

F.

CIRCULATION

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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, with proposed minor changes. The vehicular circulation system is consistent with the City's General Plan.

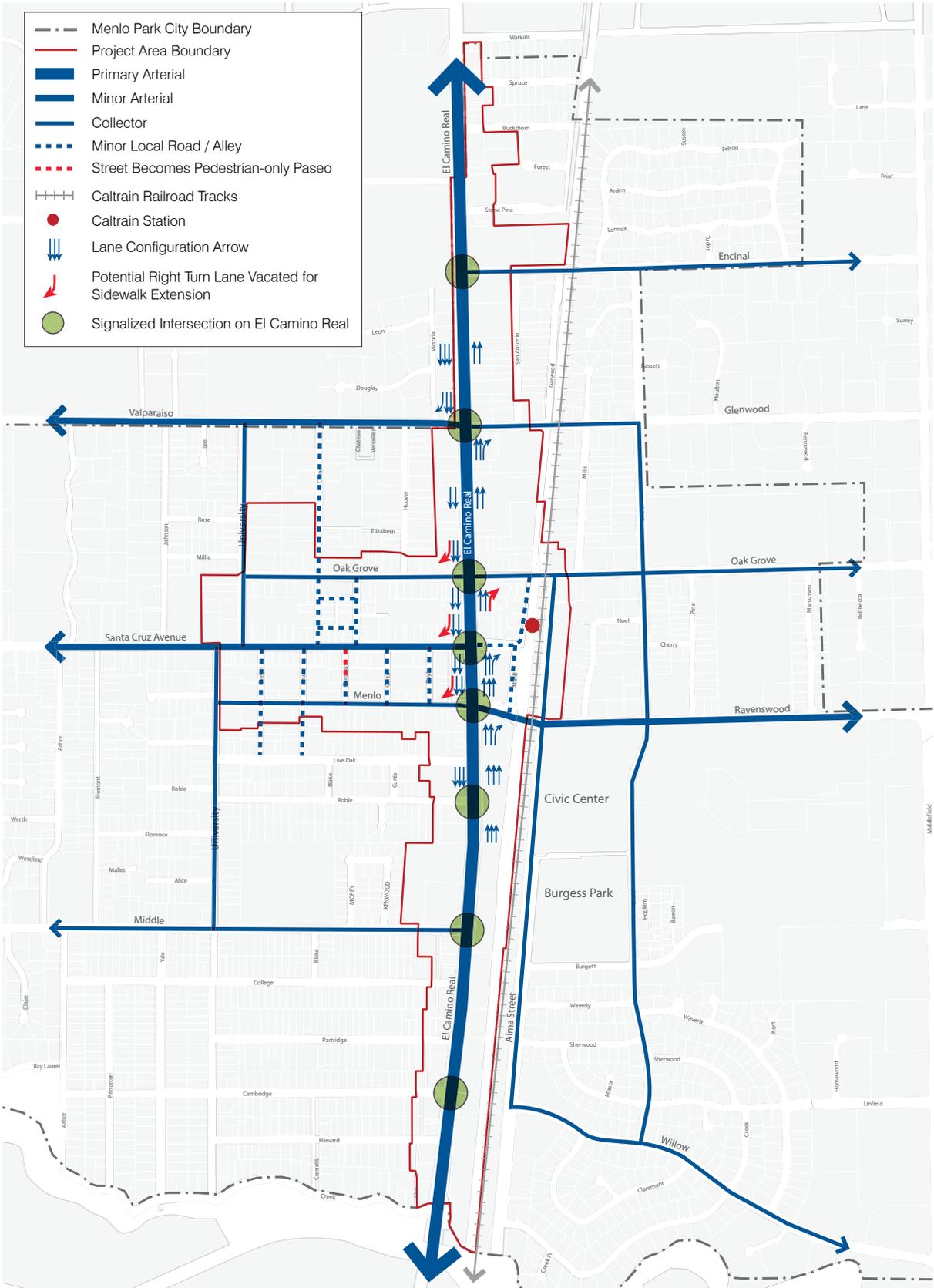


Figure F1. Vehicular Circulation

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.

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 slightly narrowing the vehicle travel lanes and by adding 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. During the morning and evening peak commute hours, the right-turn volumes are typically fewer than 100 vehicles, and often fewer than 50 vehicles at these locations. Additionally, congestion in the through lanes on El Camino Real often prevents right-turning vehicles from being able to access these right-turn pockets. Constructing curb extensions at these three intersections, therefore, is not expected to substantially affect their traffic operations, although the Draft Environmental Impact Report (EIR) will analyze the potential impacts in more detail.

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. Bicyclists would be required to walk their bicycles on this segment of Chestnut Street to maintain pedestrian safety. The Specific Plan makes Oak Grove Avenue a bicycle-priority street with added bike lanes (discussed below in Bicycle Facilities).

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, accessible pedestrian signals and sidewalk extensions; and
- Special Crossing Treatment, which generally includes high visibility crosswalks with enhanced pavement, accessible pedestrian signals, countdown pedestrian signals, sidewalk extensions and median islands/ pedestrian refuges.

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.



Sidewalk extensions

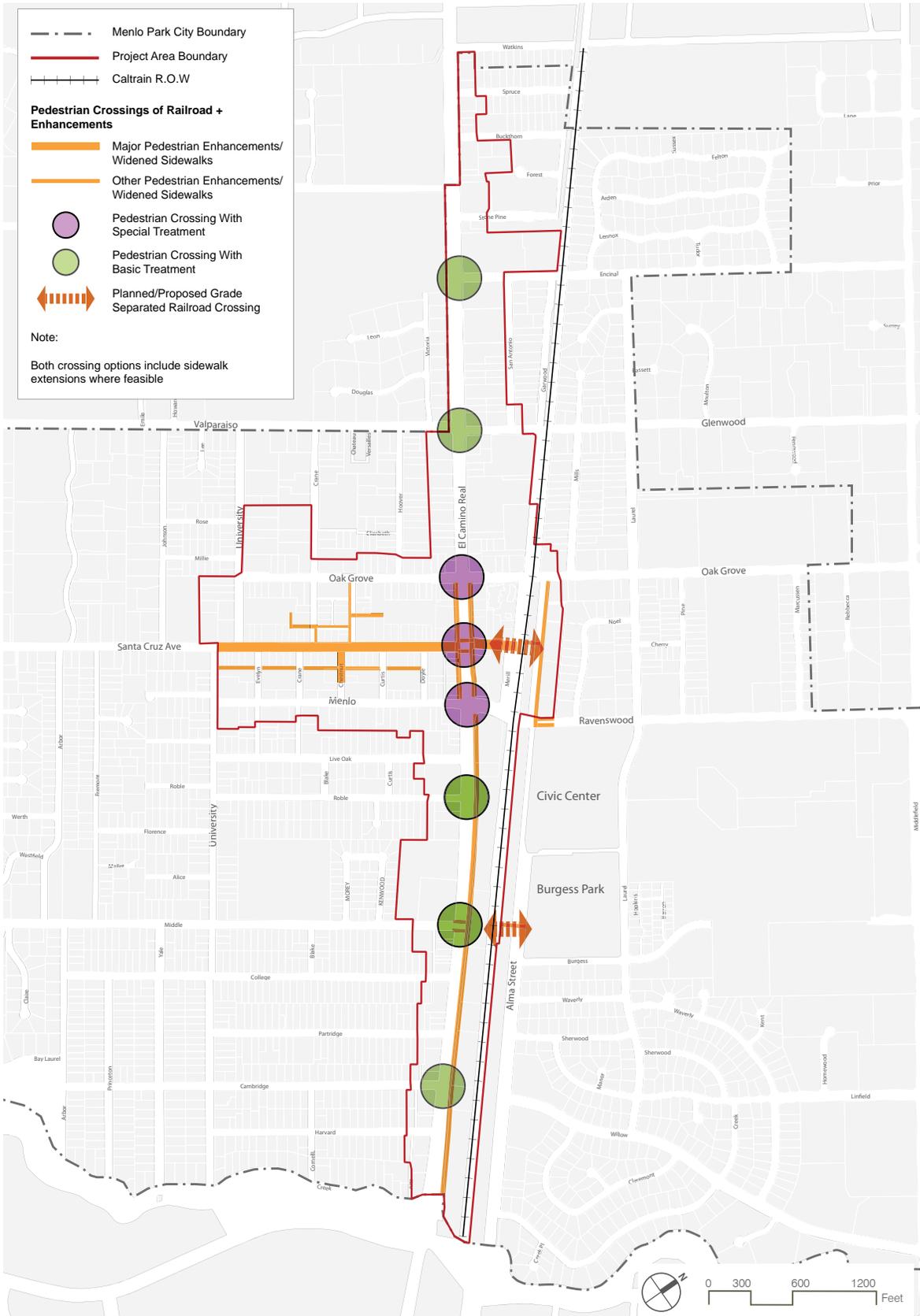


Figure F2. Pedestrian Improvements

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 three primary approaches to improve east-west pedestrian connectivity:

- Reduce the pedestrian crossing distance across El Camino Real;
- Improve pedestrian comfort and accommodation; and
- Add track-separated pedestrian/bicycle across the railroad tracks.

Reduce the pedestrian crossing distance across El Camino Real.

The Specific Plan reduces pedestrian crossing distance across El Camino Real by narrowing the vehicle travel lanes to 11 feet throughout the plan area and 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). Figure F2 illustrates possible locations for curb extensions and other improvements. As noted earlier, these pedestrian improvements could potentially affect vehicle delay, and the Draft EIR will analyze impacts in more detail.

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 area, 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 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).

North-South Connectivity



Sidewalk with clear zone and furnishings zone

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 planter strip/furnishings zone (as part of the sidewalk section) and a parking lane. The furnishing zone provides a place for plantings (i.e. 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 a eight-foot wide clear pedestrian through zone and a four-foot wide furnishings zone. The plan proposes a narrower sidewalk on the west side, inclusive of a furnishings zone rather than a planter strip, 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 are redeveloped.



Sidewalk with clear zone and planting zone

Within the Downtown area on El Camino Real (between Oak Grove and Menlo Avenues), the Specific Plan proposes 15-foot wide sidewalks separated from travel lanes by on-street parking. The sidewalks would consist of a 10-foot wide clear pedestrian zone and a five-foot wide furnishings zone. The gains in sidewalk widths are achieved by narrowing vehicle travel lanes to 11 feet and extending the sidewalks. The improvements would be implemented by private developers, as sites are redeveloped, or by the City and in association with the California Department of Transportation (Caltrans), which has jurisdiction over the roadway. Unlike other portions of El Camino Real, the gain in sidewalk widths along this section of the corridor would be achieved by extending the sidewalk, rather than moving building frontages back, consistent with the historic character of El Camino Real in this area (i.e. buildings are close to the street with zero setbacks).

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.

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%¹ of Menlo Park residents commute to work by bicycle, 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 bike paths, bike lanes and bike 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

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 as suggested by the community.

Recommendations for new east-west facilities include:

- Bike 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 Menlo Avenue between University Drive and El Camino Real;
- Bicycle route on Middle Avenue between San Mateo Drive and El Camino Real; and
- Bicycle/pedestrian under-crossing of the railroad tracks at the train station and near Burgess Park, with the ultimate configuration depending on the final configuration of the high speed rail.

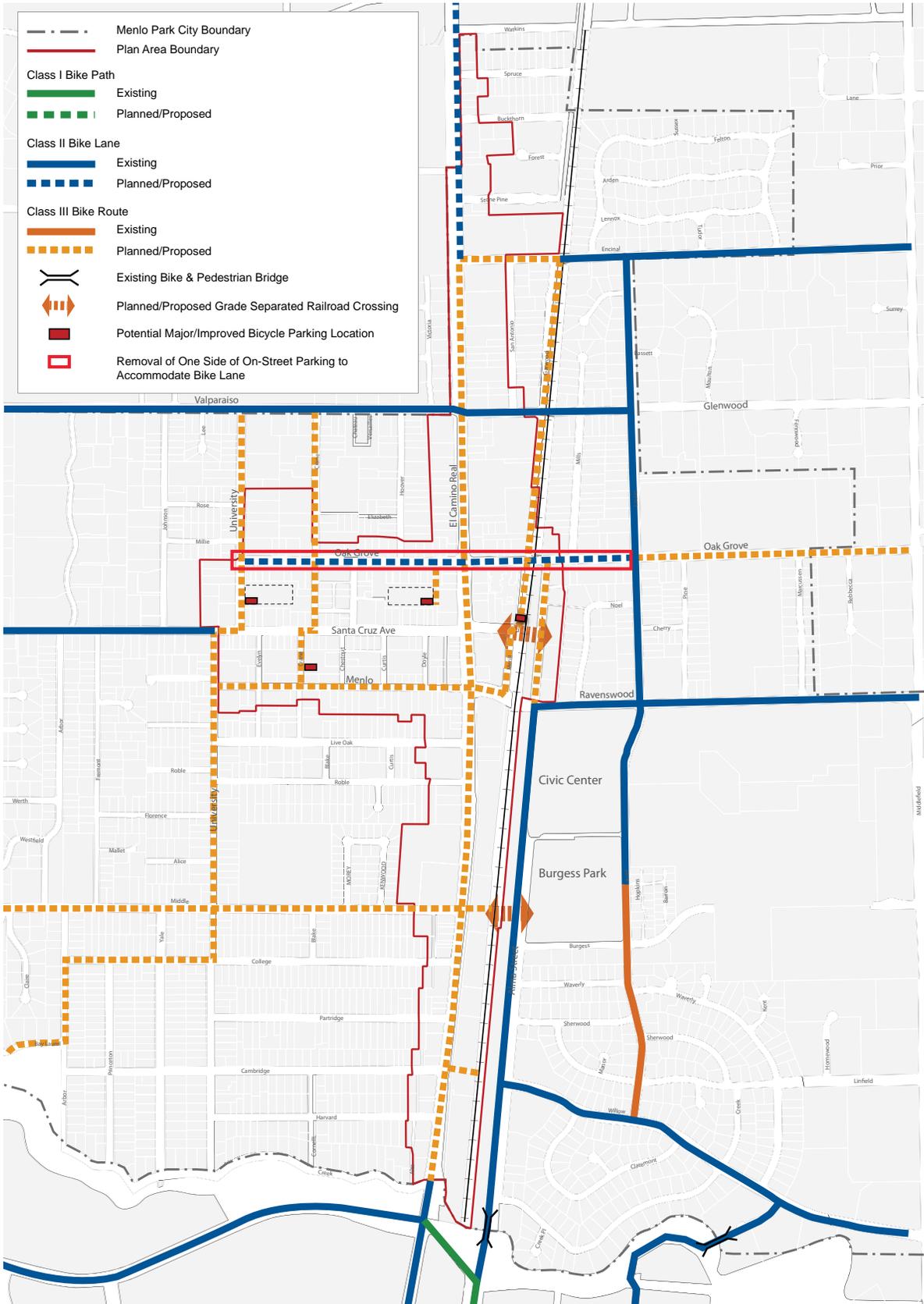


Figure F3. Bicycle Facilities

Recommendations for north-south facilities include:

- Bike route on University Drive between Valparaiso Avenue and Menlo Avenue;
- *Bike route on Crane Street between Valparaiso Avenue and Menlo Avenue;*
- Bike lanes on El Camino Real north of Encinal Avenue;
- Bike route on El Camino Real south of Encinal Avenue;
- *Bike route along Garwood Way from Oak Grove Avenue to Encinal Avenue; and.*
- *Bike route on Alma Street between Oak Grove Avenue and Ravenswood Avenue.*

Other recommendations include:

- Sharrows, as shown in the photo, 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; and
- New bicycle parking racks in the plan area in new pocket parks, on the Chestnut Paseo, and along Santa Cruz Avenue.



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 in commercial development. Many of the standards and guidelines are consistent with the requirements of Leadership in Energy and Environmental Design, Neighborhood Design (LEED ND).

Standards

F.5.01 Outside downtown, new commercial development shall provide secure bicycle and storage facilities on-site.

Guidelines

F.5.01 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.5.02 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 disbursed within 50 feet of business or other main entries.

For retail outside downtown, the following secure bicycle storage facilities should be provided as follows.

F.5.03 At least one accessible, indoor, secure bicycle storage space per retail worker for 10% of retail worker planned occupancy.

F.5.04 Secure visitor/customer bicycle racks on-site, with at least one bicycle space per 5,000 square feet of retail space, but no fewer than one bicycle space per business or four bicycle spaces per project site, whichever is greater.

For commercial non-retail outside downtown, the following secure bicycle storage facilities should be provided as follows.

F.5.05 At least one accessible, indoor, secure bicycle storage space per occupant for 10% of planned occupancy.

F.5.06 Secure visitor bicycle racks on-site with at least one bicycle space per 10,000 square feet of commercial non-retail space but not fewer than four bicycle spaces per building.

F.6 TRANSIT SERVICE

The plan area is well served by the 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, as follows:

- Accommodate potential BRT service in accordance with the ongoing 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.9 “Transportation Demand Management” (TDM)).

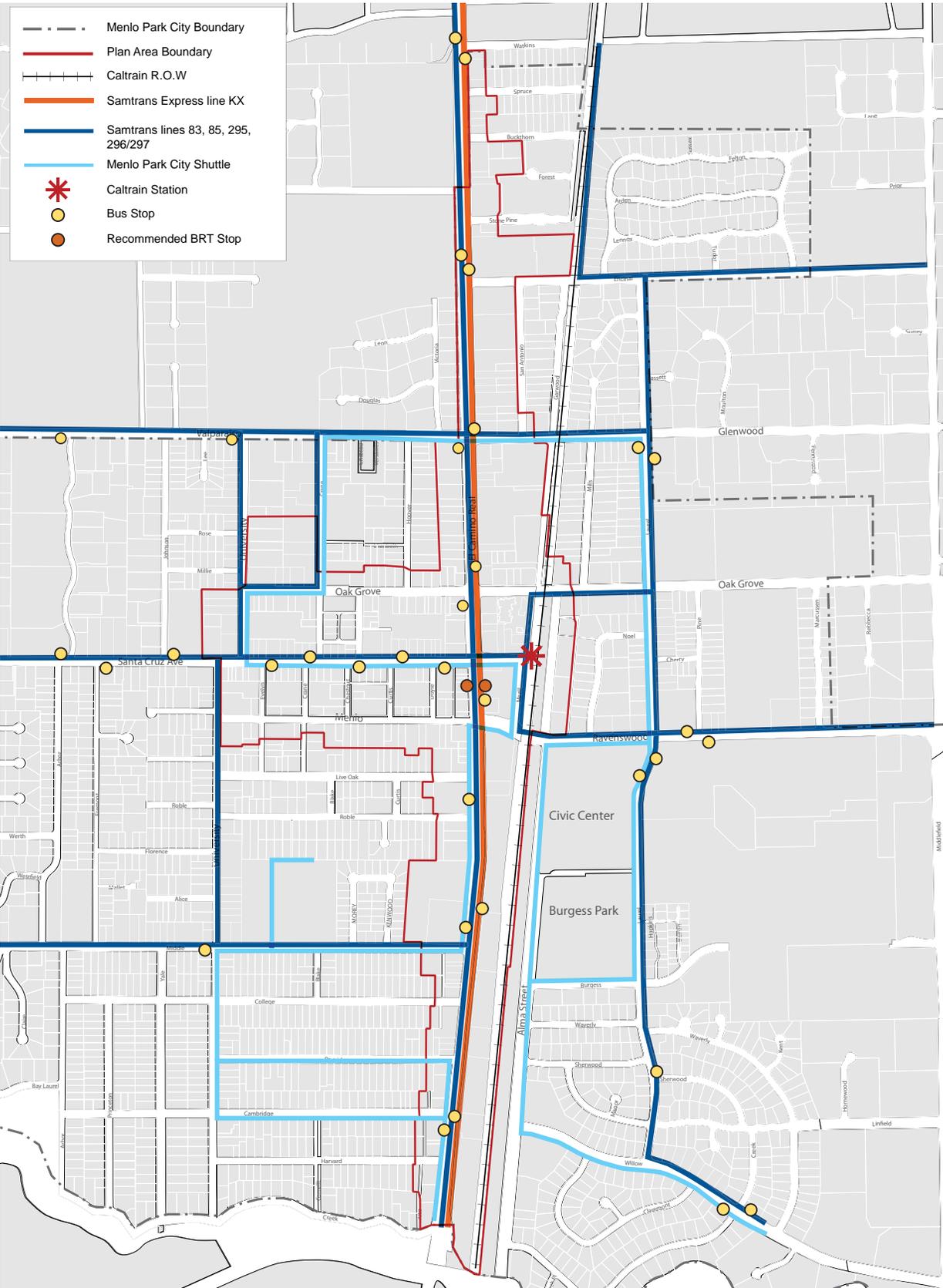


Figure F4. Transit Service

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 constructed if the adjacent parcels redevelop and new buildings set back, although this is inconsistent with retaining the historic built character of buildings close to the street with no setback. Alternatively, on-street parking could be removed and replaced by a bus stop. These stops would be the responsibility of the transit agency providing BRT service.

City of Menlo Park Shuttles

Free shuttles² 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 City code requirements. 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). Downtown developments are currently allowed at a density of 200% FAR but they must provide the additional parking on-site or nearby. This can be physically difficult and expensive.

Results of parking surveys recently completed by Wilbur Smith Associates for the draft *2009-2010 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 relatively little capacity, at this time, to accommodate parking displaced by public space improvements (such as the Santa Cruz 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 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 vehicles³, 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 employees⁴. 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 F1 summarizes the Specific Plan's proposed minimum 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 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. 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.

Minimum 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	Future Supply
Multi-Family Dwelling	2.0	-	1.68	1.85 / 1.85 ⁵	1.0 - 1.5	1.85
General Office (per 1,000 sf gfa)	6	3.3	3.27	3.8 / 0.38 ⁵	2.0 - 3.0	3.8
Medical Office (per 1,000 sf gfa)	6	5	4.06	4.5 / 4.5 ⁵	-	4.5
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
Supermarket (per 1,000 sf gfa)	6	-	5.01 / 5.46 ⁵	-	-	5.5
Restaurants (per 1,000 sf gfa/gla)	6	6	-	-	3.0 - 5.0	6
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

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 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.

Table F1. Minimum 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 new development sites 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 draft *2009-2010 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.

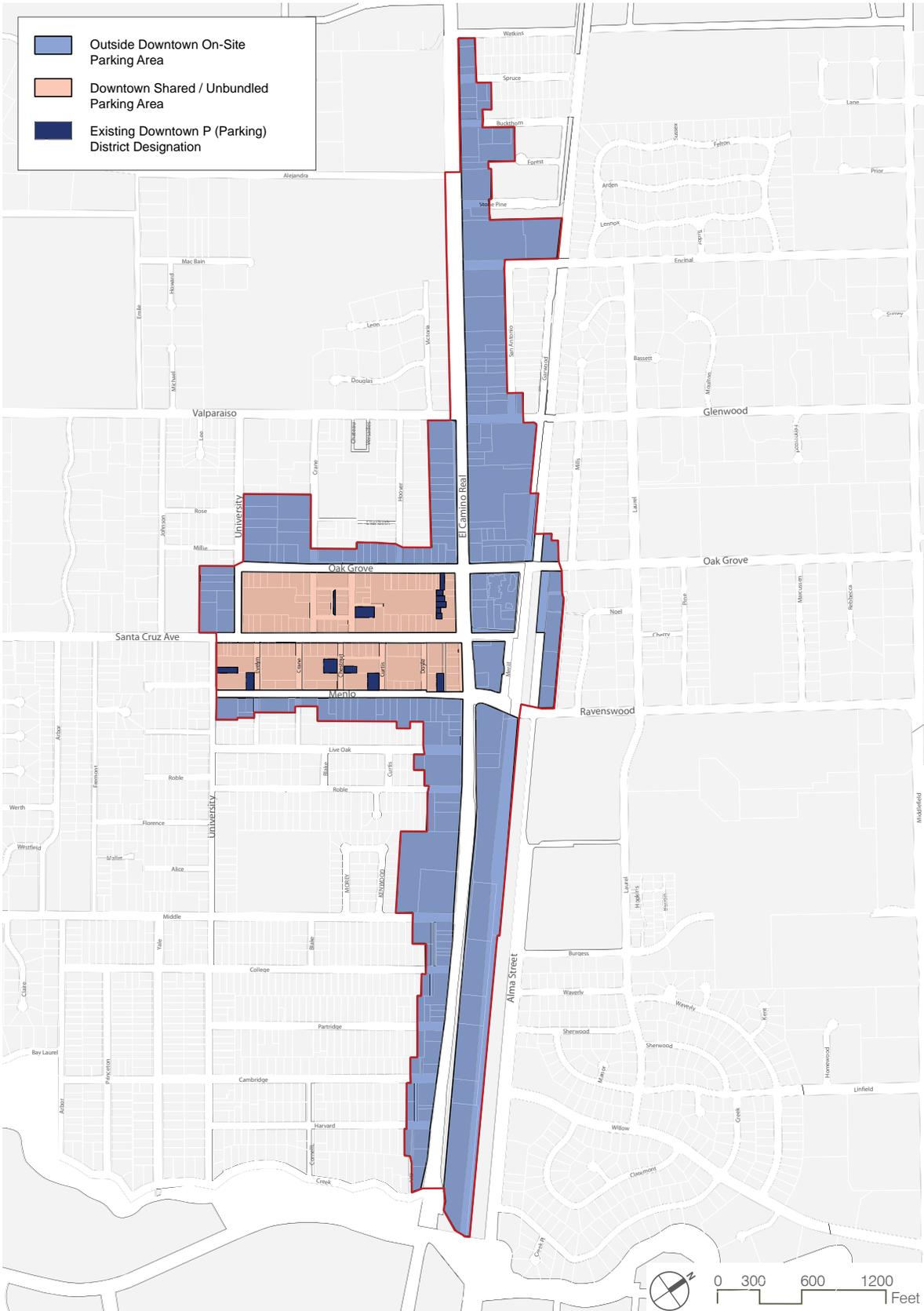


Figure F5. Parking Area

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 Parking Plazas 1 and 3 and the relocation of parking spaces for public space improvements, such as widened sidewalks, and for selected infill development sites. 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 3, the Specific Plan proposes two options: a) a 3.5-level parking garage -- one and a half levels below ground and two above -- with town houses on top, providing residential parking as well as 370 publicly accessible spaces, and b) 5-level parking garage -- one level below ground and four above -- fully committed to public parking, providing 650 publicly accessible spaces.

Table F2 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. The future parking supply is estimated to be 1,851 to 2,131 spaces, depending on the Parking Plaza 3 option.

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.

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

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 ⁴
Parking Plaza 2	95	Development Site and Pocket Park	-95	0
Parking Plaza 3	212	Added Parking Garage ³ and Pocket Park	158/438 ⁵	370/650 ⁵
Parking Plaza 4	105	Pedestrian Link, Development Site	-31	74
Parking Plaza 5	150	Pedestrian Link, Development Site	-42	108
Parking Plaza 6	136	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		361/641	1,547/1,827
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
Downtown Core Area Total	1,595		256/536	1,851/2,131

Notes:

1, Draft 2009-2010 Downtown Menlo Park Parking Study, Wilbur Smith Associates.

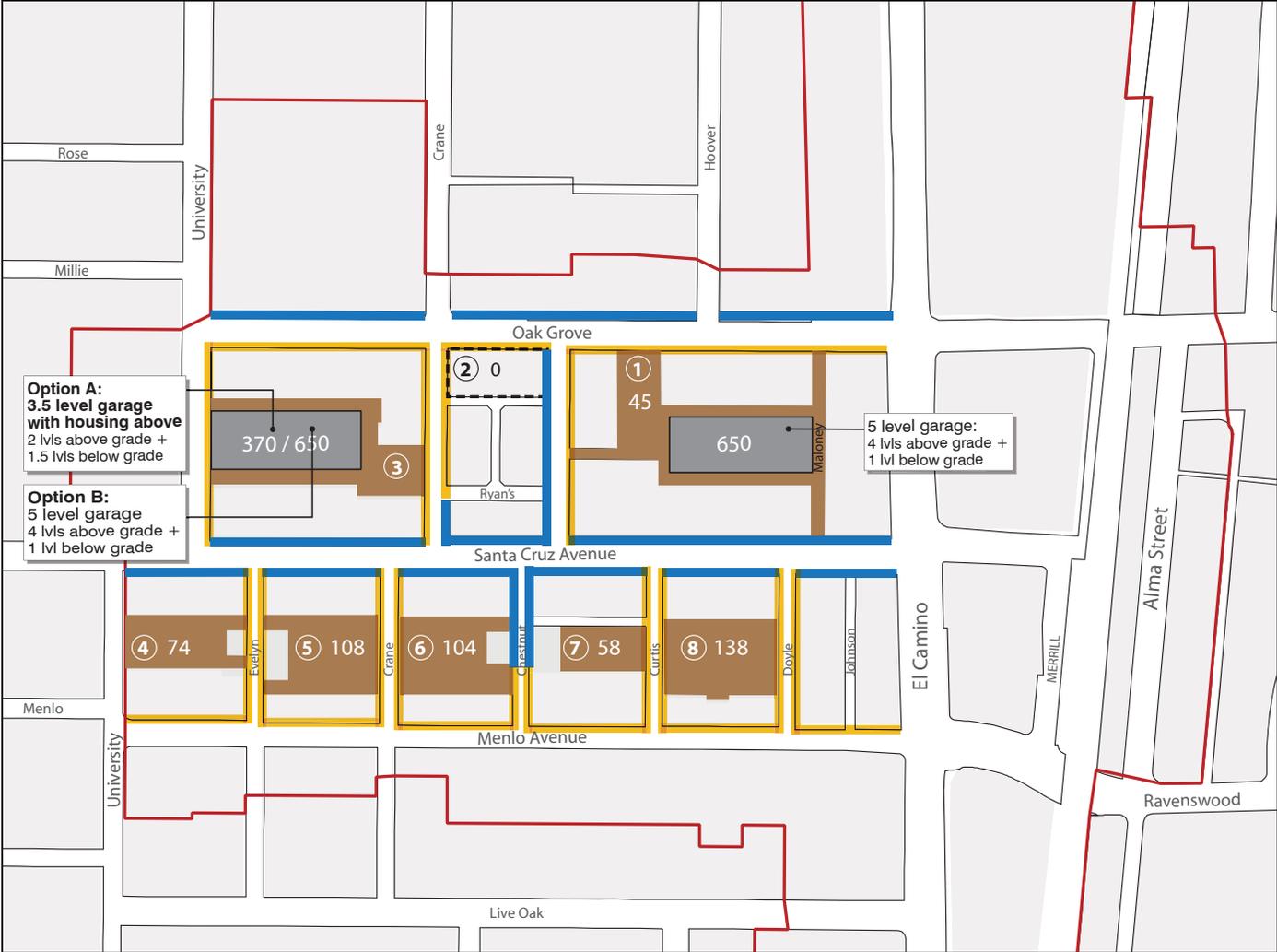
2, A new parking garage at Parking Plaza 1 would displace 204 existing spaces.

3, A new parking garage at Parking Plaza 3 would displace 187 existing spaces.

4, Future parking supply for Parking Plaza 1 includes a 650-space parking garage + 45 surface spaces remaining.

5, The two numbers for "changes in spaces" and "future supply" refer to Parking Plaza 3 and reflect the following: the first number reflects changes in/supply of public parking spaces on the site if the site includes a parking garage with housing above (Option A). The second number reflects changes in/supply of public parking spaces if no housing is provided and the entire garage is used for public parking (Option B).

Table F2. Existing and future downtown parking supply



	Option A	Option B
Public Parking Plazas	1547	1827
On-street Parking	304	304
Total	1851	2131

— Project Area Boundary

Public Parking Plazas

■ Parking Garages

■ Surface Parking

On-street Spaces

— Affected by Specific Plan Improvements

— Unaffected by Specific Plan Improvements

① Downtown Parking Plaza Number

Notes:

- 1 For Parking Plaza 3, Option A, the parking garage accommodates public parking / parking for residential above; 370 spaces shown in the diagram represent parking that is publicly accessible.
- 2 For Parking Plaza 3, Option B, the parking count for parking garage is based on "Parking Structure Feasibility Options for Plaza 3" prepared by Watry Design, Inc. as referenced in the City of Menlo Park, Public Works Department Staff Report #:05-060.

Figure F6. Proposed public parking downtown

Benefits of Garaged Parking

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.
- Garages can incorporate retail or other commercial elements to minimize visual impact and provide additional revenue.

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 areas⁶. They can also be designed to incorporate active uses such as ground floor retail, which increase the vibrancy of an area when compared to surface parking lots.

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 plazas*
”

- 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 probable construction cost for the parking garage is \$32,500 to \$37,500 per parking stall, in 2011 dollars, which equates to between \$21,100,000 and \$24,400,000. 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 \$26,000 to \$30,000 per parking stall⁷. An additional 25% above and beyond this base cost covers design services, environmental review, surveying, building permits, utility connections and construction administration.

⁷ Watry Design, Inc. On-Line Parking Structure Cost Calculator (www.watrydesign.com), March 2010. For calculation of low-end estimate of cost range.

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.

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 is currently undertaking a parking study to select appropriate time limits for the current supply of parking. The results of that study should be incorporated into the Parking Management Plan.



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 (such as within garages).
- 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).

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 principals 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 proposes requiring 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 intent of TDM programs is to reduce the amount of peak period motor vehicle traffic on roadways and their associated parking demand by encouraging the use of modes other than single-occupant vehicles for travel.

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

- Transit subsidies/reimbursements to employees (“commuter check” or “Caltrain GO Pass”);
- Pedestrian/bicyclist subsidies for those who primarily walk/bike to work;
- Guaranteed ride home program for employees in event of emergency;
- Incentives such as “parking cash-out” program in which employees receive cash in lieu of receiving free parking, to encourage carpool and vanpool use;
- Car-Share programs and neighborhood electric vehicle programs to reduce the need to have a car or second car;
- Area wide TDM Coordinator to manage and promote TDM programs and oversee monitoring to determine program effectiveness;
- Preferential parking for carpoolers or alternative fuel vehicles; and
- Marketing and information programs to encourage alternative transportation modes (which could include partnering with other local organizations such as the Peninsula Congestion Relief Alliance).

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.

