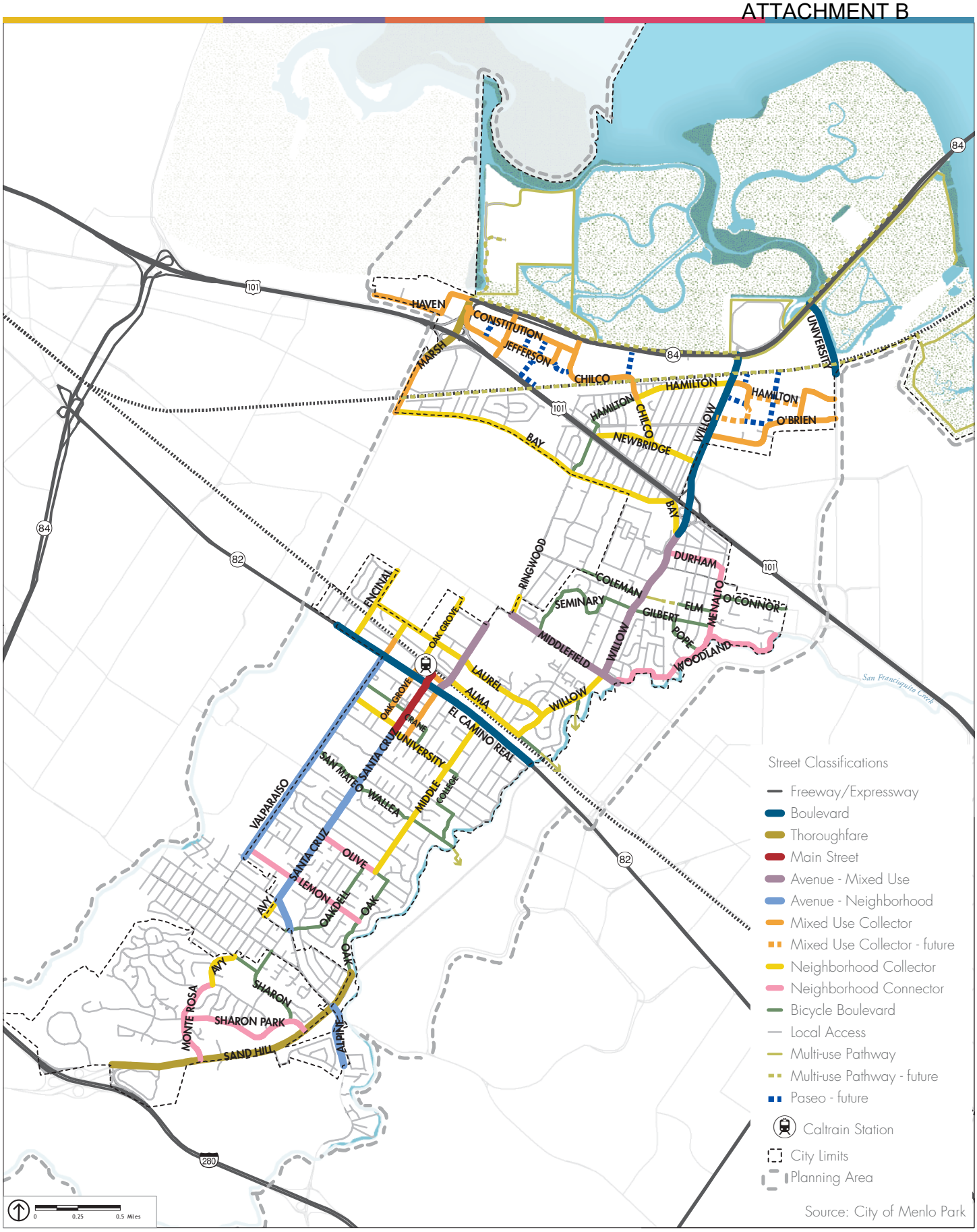


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FIGURE 2: STREET CLASSIFICATIONS

TABLE 1 DESCRIPTION OF STREET CLASSIFICATIONS

Classification	Mode Priority	Description and Guidelines	Examples	FHWA Category
Freeway/ Expressway	Vehicle: ● Other modes: N/A	*Limited access, major regional freeways and expressways that are part of the state and regional network of highways and subject to state design standards.*	Bayfront Expressway	Expressway
Boulevard	Bicycle: ◕ Pedestrian: ● Transit: ● Vehicle: ●	*Major thoroughfare with higher frequency of transit service and mixed commercial and retail frontages.* Provides access and safe crossings for all travel modes along a regional transportation corridor. Emphasizes walking and transit and accommodates regional vehicle trips in order to discourage such trips on nearby local roadways, through collaborations with other cities and agencies. In areas of significant travel mode conflict, bicycle improvements may have lower priority if appropriate parallel corridors exist.	El Camino Real	Primary Arterial
Thoroughfare	Bicycle: ◑ Pedestrian: ◑ Transit: ◑ Vehicle: ●	*Major thoroughfare, limited mixed commercial frontages.* Provides access and safe crossings for all travel modes along a regional transportation corridor. Emphasizes regional vehicle trips in order to discourage such trips on nearby local roadways, through collaborations with other cities and agencies.	Marsh Road, Sand Hill Road	Primary Arterial
Main Street	Bicycle: ◑ Pedestrian: ● Transit: ◑ Vehicle: ◑	*High intensity, pedestrian-oriented retail street.* Provides access to all travel modes in support of Downtown, includes on-street parking. Service to pedestrian-oriented retail is of prime importance. Vehicle performance indicators may be lowered to improve the pedestrian experience. Bicycle priority may be lower where appropriate parallel bicycle corridors exist.	Santa Cruz Avenue	Minor Arterial
Avenue – Mixed Use	Bicycle: ● Pedestrian: ● Transit: ● Vehicle: ◕	*Streets with mixed residential and commercial frontages that serve as a main route for multiple modes.* Distributes trips to residential and commercial areas. Provides a balanced level of service for vehicles, transit, bicycles, and pedestrians, wherever possible. Bicycle priority is greater along identified bicycle corridors. Pedestrian improvements are comfortable to walk along, and provide safe crossings at designated locations.	Willow Road (south of Bay), Middlefield Road	Minor Arterial
● = High Priority ◑ = Medium Priority ○ = Low Priority				

TABLE 1 DESCRIPTION OF STREET CLASSIFICATIONS (CONTINUED)

Classification	Mode Priority	Description and Guidelines	Examples	FHWA Category
Avenue – Neighborhood	Bicycle: ● Pedestrian: ● Transit: ● Vehicle: ◕	*Streets with residential frontages that serve as a main route for multiple modes.* Distributes trips to residential areas. Provides a balanced level of service for vehicles, transit, bicycles, and pedestrians, wherever possible. Bicycle priority is greater along identified bicycle corridors. Pedestrian improvements are comfortable to walk along, and provide safe crossings at designated locations.	Santa Cruz Avenue (south of University Drive), Valparaiso Avenue	Minor Arterial
Mixed-Use Collector	Bicycle: ● Pedestrian: ● Transit: ◑ Vehicle: ◑	*Mixed-use street that serves a significant destination.* Prioritizes walking and bicycling. Accommodates intra-city trips while also distributing local traffic to other streets and areas.	Chilco St (north of rail corridor), O'Brien Drive, Haven Avenue	Collector
Neighborhood Collector	Bicycle: ● Pedestrian: ● Transit: ◑ Vehicle: ◑	*Primarily residential street that serves a significant destination.* Prioritizes walking and bicycling. Accommodates intra-city trips while also distributing local traffic to other streets and areas. Accommodating vehicle traffic while ensuring a high quality of life for residents is a key design challenge.	Bay Road, Laurel Street, Hamilton Avenue	Collector
Neighborhood Connector	Bicycle: ● Pedestrian: ● Transit: ○ Vehicle: ◑	*Low-medium volume residential through street*. Primarily serves residential neighborhoods. Provides high quality conditions for walking and bicycling and distributes vehicle, pedestrian, and bicycle trips to and from other streets.	Monte Rose Avenue, Woodland Avenue	Local
Bicycle Boulevard	Bicycle: ● Pedestrian: ● Transit: ○ Vehicle: ◑	*Low volume residential street, serving mostly local traffic, connecting key bicycle facilities*. Provides access primarily to abutting uses. These streets should offer safe and inviting places to walk and bike.	San Mateo Drive, Hamilton Avenue	Local
Local Access	Bicycle: ● Pedestrian: ● Transit: ○ Vehicle: ◑	*Low volume residential street, serving mostly local traffic*. Provides access primarily to abutting uses. These streets should offer safe and inviting places to walk and bike.	San Mateo Drive	Local
Multi-Use Pathway	Bicycle: ● Pedestrian: ● Transit: N/A Vehicle: N/A	*Pedestrian and bicycle pathway.* Provides priority access to pedestrians and bicycles only, per Caltrans pathway minimum standards. Multi-use pathways feature high-quality crossings where they traverse major roadways.	Bay Trail	N/A
● = High Priority ◑ = Medium Priority ○ = Low Priority				

MOBILITY OPTIONS

Providing transportation options for the Menlo Park community is essential to maintaining and enhancing quality of life in the city. Even with a strong multi-modal transportation network, some single-occupant vehicle trips may still be necessary and must be considered in the design and modification of the circulation system. The nature of single-occupant vehicles may change significantly over the timeframe of the General Plan, with non-emitting, self-propelling, and other vehicle technology advances on the horizon. For people to be able to use travel means other than driving alone, those other options must be safe, convenient, and if possible, even fun.

"I wish Menlo Park had better, safer, more convenient bike corridors."

Community Workshop Participant, September 2014

SUSTAINABLE TRANSPORTATION

Sustainable transportation systems are those supporting safe and healthy transportation, active living, and a sense of community where walking, bicycling, and transit are integral parts of daily life. Sustainable transportation promotes the reduction of greenhouse gas (GHG) emissions and per capita vehicle-miles traveled (VMT), which are major goals of the City's Climate Action Plan. Both GHG and VMT can be reduced through transportation improvements making travel modes other than driving alone more accessible and safe to use. GHG can be further reduced through "green" vehicle technologies, including electric vehicles, bicycles, and scooters, and transportation advancements such as connected and autonomous vehicles, and the sharing economy (e.g., ride sharing, bike sharing, and car sharing).

Walking and biking route under Bayfront Expressway

HEALTH AND WELLNESS

The complete streets approach is also a public health initiative, as it promotes walking, bicycling, and access to public transit, which help increase recreation and also reduce local vehicle trips and vehicle-miles traveled, as well as local air pollution and GHG emissions. When people have safe places to walk near their homes, they are more likely to meet recommended levels of physical activity, ultimately improving public health through reduced rates of obesity and chronic disease, and increased life expectancy.

Pedestrian-friendly streetscape design

Complete streets and sustainable transportation systems also improve traffic safety by reducing speeds and making drivers more aware of other

roadway users. Streets designed with public health and wellness in mind are associated with lower rates of vehicle collisions and pedestrian/bicyclist injuries than are street systems focused only on moving automobiles most efficiently. By slowing traffic and improving visibility for pedestrians and bicyclists, complete, livable, green, and therefore sustainable, streets decrease the severity of injuries sustained by bicyclists and pedestrians. The Bicycle Infrastructure map (Figure 3) highlights routes in Menlo Park promoting travel by bicycle.

Reducing vehicle trips and vehicle-miles traveled leads directly to a reduction in local air pollution. People experiencing chronic exposure to pollution from heavy truck traffic, freeways, and other high-traffic arterials face an increased risk of respiratory diseases, chronic illnesses, and premature death. Traffic-related air pollution is linked to asthma, especially among children.

TRANSIT

Transit service is an essential component of the Menlo Park transportation system. Encouraging the use of transit can help reduce vehicular emissions and pollution, increase access to employment and activity centers for those without a car, and help individuals meet daily needs of physical activity. Increased transit frequency and corridor improvements are critical to the City's efforts to improve public transportation choices and regional access. The Transit Infrastructure map (Figure 4) shows both the existing and planned transit routes in Menlo Park.

The City can improve local and regional bus service by collaborating with San Mateo County Transit (SamTrans), the Santa Clara Valley Transportation Authority (VTA), Stanford University, and private organizations to expand public and private service and to improve stops near attractors such as employment centers, commercial destinations, schools, and public facilities.

""No matter where a transit station is added, it should be co-located with retail –coffee shop, restaurant, dry cleaner– and anything else the commuters may want on their way to or from work."

Land Use Survey Response, January 2015

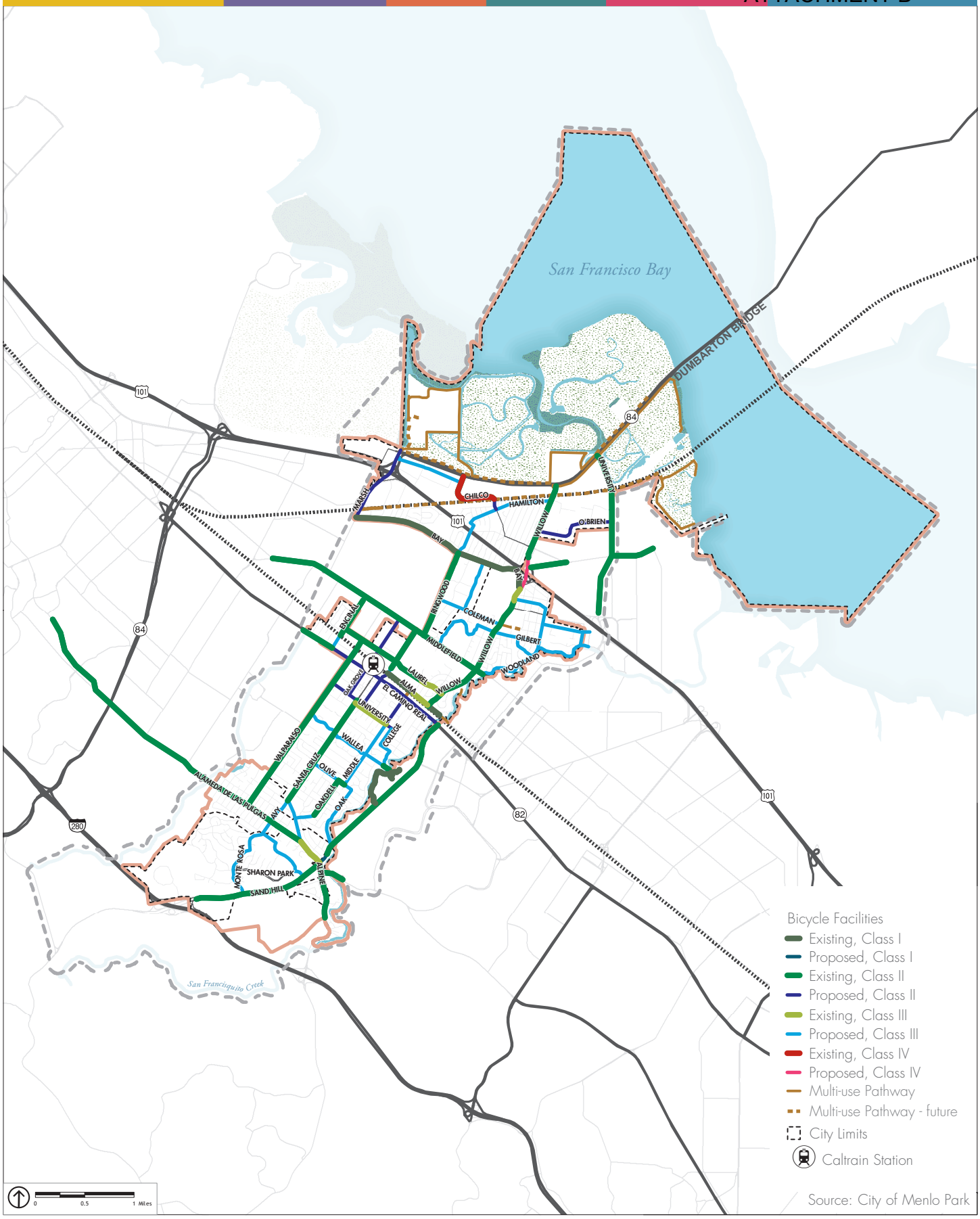

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FIGURE 3: BICYCLE FACILITIES - EXISTING AND PROPOSED

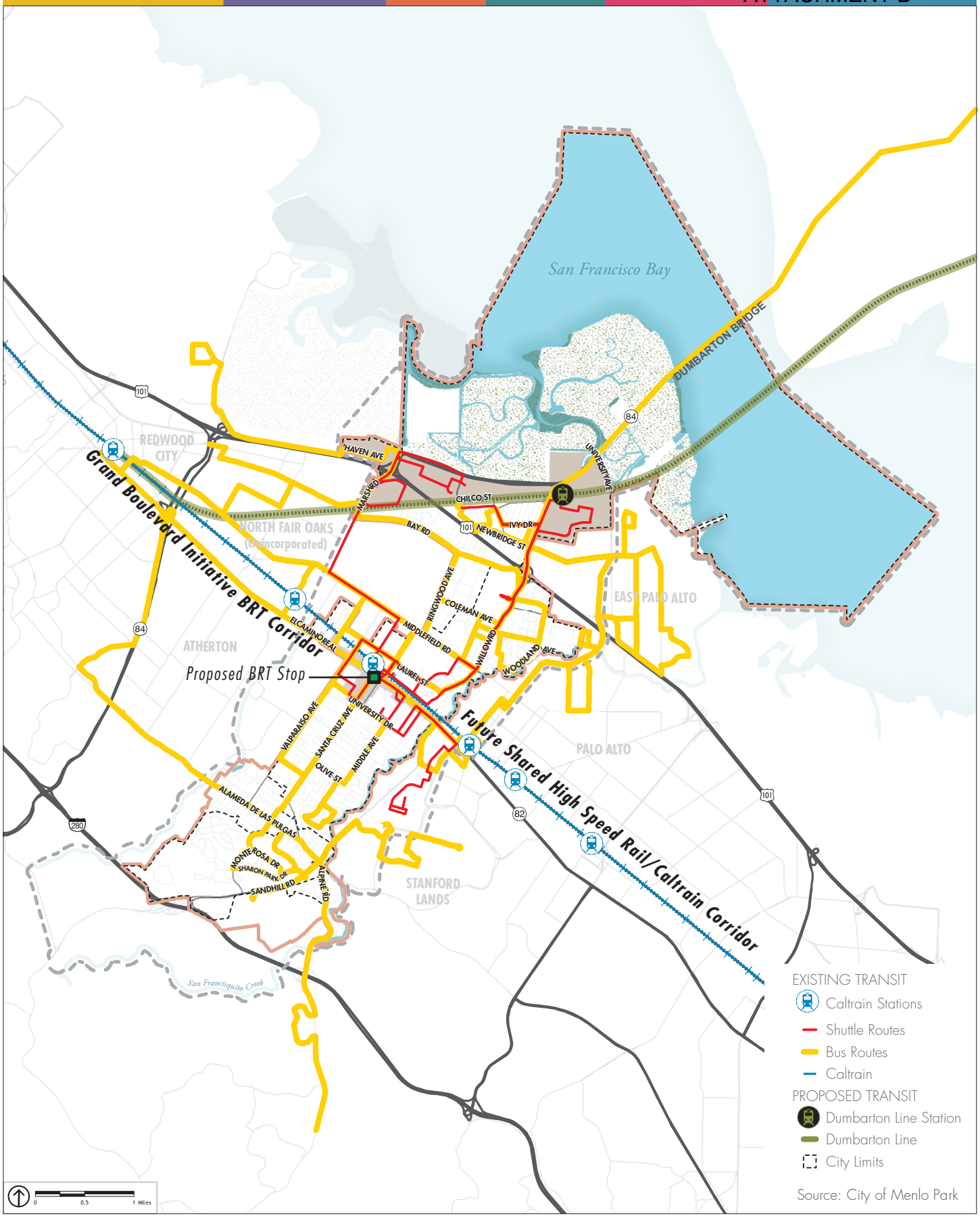

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FIGURE 4: TRANSIT INFRASTRUCTURE - EXISTING AND PROPOSED

Electrification of Caltrain between San Jose and San Francisco is planned to improve travel times and increase service frequency in the Caltrain corridor, and lays the framework for a future Caltrain/High Speed Rail blended system operating within the Caltrain right-of-way. Electrified rail service allows faster speeds, shorter travel times, reduced wait times, and better overall connectivity with other regional transit systems. An increase in train frequency also supports an increased number of trains stopping at Menlo Park.

The City of Menlo Park has formed a City Council Rail Subcommittee to advocate for reducing the negative impacts and enhancing the benefits of High Speed Rail in Menlo Park. The Subcommittee has also established principles based on the City Council's position on High Speed Rail. Menlo Park supports the extension of Caltrain to Downtown San Francisco's Transbay Terminal, as well as grade separation efforts to make crossing the rail corridor safer. Reactivation of the Dumbarton Rail Corridor between Redwood City and Menlo Park is another means to provide additional fast and reliable transportation, by rail, bus rapid transit and/or pedestrian and bicycle paths that may ultimately connect to the Dumbarton Bridge.

"Activate Dumbarton Rail!"

Guiding Principles Survey Response, October 2014

TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) programs are intended to reduce vehicle trips and parking demand by promoting the use of a variety of transportation options and shifting travel mode and time of day to take advantage of available capacity to reduce crowding and congestion. By implementing TDM programs, municipalities and private entities can use available transportation resources more efficiently.

TDM programs can incorporate intelligent transportation systems and other technological solutions to offer applications providing real-time information on transportation options. To ensure effectiveness, the City of Menlo Park can also encourage the development and maintenance of a Transportation Management Association (TMA). The primary goal of a TMA is to reduce vehicle trips to existing and planned developments in a particular area. A TMA can also assist residents, employees, business owners, and other community members in identifying and taking advantage of transportation options between activity centers and public transportation hubs. The City of Menlo Park can coordinate efforts with other agencies providing similar service within San Mateo and Santa

Clara Counties and participate in efforts to increase transportation options near major activity centers.

PARKING

Encouraging the development of an efficient and adequate parking supply can reduce the negative effects of parking on the pedestrian environment and surrounding neighborhoods, and support the City's goals for complete streets, walkability, bikeability, and effective transit. The cost of providing parking can significantly affect the economic feasibility of both private development and City projects. Allowing appropriately sized parking requirements can reduce barriers to new development and renovation of existing buildings while creating a healthy market for parking where parking spaces may be bought, sold, rented, and leased like any other commodity.

Electric vehicle charging at City Hall

New developments can be encouraged to provide appropriate parking ratios with "unbundled" (separately costed) spaces while also making space for car sharing and electric-vehicle charging stations. A shared public parking approach and "park-once" strategies allow motorists to complete multiple daily tasks before moving their vehicle, thereby reducing both vehicle trips and parking demand, particularly in mixed-use areas. With decreased parking demand and establishment of public parking management strategies, the on- and off-street parking supply can be used more efficiently, ensuring that adequate parking is available for short-term and nearby uses. The inclusion of parking pricing at new developments or public parking facilities may be considered as part of a public parking management strategy to further manage this resource.

The Goals, Policies, and Programs on the following pages are intended to provide the Menlo Park community with quality services that encompass all of the mobility options outlined above, and as called for in the ConnectMenlo Guiding Principles.

GOALS, POLICIES, AND PROGRAMS

SAFE TRANSPORTATION SYSTEM

GOAL CIRC-1 Provide and maintain a safe, efficient, attractive, user-friendly circulation system that promotes a healthy, safe, and active community and quality of life throughout Menlo Park.

POLICIES

Policy CIRC-1.1 **Vision Zero.** Eliminate traffic fatalities and reduce the number of non-fatal collisions by 50 percent by 2040.

Policy CIRC-1.2 **Capital Project Prioritization.** Maintain and upgrade existing rights-of-way before incurring the cost of constructing new infrastructure, and ensure that the needs of non-motorized travelers are considered in planning, programming, design, reconstruction, retrofit, maintenance, construction, operations, and project development activities and products.

Policy CIRC-1.3 **Engineering.** Use data-driven findings to focus engineering efforts on the most critical safety projects.

Policy CIRC-1.4 **Education and Encouragement.** Introduce and promote effective safety programs for adults and youths to educate all road users as to their responsibilities.

Policy CIRC-1.5 **Enforcement Program.** Develop and implement an enforcement program to encourage safe travel behavior and to reduce aggressive and/or negligent behavior among drivers, bicyclists, and pedestrians.

Policy CIRC-1.6 **Emergency Response Routes.** Identify and prioritize emergency response routes in the citywide circulation system.

Policy CIRC-1.7 **Bicycle Safety.** Support and improve bicyclist safety through roadway maintenance and design efforts.

Policy CIRC-1.8 **Pedestrian Safety.** Maintain and create a connected network of safe sidewalks and walkways within the public right of way ensuring that appropriate facilities, traffic control, and

street lighting are provided for pedestrian safety and convenience, including for sensitive populations.

Policy CIRC-1.9 **Safe Routes to Schools.** Support Safe Routes to School programs to enhance the safety of school children who walk and bike to school.

PROGRAMS

Program CIRC-1.A **Pedestrian and Bicyclist Safety.** Include pedestrian and bicyclist safety in the design of streets, intersections, and traffic control devices.

Program CIRC-1.B **Safe Routes to Schools.** Work with schools and neighboring jurisdictions to develop, implement and periodically update Safe Routes to School programs. Schools that have not completed a Safe Routes to Schools plan should be prioritized before previously completed plans are updated.

Program CIRC-1.C **Capital Improvement Program.** Annually review progress implementing General Plan policies, and update the Capital Improvement Program to reflect the latest City and community priorities embodied in the General Plan, including for physical projects related to transportation.

Program CIRC-1.D **Travel Pattern Data.** Bi-annually update data regarding travel patterns for all modes to measure circulation system efficiency (e.g., vehicle miles traveled per capita, traffic volumes) and safety (e.g., collision rates) standards. Coordinate with Caltrans to monitor and/or collect data on state routes within Menlo Park.

Program CIRC-1.E **Emergency Response Routes Map.** In collaboration with the Menlo Park Fire Protection District and Menlo Park Police Department, adopt a map of emergency response routes that considers alternative options, such as the Dumbarton Corridor, for emergency vehicle access. Modifications to emergency response routes should not prevent or impede emergency vehicle travel, ingress, and/or egress.

Program CIRC-1.F **Coordination with Emergency Services.** Coordinate and consult with the Menlo Park Fire Protection District in establishing circulation standards to assure the provision of

high quality fire protection and emergency medical services within the City.

COMPLETE STREETS

GOAL CIRC-2 Increase accessibility for and use of streets by pedestrians, bicyclists, and transit riders.

POLICIES

Policy CIRC-2.1 **Accommodating All Modes.** Plan, design and construct transportation projects to safely accommodate the needs of pedestrians, bicyclists, transit riders, motorists, people with mobility challenges, and persons of all ages and abilities.

Policy CIRC-2.2 **Livable Streets.** Ensure that transportation projects preserve and improve the aesthetics of the city.

Policy CIRC-2.3 **Street Classification.** Utilize measurements of safety and efficiency for all travel modes to guide the classification and design of the circulation system, with an emphasis on providing "complete streets" sensitive to neighborhood context.

Policy CIRC-2.4 **Equity.** Identify low-income and transit-dependent districts that require pedestrian and bicycle access to, from, and within their neighborhoods.

Policy CIRC-2.5 **Neighborhood Streets.** Support a street classification system with target design speeds that promotes safe, multimodal streets, and minimizes cut-through and high-speed traffic that diminishes the quality of life in Menlo Park's residential neighborhoods.

Policy CIRC-2.6 **Local Streets as Alternate Routes.** Work with appropriate agencies to discourage use of city streets as alternatives to, or connectors of, State and federal highways; to encourage improvement of the operation of US 101; and to explore improvements to Bayfront Expressway (State Route 84) and Marsh Road (and its connection to US 101), with environmental protection for adjacent marsh and wetland areas, to reduce regional traffic on Willow Road (State Route 114).

Policy CIRC-2.7 **Walking and Biking.** Provide for the safe, efficient, and equitable use of streets by pedestrians and bicyclists through appropriate roadway design and maintenance, effective traffic law enforcement, and implementation of the City's Transportation Master Plan (following completion; until such time the Comprehensive Bicycle Development Plan, Sidewalk Master Plan and the El Camino Real/Downtown Specific Plan represent the City's proposed walking and bicycling networks).

Policy CIRC-2.8 **Pedestrian Access at Intersections.** Support full pedestrian access across all legs of signalized intersections.

Policy CIRC-2.9 **Bikeway System Expansion.** Expand the citywide bikeway system through appropriate roadway design, maintenance, effective traffic law enforcement, and implementation of the City's Transportation Master Plan (following completion; until such time the Comprehensive Bicycle Development Plan and the El Camino Real/Downtown Specific Plan represent the City's proposed bicycle network).

Policy CIRC-2.10 **Green Infrastructure.** Maximize the potential to implement green infrastructure by: a) Reducing or removing administrative, physical, and funding barriers; b) Setting implementation priorities based on stormwater management needs, as well as the effectiveness of improvements and the ability to identify funding; and c) Taking advantage of opportunities such as grant funding, routine repaving or similar maintenance projects, funding associated with Priority Development Areas, public private partnerships, and other funding opportunities.

Policy CIRC-2.11 **Design of New Development.** Require new development to incorporate design that prioritizes safe pedestrian and bicycle travel and accommodates senior citizens, people with mobility challenges, and children.

Policy CIRC-2.12 **State-Controlled Signals.** Work with Caltrans to ensure use of appropriate modern technology traffic signal equipment on State routes with the objective of meeting Caltrans' adopted performance metrics for state-controlled facilities in conjunction with good fiscal planning.

Policy CIRC-2.13 **County Congestion Management.** Work with the County Congestion Management Agency to implement the Countywide Congestion Management Program and Deficiency Plans for City and State facilities, and avoid adding any Menlo Park streets or intersections to the Countywide Congestion Management Program.

Policy CIRC-2.14 **Impacts of New Development.** Require new development to mitigate its impacts on the safety (e.g., collision rates) and efficiency (e.g., vehicle miles traveled (VMT) per service population or other efficiency metric) of the circulation system. New development should minimize cut-through and high-speed vehicle traffic on residential streets; minimize the number of vehicle trips; provide appropriate bicycle, pedestrian, and transit connections, amenities and improvements in proportion with the scale of proposed projects; and facilitate appropriate or adequate response times and access for emergency vehicles.

Policy CIRC-2.15 **Regional Transportation Improvements.** Work with neighboring jurisdictions and appropriate agencies to coordinate transportation planning efforts and to identify and secure adequate funding for regional transportation improvements to improve transportation options and reduce congestion in Menlo Park and adjacent communities.

PROGRAMS

Program CIRC-2.A **Manage Neighborhood Traffic.** Following the adoption of a street classification system with target design speeds, establish design guidelines for each street classification. Periodically review streets for adherence to these guidelines, with priority given to preserve the quality of life in Menlo Park's residential neighborhoods and areas with community requests. Utilize a consensus-oriented process of engagement to develop an appropriate set of modifications when needed to meet the street classification guidelines.

Program CIRC-2.B **NACTO Design Guidelines.** Adopt the National Association of City Transportation Officials (NACTO) Urban Street Design Guide and Urban Bikeway Design Guide as supplements to the California Manual for Uniform Traffic Control Devices to enhance safety for users of all travel modes and improve aesthetics.

Program CIRC-2.C **Transportation Master Plan.** Prepare a citywide Transportation Master Plan that includes roadway system improvements and combines and updates the existing Bicycle Plan, includes provisions for overcoming barriers and identifying safe multi-modal routes to key destinations in the City, and replaces the existing Sidewalk Master Plan with a section that identifies areas in Menlo Park where the community and neighborhood have expressed a desire for sidewalk improvements. Update the Transportation Master Plan at least every five years, or as necessary.

Program CIRC-2.D **Pedestrian and Bicycle Facility Maintenance.** Remove debris on roadways and pedestrian/bike facilities, monitor intersection sight clearance, and repair pavement along all roadways and sidewalks; prioritize improvements along bicycle routes and at pedestrian crossing locations.

Program CIRC-2.E **Bikeway System Planning.** Review the citywide bikeway system pursuant to the Transportation Master Plan (following completion; until such time the Comprehensive Bicycle Development Plan and El Camino Real/Downtown Specific Plan represent the City's proposed bicycle network), and other recent planning efforts every five years and update as necessary.

Program CIRC-2.F **Bicycle Improvement Funding.** Pursue funding for improvements identified in the Transportation Master Plan (following completion; until such time, the Comprehensive Bicycle Development Plan and El Camino Real/Downtown Specific Plan represent the City's proposed bicycle network).

Program CIRC-2.G **Zoning Requirements for Bicycle Storage.** Establish Zoning Ordinance requirements for new development to provide secure bicycle and convenient storage and/or bike-sharing facilities.

Program CIRC-2.H **Zoning Requirements for Paseos.** Establish Zoning Ordinance requirements for new development to include public easements for paseos.

Program CIRC-2.I **Bike Sharing Program.** Work with local and regional organizations to develop and implement a citywide bike sharing program.

Program CIRC-2.J **Multi-modal Stormwater Management**. Identify funding opportunities for stormwater management that can be used to support implementation of multimodal improvements to Menlo Park's streets.

Program CIRC-2.K **Zoning Ordinance Requirements.** Establish Zoning Ordinance requirements for all new development to incorporate safe and attractive pedestrian and bicycle facilities, including continuous shaded sidewalks, pedestrian lighting, and other amenities.

Program CIRC-2.L **Transportation Impact Analysis Guidelines.** Review and update the City's Transportation Impact Analysis (TIA) Guidelines, as needed. Consider factors such as preserving residential quality of life, appropriate accounting for mixed land uses, use of multiple transportation modes, and induced travel demand.

Program CIRC-2.M **Transportation Management Program.** Establish goals and metrics for the City's Transportation Management Program, and annually assess progress toward meeting those objectives.

Program CIRC-2.N **Transportation Design Details.** Develop a signage and pavement marking inventory. Prepare and periodically update design details for transportation improvements.

Program CIRC-2.O **Traffic Signal Timing.** Periodically adjust traffic signal timing to support efficient and safe travel for all modes and emergency vehicles, including in conjunction with Caltrans on its rights-of-way.

Program CIRC-2.P **Plan Lines.** Review all "plan lines" indicating where City-owned rights-of-way exist but have not been constructed to determine whether those alignments should be maintained, modified, or abandoned, and identify locations where additional right-of-way is needed to accommodate roadway or bicycle/pedestrian improvements.

Program CIRC-2.Q **Caltrans.** Collaborate with Caltrans to achieve and maintain travel efficiency along Caltrans rights-of-way in Menlo Park consistent with the San Mateo County Congestion Management Plan.

Program CIRC-2.R **Caltrans Relinquishment.** Investigate the potential for relinquishment by Caltrans of State Route 114 (the portion of Willow Road between Bayfront Expressway and US 101 near Bay Road).

SUSTAINABLE TRANSPORTATION

GOAL CIRC-3 **Increase mobility options to reduce traffic congestion, greenhouse gas emissions, and commute travel time.**

POLICIES

Policy CIRC-3.1 **Vehicle-Miles Traveled.** Support development and transportation improvements that help reduce per service population (or other efficiency metric) vehicle miles traveled.

Policy CIRC-3.2 **Greenhouse Gas Emissions.** Support development, transportation improvements, and emerging vehicle technology that help reduce per capita (or other efficiency metric) greenhouse gas emissions.

Policy CIRC-3.3 **Emerging Transportation Technology.** Support efforts to fund emerging technological transportation advancements, including connected and autonomous vehicles, emergency vehicle pre-emption, sharing technology, electric vehicle technology, electric bikes and scooters, and innovative transit options.

Policy CIRC-3.4 **Level of Service.** Strive to maintain level of service (LOS) D at all City-controlled signalized intersections during peak hours, except at the intersection of Ravenswood Avenue and Middlefield Road and at intersections along Willow Road from Middlefield Road to US 101. The City shall work with Caltrans to ensure that average stopped delay on local approaches to State-controlled signalized intersections does not exceed LOS E.

PROGRAMS

Program CIRC-3.A **Transportation Impact Metrics.** Supplement Vehicle Miles Traveled (VMT) and greenhouse gas emissions per service population (or other efficiency metric) metrics with Level of Service (LOS) in the transportation impact review process, and utilize LOS for identification of potential operational improvements, such as traffic signal upgrades and coordination, as part of the Transportation Master Plan.

Program CIRC-3.B **Emergency Response Coordination.** Equip all new traffic signals with pre-emptive traffic signal devices for emergency services. Existing traffic signals without existing pre-emptive devices will be upgraded as major signal modifications are completed.

HEALTH AND WELLNESS

GOAL CIRC-4 Improve Menlo Park's overall health, wellness, and quality of life through transportation enhancements.

POLICIES

Policy CIRC-4.1 **Global Greenhouse Gas Emissions.** Encourage the safer and more widespread use of nearly zero-emission modes, such as walking and biking, and lower emission modes like transit, to reduce greenhouse gas emissions.

Policy CIRC-4.2 **Local Air Pollution.** Promote non-motorized transportation to reduce exposure to local air pollution, thereby reducing risks of respiratory diseases, other chronic illnesses, and premature death.

Policy CIRC-4.3 **Active Transportation.** Promote active lifestyles and active transportation, focusing on the role of walking and bicycling, to improve public health and lower obesity.

Policy CIRC-4.4 **Safety.** Improve traffic safety by reducing speeds and making drivers more aware of other roadway users.

PROGRAMS

Program CIRC-4.A **Partnerships.** Explore partnerships with private and public organizations (e.g., the County of San Mateo Health Department) to fund incentive programs and events that encourage multimodal transportation.

TRANSIT

GOAL CIRC-5 Support local and regional transit that is efficient, frequent, convenient, and safe.

POLICIES

Policy CIRC-5.1 **Transit Service and Ridership.** Promote improved public transit service and increased transit ridership, especially to employment centers, commercial destinations, schools, and public facilities.

Policy CIRC-5.2 **Transit Proximity to Activity Centers.** Promote the clustering of as many activities as possible within easy walking distance of transit stops, and locate any new transit stops as close as possible to housing, jobs, shopping areas, open space, and parks.

Policy CIRC-5.3 **Rail Service.** Promote increasing the capacity and frequency of commuter rail service, including Caltrain; protect rail rights-of-way for future transit service; and support efforts to reactivate the Dumbarton Corridor for transit, pedestrian, bicycle, and emergency vehicle use.

Policy CIRC-5.4 **Caltrain Enhancements.** Support Caltrain safety and efficiency improvements, such as positive train control, grade separation (with priority at Ravenswood Avenue), electrification, and extension to Downtown San Francisco (Transbay Terminal), provided that Caltrain service to Menlo Park increases and use of the rail right-of-way is consistent with the City's Rail Policy.

Policy CIRC-5.5 **Dumbarton Corridor.** Work with SamTrans and appropriate agencies to reactivate the rail spur on the Dumbarton Corridor with appropriate transit service from Downtown

Redwood City to Willow Road with future extension across the San Francisco Bay.

Policy CIRC-5.6 **Bicycle Amenities and Transit.** Encourage transit providers to improve bicycle amenities to enhance convenient access to transit, including bike share programs, secure storage at transit stations and on-board storage where feasible.

Policy CIRC-5.7 **New Development.** Ensure that new nonresidential, mixed-use, and multiple-dwelling residential development provides associated needed transit service, improvements and amenities in proportion with demand attributable to the type and scale of the proposed development.

PROGRAMS

Program CIRC-5.A **Long-Term Transit Planning.** Work with appropriate agencies to agree on long-term peninsula transit service that reflects Menlo Park's desires and is not disruptive to the city.

Program CIRC-5.B **SamTrans.** Work with SamTrans to provide appropriate community-serving transit service and coordination of schedules and services with other transit agencies.

TRANSPORTATION DEMAND MANAGEMENT

GOAL CIRC-6 Provide a range of transportation choices for the Menlo Park community.

POLICIES

Policy CIRC-6.1 **Transportation Demand Management.** Coordinate Menlo Park's transportation demand management efforts with other agencies providing similar services within San Mateo and Santa Clara Counties.

Policy CIRC-6.2 **Funding Leverage.** Continue to leverage potential funding sources to supplement City and private monies to support transportation demand management activities of the City and local employers.

Policy CIRC-6.3 **Shuttle Service.** Encourage increased shuttle service between employment centers and the Downtown Menlo Park Caltrain station.

Policy CIRC-6.4 **Employers and Schools.** Encourage employers and schools to promote walking, bicycling, carpooling, shuttles, and transit use.

PROGRAMS

Program CIRC-6.A **Transportation Demand Management Guidelines.** Update the City's Transportation Demand Management Guidelines to require new non-residential, mixed use and multi-family residential development to provide facilities and programs that ensure a majority of associated travel can occur by walking, bicycling, and/or transit, and that include vehicle trip reduction reporting goals, requirements, and monitoring and enforcement mechanisms.

Program CIRC-6.B **Transportation Management Association.** Participate in the formation of a Transportation Management Association (TMA) to assist local residents, employees, students, and other community members in identifying and taking advantage of travel options between employment centers and rail connections, downtown, and nearby cities. Require new, large commercial and residential development to participate in the TMA. Establish goals for the TMA, such as those for mode share, vehicle trips, or VMT by geographic areas in the City. Collaborate or partner with adjacent cities' TMAs to ensure regional consistency.

Program CIRC-6.C **Transportation Impact Fee.** Require new and expanded development to pay a transportation impact fee, and update the fee periodically to ensure that development is paying its fair share of circulation system improvement costs for all modes of transportation.

Program CIRC-6.D **Peninsula Traffic Congestion Relief Alliance.** Consider joining the Peninsula Traffic Congestion Relief Alliance ("commute.org") to assist local employers with increasing biking and walking, transit, carpool, and vanpool and shuttle use for their employees.

Program CIRC-6.E **Employer Programs.** Work with local employers to develop programs that encourage walking, bicycling, and transit use.

Program CIRC-6.F **Trip Reduction Goals.** Maintain an adopted vehicle trip reduction goal in the Zoning Ordinance to encourage transportation demand management programs and reduce vehicle traffic and update the goal with major changes in transit service, every five years, or as needed.

PARKING

GOAL CIRC-7 Utilize innovative strategies to provide efficient and adequate vehicle parking.

POLICIES

Policy CIRC-7.1 **Parking and New Development.** Ensure new development provides appropriate parking ratios, including application of appropriate minimum and/or maximum ratios, unbundling, shared parking, electric car charging, car sharing, and Green Trip Certified strategies to accommodate residents, employees, customers and visitors.

Policy CIRC-7.2 **Off-Street Parking.** Ensure both new and existing off-street parking is properly designed and used efficiently through shared parking agreements and, if appropriate, parking in-lieu fees.

Policy CIRC-7.3 **Park Once.** Support the establishment of shared public parking, particularly in mixed-use and retail areas, and of Park-Once strategies that allow motorists to park once and complete multiple daily tasks on foot before returning to their vehicle, helping to reduce vehicle trips and parking demand.

Policy CIRC-7.4 **Public Parking Management.** Improve the efficiency of the on- and off-street public parking system via parking management strategies that ensure adequate parking is available for nearby uses. Prioritize allocation of short-term retail customer parking in convenient on-street and off-street facilities. Locate long-term employee parking in such a manner that it does not create a shortage of customer parking adjacent to retail. Consider utilizing parking pricing as a strategy to balance demand and supply.

Policy CIRC-7.5 **Parking Technology.** Utilize real-time wayfinding and parking technology to guide drivers to facilities with available parking.

Policy CIRC-7.6 **Caltrain Parking and Access.** Work with the Joint Powers Board to improve bicycle and pedestrian access to Caltrain stations while providing adequate parking at the Menlo Park Caltrain station that does not negatively impact nearby uses.

PROGRAMS

Program CIRC-7.A **Parking Requirements.** Periodically evaluate and update parking requirements, including bicycle and electric vehicle spaces. Update the Parking Stall and Driveway Design Guidelines. Consider the effect on demand due to various contextual conditions such as parking pricing, transportation demand management strategies, transit accessibility, walkability and bikeability.

Program CIRC-7.B **Parking In-Lieu Fees.** Explore adoption of a parking in-lieu fee to fund a variety of tools that provide additional parking, improve access to parking, or reduce parking demand.

STAFF REPORT

Environmental Quality Commission
Meeting Date: **6/21/2017**
Staff Report Number: **17-010-EQC**

Regular Business: Discuss the Climate Action Plan progress and update on greenhouse gas emissions inventory

Recommendation
This is an informational item and does not require Environmental Quality Commission action.

Policy Issues
In 2013, the City Council adopted a target of reducing community-wide greenhouse gas emissions by 27 percent by 2020 from 2005 levels. The commission's 2016-2018 work plan also includes a focus on climate action plan initiatives.

Background
The City completed its baseline community-wide greenhouse gas inventory in 2005 and adopted its first climate action plan in 2009. Updates to the greenhouse gas inventory and climate action plan should occur annually, this allows for frequent updates as new data and greenhouse gas accounting methodologies become available.

The purpose of the climate action plan is to provide strategies that can aid in the reduction of local greenhouse gas emissions and assist the City in meeting or exceeding the greenhouse gas emission reduction targets established by AB 32 (California's Global Warming Solutions Act of 2006).

On October 7, 2015, Governor Brown signed SB350 into law, which will increase California's use of renewable power to 50% and establishes a statewide goal of making existing buildings twice as efficient as they currently are by the year 2030.

Analysis
The last climate action plan update to City Council was October 20, 2015. The planned climate action plan strategies presented at that time have since been completed and include:

- Installation of solar photovoltaic systems at the City Corporation Yard, Arrillaga Family Gymnasium, Arrillaga Family Gymnastics Center and Onetta Harris Community Center
- Installation of public electric vehicle charging stations in downtown's parking plaza 2 and at City Hall
- Incorporation of climate action plan strategies and greenhouse gas emission reductions into the General Plan and M-2 Area zoning update
- Completed energy efficiency upgrades at City Hall
- Providing 50 percent renewable/75 percent greenhouse gas-free electricity to all Menlo Park residents and 100 percent renewable/100 percent greenhouse gas-free electricity in all City facilities through Peninsula Clean Energy

The City has recently updated its greenhouse gas emissions inventory from the base year of 2005 to 2015 (the most current greenhouse gas emissions data available). Beginning in 2005, the City's greenhouse gas emissions showed a brief increase, but then began to follow a consistent downward trend starting in 2008.

The City's 2015 community-wide greenhouse gas emissions include:

- Transportation representing 44%
- Residential energy use representing 15%
- Commercial energy use representing 31%
- Direct access energy use representing 4%
- Solid waste and the closed landfill at Bayfront Park representing 6%

Planned climate action plan strategies moving forward into fiscal year 2017-18 include:

- Zero Net Energy, LEED Silver, Energy Star Planning requirements or building codes
- Updating the City's franchise agreement with Recology San Mateo County
- Development and implementation of a community zero waste plan
- Develop an energy efficient/renewable energy plan for existing buildings
- Re-invigorate social marketing to increase biking, public transit and walking in the community

With all the progress that has been made, the City also continues to experience significant growth in residential and commercial construction within the City. Although new buildings and new vehicles are more efficient, in effect, the growth will continue to present net-new challenges to the achievement of the City's greenhouse gas emission reduction goals.

Impact on City Resources

There is no impact on city resources related to this discussion item.

Public Notice

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

Report prepared by:
Vanessa Marcadejas, Senior Sustainability Specialist

STAFF REPORT

Environmental Quality Commission
Meeting Date: **6/21/2017**
Staff Report Number: **17-011-EQC**

Regular Business: Review and discuss potential changes to the Environmental Quality Commission's meeting schedule

Recommendation

Staff recommends the Environmental Quality Commission review and provide feedback on the 2017 Environmental Quality Commission meeting schedule.

Policy Issues

City Council Policy CC-01-004 was adopted in 1991 and outlines the procedures, roles and responsibilities of the City Council-appointed advisory bodies for optimal functioning. Amendments were made to the policy in 2001, 2011, 2013 and 2017.

Background

According to City Council Policy CC-01-004, which was last updated on Feb. 28, 2017, the Environmental Quality Commission's regular meeting schedule is the third Wednesday of each month. This schedule is reflected in the current 2017 Environmental Quality Commission meeting schedule (Attachment A).

Analysis

At times, the commission may choose to cancel a regular meeting or add a special meeting, depending on the issues before the commission, but these instances are rare. Occasionally, regular meetings have been cancelled during the slower summer season or around the holidays.

Individual commissioners are always encouraged to let staff know well in advance if they are unable to attend a meeting. Recently, staff heard from a few commissioners about their need to miss certain meetings in the coming months. Staff recognizes that additional schedule conflicts may arise at any time in the future, but if the commission can determine that certain meeting dates will lack a quorum, these dates should be avoided now. For example, if a commissioner is aware of a particularly problematic conflict with a local school break, that can be discussed at this meeting.

If the commission seeks to modify its ongoing regular meeting schedule, a formal motion/second and vote to approve the change and make a recommendation to the City Council to update City Council Policy CC-01-004 would be appropriate.

Staff will ensure that any changes to the meeting schedule are updated with the City Clerk's Office and updated on the city website.

Impact on City Resources

There is no impact on city resources related to this item.

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. Current 2017 Environmental Quality Commission meeting schedule

Report prepared by:
Clay J. Curtin, Assistant to the City Manager/Interim Sustainability Manager

2017 CITY COUNCIL AND ENVIRONMENTAL QUALITY COMMISSION SCHEDULES

CITY OF MENLO PARK

JANUARY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27*	28
29	30	31				

*City Council goal setting meeting

FEBRUARY

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MARCH

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APRIL

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MAY

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28	29	30	31			

*Commission appreciation and training

JUNE

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JULY

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30	31					

AUGUST

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*if needed

SEPTEMBER

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OCTOBER

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NOVEMBER

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DECEMBER

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24	25	26	27	28	29	30
31						

City Council meetings

Environmental Quality Commission meetings

City Hall closed

CITY OF MENLO PARK

REGULAR MEETING MINUTES - DRAFT

Date: 5/17/2017
Time: 6:30 p.m.
City Hall/Administration Building
701 Laurel St., Menlo Park, CA 94025

A. Chair Martin called the meeting to order at 6:36 p.m.

B. Roll Call

Present: Allan Bedwell, Chris DeCardy (absent), Joyce Dickerson, Vice Chair Janelle London, Scott Marshall, Chair Deb Martin, Christina Smolke (absent)
Staff: Clay Curtin, Assistant to the City Manager/Interim Sustainability Manager
Vanessa Marcadejas, Senior Sustainability Specialist

C. Public Comment

No one from the audience provided public comment.

D. Regular Business

D1. Select new commission chair and vice chair

ACTION: Motion and second (Dickerson/Marshall) to select Commissioner London as Chair. The motion passed unanimously (5-0-2, DeCardy and Smolke absent).

ACTION: Motion and second (London/Bedwell) to select Commissioner Martin as Vice Chair. The motion passed unanimously (5-0-2, DeCardy and Smolke absent).

D2. Discuss and make a recommendation to the City Council on adoption of the community zero waste plan

Garth Shultz of R3 Consulting, Inc., provided a presentation to the commission.

ACTION: Motion and second (Marshall/London) to recommend that the City Council consider the following comments on the draft community zero waste plan:

"The Environmental Quality Commission applauds the City for its efforts on the community zero waste strategy to meet the needs of our growing community. We support the direction and intent of the draft plan.

In an effort to have the most impact from City funds, the Environmental Quality Commission recommends that the City Council consider accelerating the implementation of universal recycling and composting collection service, increased recycling requirements in the Construction and Demolition Ordinance, mandatory self-hauled waste at Shoreway Environmental Center and mandatory participation in recycling and composting programs. These initiatives were selected

based on the cost-effectiveness, total tons of waste diverted and staffing resources required.

We believe the City may get better outcomes by concentrating on these high-impact initiatives that focus on the underperforming waste generating sectors, namely multifamily and commercial entities. In addition, we recommend that outreach efforts focus on these sectors."

The motion passed unanimously (5-0-2, DeCardy and Smolke absent).

D3. Discuss and make a recommendation to the City Council on environmental issues related to the Middle Plaza at 500 El Camino Real project

Clay Curtin provided an update to the commission.

City Councilmember Ray Mueller, liaison to the Environmental Quality Commission, joined the meeting at 8:58 p.m.

Councilmember Mueller answered the Environmental Quality Commission's questions on the project and recommended that they submit a letter containing any concerns and feedback to the City Council's Stanford Parcel Negotiation Subcommittee.

Councilmember Mueller left the meeting at 9:19 p.m.

ACTION: Motion and Second (Marshall/London) to designate the Climate Action Plan subcommittee to prepare a draft comment letter from the Environmental Quality Commission addressing the environmental issues related to the Middle Plaza at 500 El Camino Real project for staff to distribute to the commission members for review, prior to final submission to the City Council subcommittee. The motion passed unanimously (5-0-2, DeCardy and Smolke absent).

D4. Approve the April 19, 2017, Environmental Quality Commission meeting minutes

ACTION: Motion and second (Marshall/London) to approve the April 19, 2017, meeting minutes with a correction to the adjourned date. The motion passed unanimously (5-0-2, DeCardy and Smolke absent).

E. Reports and Announcement

E1. Commissioner reports

Chair London and Vice Chair Martin complemented staff's work on coordinating Menlo Park's first Earth Day event held on April 22, 2017.

E2. Staff updates and announcements

Clay Curtin referenced the written report attached to the agenda.

E3. Future agenda items

- Discuss Environmental Quality Commission meeting schedule
- Informational presentation from Public Works on permeable pavement and groundwater recharge

- Update on Climate Action Plan progress and greenhouse gas emissions inventory

F. Adjournment

ACTION: Motion and second (London/Marshall) to adjourn the Environmental Quality Commission until the June 21, 2017. The motion passed unanimously (5-0-2, DeCardy and Smolke absent).

Chair London adjourned the meeting at 9:58 p.m.

Minutes prepared by Vanessa Marcadejas.

CITY OF MENLO PARK

STAFF REPORT

Environmental Quality Commission
Meeting Date: **6/21/2017**
Staff Report Number: **17-012-EQC**
Manager's Report: Sustainability Manager's update and announcements

Recommendation

Staff recommends the Environmental Quality Commission receive the Sustainability Manager's update and announcements.

Policy Issues

This written report is meant to supplement the verbal report provided at the Environmental Quality Commission's regular meeting. It is informational only.

Updates and Announcements

Appeal of 318 Pope St. heritage tree permit denial

This item is was heard by the City Council on June 6, 2017. Senior Sustainability Specialist Vanessa Marcadejas and City Arborist Christian Bonner carried forward the Environmental Quality Commission's recommendation to deny the appeal. With two councilmembers absent (Cline/Mueller), the appeal was ultimately denied on a 2-1 vote (Keith/Ohtaki – aye, Carlton – no).

Upcoming dates of note

July 1 – Monthly compost giveaway
July 18 – Tentative City Council consideration of the term sheet for the Middle Plaza at 500 El Camino Real project

Report prepared by:
Clay J. Curtin, Assistant to the City Manager/Interim Sustainability Manager