




# parkmerced

transportation plan

06.23.11

An aerial, isometric view of a city grid. The grid consists of numerous rectangular blocks of varying sizes. A large, irregularly shaped green space, representing a park or reservoir, is located in the upper right quadrant. The entire image is overlaid with a semi-transparent purple filter. A dark purple rectangular box containing white text is positioned in the lower-left area.

The Parkmerced Transportation Plan establishes specific goals, strategies and targets that will be incorporated into the transformation of Parkmerced into a model 21st century neighborhood. The Plan provides a framework and management plan for addressing transit and vehicular travel to and from the neighborhood. Together with the accompanying Vision Plan, Design Standards and Guidelines, Sustainability Plan, and Infrastructure Report, the Parkmerced Transportation Plan provides a comprehensive vision for all future improvements at Parkmerced.

- The Vision Plan lays out the vision and conceptual frameworks for all proposed improvements at Parkmerced.
- The Design Standards and Guidelines prescribe urban design controls for land use, open spaces, streets, blocks and individual buildings. It also outlines a process for project implementation.
- The Sustainability Plan contains specific strategies and metrics which together address the management and conservation of energy, water and other natural resources, as well as establish goals for green building standards.
- The Infrastructure Report establishes an outline for anticipated site-wide improvements to all streets and public rights-of-way, underground utilities, and grading.

The vision has been developed through a collaborative process with input from community members, local agencies and departments, public advocacy organizations and design and engineering experts.



# parkmerced vision plan transportation plan

<b>01</b>	<b>Introduction</b>	<b>4</b>
	Challenges and Implementation	6
	Principles	6
	Goals	6
	Strategies	6
<b>02</b>	<b>Existing Transportation Conditions</b>	<b>8</b>
	Existing Street Network	11
	Existing Transit Services	12
	Existing Bicycle and Pedestrian Network	13
	Existing Parking	15
	Existing Travel Characteristics	15
	Existing Circulation and Access Issues	16
<b>03</b>	<b>Proposed Development and Infrastructure</b>	<b>18</b>
	Land Use Program	20
	Internal Street Network	22
	External Intersection and	
	Roadway Improvements	28
	Transit Modifications	
	Pedestrian and Bicycle Circulation	32
	Possible Long-Term Projects	33
<b>04</b>	<b>Proposed Transportation Program and Policies</b>	<b>34</b>
	Strategies	36
<b>05</b>	<b>Implementation and Phasing</b>	<b>52</b>
<b>06</b>	<b>Conclusion</b>	<b>54</b>

# introduction

Challenges and Implementation	6
Principles	6
Goals	6
Stratgies	6

01



The Parkmerced Transportation Plan (herein referred to as the “Plan”) envisions the transformation of the existing automobile-oriented community into an international example of sustainable living. Current levels of private vehicle use at Parkmerced are not sustainable; as such, this Plan lays out a series of strategies that emphasize transportation alternatives.

The seamless integration of land use and transportation is a fundamental principle of the proposed land use plan and urban form goals for Parkmerced. The proposed neighborhood design facilitates convenient access to all areas on foot, by bicycle, and via transit, and is designed to reduce single-occupant auto trips. The land use plan features a sustainable and compact development pattern focused around a mixed-use center adjacent to transit stations.

By providing a structure that allows for safe and convenient travel by non-automobile modes, the paradigm of the overall neighborhood design can be shifted away from the standard automobile-focus. This can be achieved through the implementation of programs to reduce the attractiveness of private automobile use, such as limits to off-street parking and requiring market-rate parking costs. In addition, to support this vision for Parkmerced, dedicated policies and programs have been developed to promote the use of non-automobile modes, thereby facilitating their use and attractiveness.

This document presents the goals, principles and strategies that have been developed to facilitate the travel demand needs of an emerging mixed-use, urban eco-community in southwest San Francisco. Incorporating innovative practices and sustainable development principles, this Plan will provide residents, employees and visitors with highest-quality multimodal transportation infrastructure and services.



# introduction

## Challenges and Implementation

The Plan recognizes the mobility challenges facing Parkmerced. Originally designed as an automobile-oriented community, the Plan envisions a greater role for transit, bicycle and pedestrian travel. The opportunity to access services and conduct business within the larger community that are currently unavailable within the neighborhood, will be introduced. Regional connections, now weak or strained, will be facilitated and strengthened.

The Plan represents a significant investment in transportation on a scale not seen on the west side of San Francisco in several decades. Reflecting its impact and importance, the Plan has been developed with the participation of existing residents and neighboring communities, as well as city, county and state agencies. All programs and improvements detailed in the Plan will be implemented by Parkmerced, and Parkmerced will be responsible for all required design, approval and construction activities, under supervision and guidance from the appropriate city, county and state agencies and departments.

The Plan also recognizes the close relationship between land use and transportation, and embodies the *Parkmerced Vision Plan* and *Parkmerced Design Standards and Guidelines*. The goals, principles and strategies in this Plan are supported by a mixed-use development approach, as well as an impressive investment in infrastructure and services.

## Principles

- Transportation infrastructure will be designed around walking and biking as primary modes, consistent with the San Francisco *Better Streets Plan*;
- Automobile use will be discouraged through traffic calming, parking management, and access management policies; and,

- Transportation demand measures will be implemented to encourage transit, pedestrian and bicycle travel and will be directed at residents, employees and visitors.

## Goals

- Reduce the need for private vehicles for work and non-work trips;
- Enhance the attractiveness and affordability of alternative modes of transportation;
- Internalize discretionary trips; and,
- Minimize increases in peak hour vehicle trips outside the site.

## Strategies

The Parkmerced project aims to create a self-sufficient community with a broad range of neighborhood-serving services, and serve as a world-class model of sustainable development and transportation. As a result, the future community design incorporates a development pattern centered around a mixed-use core, with strong transit, bicycle and pedestrian connections.

The Plan's elements prioritize walking, bicycling and transit travel, making these attractive and practical transportation options, while discouraging private automobile trips. These elements include the integration of land-use and transportation, new and improved transit options, and required roadway improvements.

To support the proposed major infrastructure and development, a series of programs and policies have also been developed. Implementation of these elements will be critical to the success of the Plan, as they provide the direction and assistance for all travel modes, plus design requirements that reinforce the nature of the development.

It is acknowledged, however, that any development within Parkmerced will continue to generate trips by private ve-

hicles, which will strain the local and regional facilities that are already at or near capacity. Therefore, improvements to the surrounding intersections and roadways are included as an integral component of the Plan. These planned improvements would be enhanced by a future, broader, regional transportation solution to the area. The Parkmerced project (sponsors) will participate in any such area-wide transportation planning effort.

### The following are the key strategies of the plan:

- Components of the Plan will be implemented at the earliest stages of development, and measures and services will be adopted concurrent with phasing;
- The internal street network has been designed to emphasize walking and bicycling and to reduce vehicular speeds, providing a positive experience for non-automobile travel;
- The Muni M-Ocean View light rail line is proposed to be rerouted directly through Parkmerced, with the provision of one relocated station, two new stations, and no reduction in the number of existing stops serving adjacent neighborhoods;
- Enhanced transit service to and from Parkmerced will operate throughout the day, evening, and weekends to provide convenient connections to employment activity centers and the regional transit network;
- Pedestrian and bicycle facilities will be provided throughout the site to facilitate walking and biking as modes of travel for internal and external trips;
- Intersections and roadways on the outside of Parkmerced will be redesigned and improved to reduce congestion and to increase mobility;
- Free, low-emission shuttles will be operated to the Bay Area Rapid Transit (BART) Daly City station (hereinafter referred to as the Daly City BART Station) and nearby shopping centers;



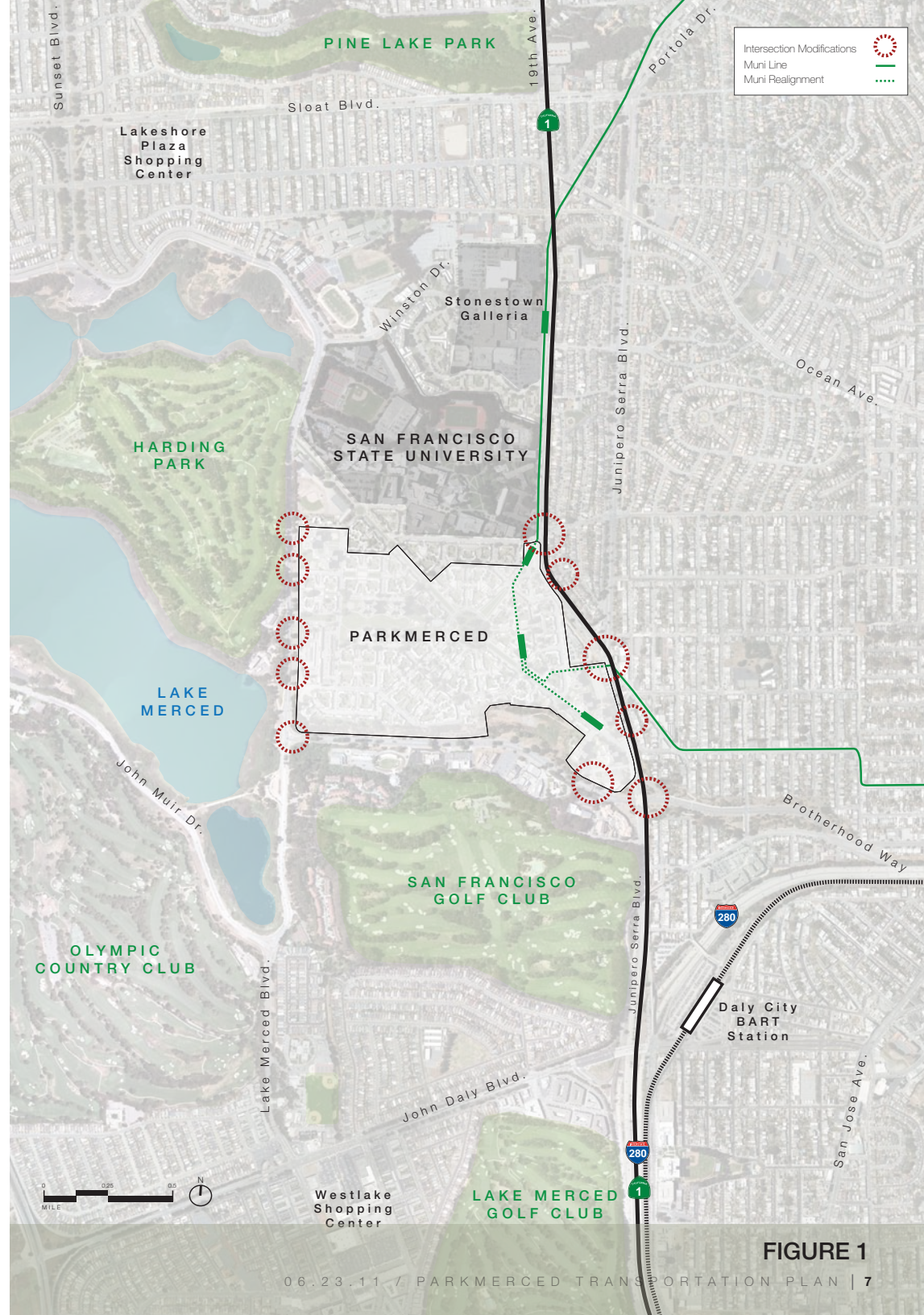
- A parking management plan will be implemented to increase the competitiveness of transit and to manage demand throughout the neighborhood;
- Residential parking will be unbundled from individual units, with lower supply provided near transit stations and the mixed-use center, and higher supply provided at peripheral locations to maximize the use of “car storage”;
- Carshare vehicle hubs and bikeshare stations will be established at strategic locations throughout the project site;
- A smart card will be introduced, allowing residents to pay for parking or access bikeshare station bicycles using a single pay system; and,
- A full-time transportation coordinator will be employed to manage the real-time transportation needs of residents.

The major elements of the Plan are highlighted in **Figure 1**.

As the overall Parkmerced project will evolve throughout its design, approval and implementation process, it is anticipated that this Plan will be a living document, in that the proposed infrastructure improvements, programs and policies may need to be modified commensurate with any changes to the project.

The remainder of this document provides the detailed approach of the Plan and is separated into the following sections:

- Chapter 2 presents the existing transportation conditions in and around Parkmerced, including some of the current constraint and problem locations;
- Chapter 3 highlights the major development and infrastructure proposals;
- Chapter 4 develops the extensive programs and policies;
- Chapter 5 outlines the implementation and phasing strategies; and,
- Chapter 6 presents the Plan conclusions.



**FIGURE 1**

# existing transportation conditions

Existing Street Network	11
Existing Transit Services	12
Existing Bicycle and Pedestrian Network	13
Existing Parking	15
Existing Travel Characteristics	15
Existing Circulation and Access Issues	16

02







# existing transportation conditions

Parkmerced is located in the southwestern portion of San Francisco and adjacent to Highway 1 (19th Avenue and Junipero Serra Boulevard). **Figure 2** shows the location of Parkmerced within southwestern San Francisco. In general, the southwest corner of San Francisco is primarily residential. However, directly north of Parkmerced are two major destinations: San Francisco State University (SFSU) and Stonestown Galleria, a regional shopping center. In addition to the regional traffic that uses Highway 1 to travel north and south of San Francisco, the high volume of activity at these two destinations dictate the existing transportation conditions in the area.

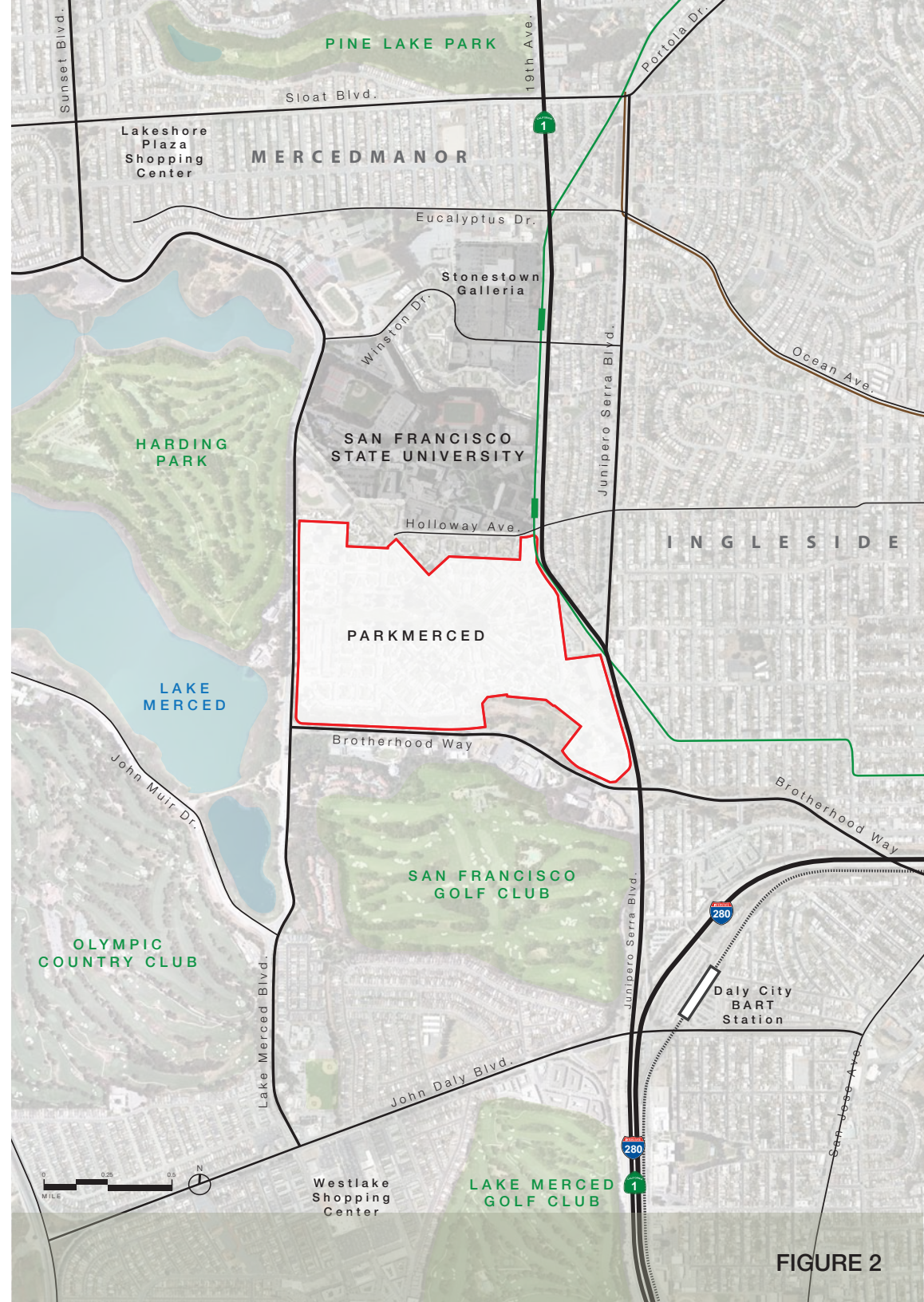


FIGURE 2



## 2.1 / existing street network

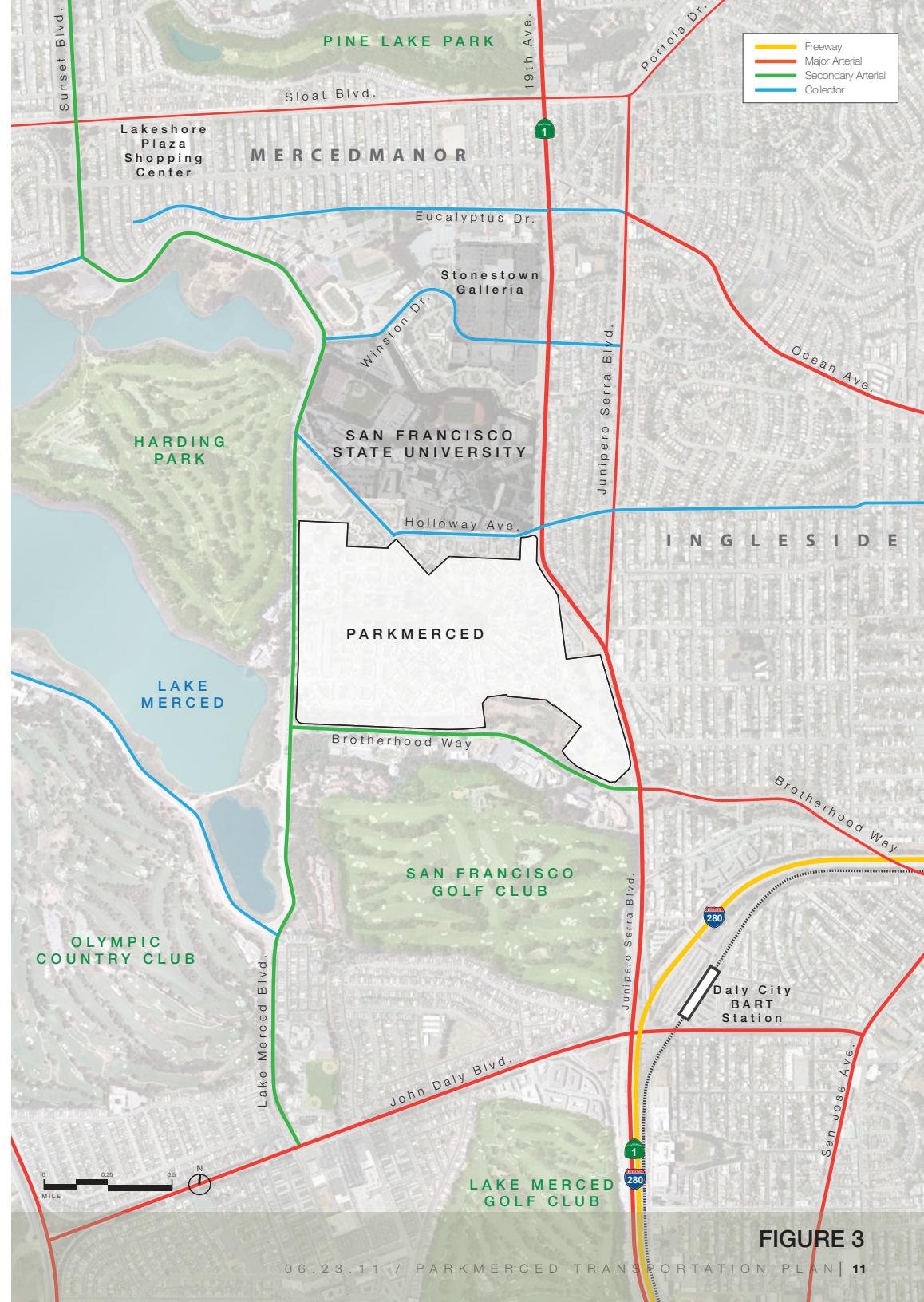
The overall Parkmerced site is bounded to the east by Highway 1 (19th Avenue and Junipero Serra Boulevard), which is one of the City's most heavily trafficked arterials. The site is bounded by two other major arterials, Lake Merced Boulevard to the west and Brotherhood Way to the south. Junipero Serra Boulevard and Brotherhood Way provide access to I-280, which is less than one mile from the project. The existing regional roadway network is shown in **Figure 3**.

Regional access to Parkmerced is provided by Highway 1, which also carries traffic to SFSU and Stonestown Galleria. These two activity centers located immediately north of the project site, like Parkmerced itself, were conceived in a suburban planning approach that emphasized access by automobiles. Convenience for cars was built-in, while the needs of transit riders, cyclists and pedestrians were given less consideration.

In addition, Junipero Serra Boulevard and 19th Avenue serve as the spine connecting all of the neighborhoods in western San Francisco and carries regional traffic passing through San Francisco between the Peninsula and the North Bay. With the built-out nature of the western San Francisco neighborhoods, there have been minimal increases in local vehicular activity. As a result, the majority of this traffic growth is due to the increase in activity for regional trips. Over the last thirty years, average daily traffic volumes on Highway 1 have increased by about 75 percent, according to Caltrans data. However, no corresponding improvements have been made to 19th Avenue's functionality or capacity. All told, the roadway is functionally oversubscribed and carries higher levels of traffic than it was designed to carry.

The major intersections along this section of 19th Avenue – at Sloat Boulevard, Ocean Avenue, Winston Drive, and Holloway Avenue – and along this section of Junipero Serra Boulevard – at 19th Avenue and Brotherhood Way – experience substantial congestion during peak periods. In addition, the Highway 1 / I-280 interchange south of the site forms a bottleneck during peak hours.

Therefore, the key objectives of this Plan are to minimize the number of peak hour vehicle trips generated by Parkmerced, and to reduce the project's contribution of additional traffic on 19th Avenue and Junipero Serra Boulevard and the intersecting arterials, while improving conditions to the 19th Avenue corridor.



**FIGURE 3**



2.2 / existing transit services

As shown on **Figure 4**, six Muni lines currently serve the project area: the M-Ocean View light rail line and the 17-Parkmerced, 18-46th Avenue, 28/28L-19th Avenue / 19th Avenue Limited, and 29-Sunset bus lines. Three of these directly enter the neighborhood.

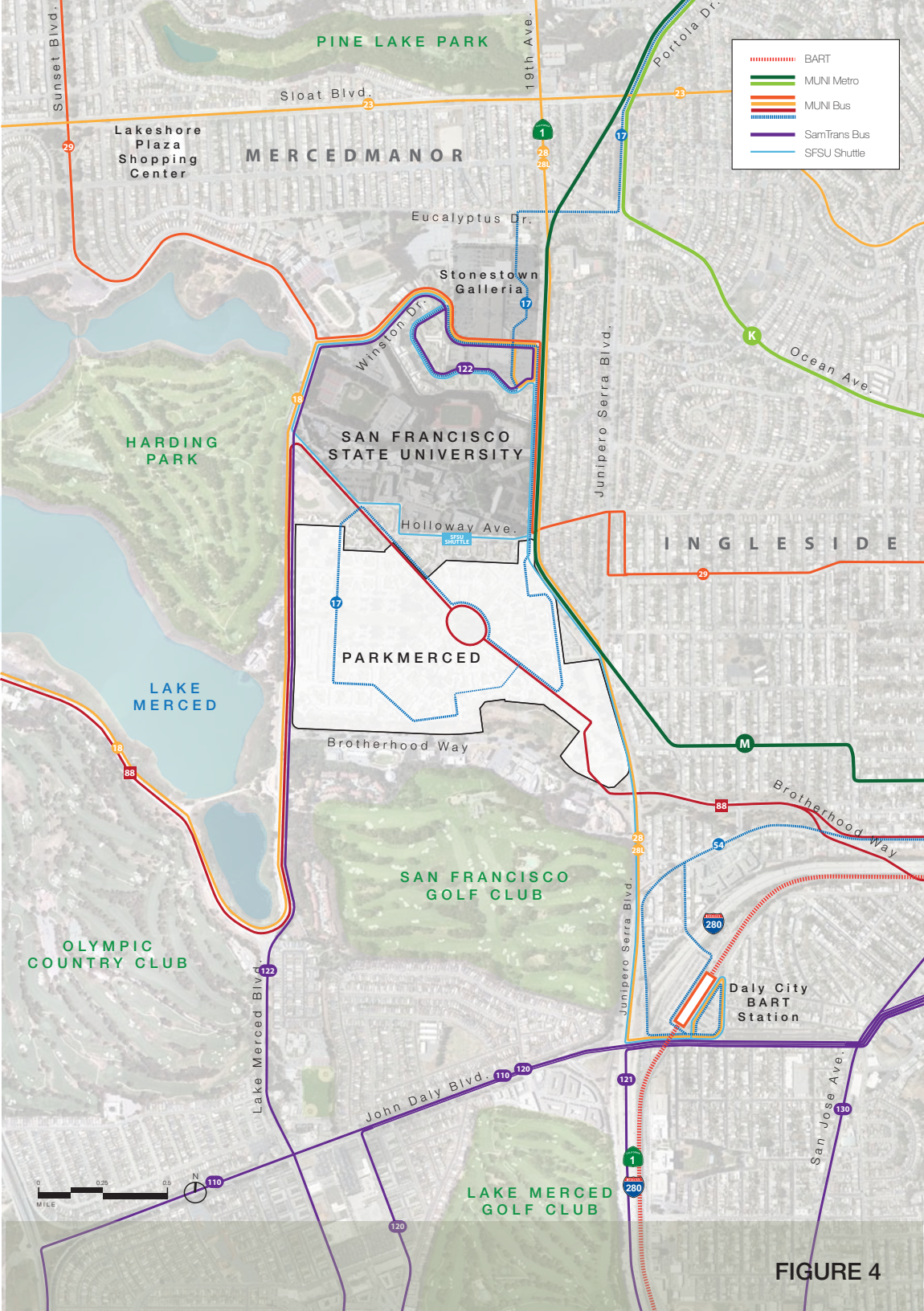


FIGURE 4



In addition, BART has a nearby station at Daly City and SamTrans operates Route 122 along the western edge of Parkmerced with stops on Lake Merced Boulevard. San Francisco State University also operates a shuttle to BART, which is for students and faculty/staff only.

This nearby transit service also provides connections to the regional transit network at the Civic Center BART Station (M-Ocean View), the Balboa Park BART Station (M-Ocean View and 29-Sunset), and the Daly City BART Station (28/28L-19th Avenue / 19th Avenue Limited).

A key issue of concern is the effect of automobile congestion on transit operating speeds. Due to the heavy vehicular traffic along Junipero Serra Boulevard and 19th Avenue and the limited capacity of intersections along the 19th Avenue corridor, substantial queuing and congestion often occurs during peak periods. This queuing results in delays to transit service on 19th Avenue—particularly the 28-19th Avenue, 28L-19th Avenue Limited and 29-Sunset—and makes it difficult for transit vehicles to merge into traffic after departing stops or to enter turn lanes. In addition, congested conditions can affect Muni operations (by increasing travel times) and service reliability.

Light rail station capacity and pedestrian access are also issues of concern. In general, platform widths at the adjacent M-Ocean View station at 19th Avenue / Holloway Avenue are inadequate to handle current passenger flows during peak hours. This station is particularly problematic as it is the primary stop for passengers bound to and from the SFSU campus and Parkmerced, which makes it one of the busiest stops along the line. During the morning period (at the start of the school day), there is a large surge of passengers with each southbound train arrival, while during the afternoon period there is a steady buildup of passengers waiting for a northbound train. In addition, passengers coming to and from the train must cross three to four lanes of moving traffic and one set of light rail tracks. Due to insufficient space between the two sets of light rail tracks, there is limited queuing area for passengers waiting to cross away from the station, who often queue up along the sloped walkway up to the platform or wait within the

light rail tracks. At the other nearby M-Ocean View stop at the intersection of 19th Avenue / Junipero Serra Boulevard, no passenger amenities or areas to safely board and alight trains are provided.

## 2.3 / existing bicycle and pedestrian network

Pedestrian facilities are provided along almost every street in and around Parkmerced, and crosswalks and pedestrian signals are provided at major signalized intersections. According to the *San Francisco General Plan*, the following nearby streets are designated as Neighborhood Commercial Streets: 19th Avenue between Sloat Boulevard and Junipero Serra Boulevard, and Holloway Avenue between 19th Avenue and Miramar Avenue.

In general, pedestrian volumes are at their highest near SFSU, where the M-Ocean View light rail stop is provided (at the 19th Avenue / Holloway Avenue intersection), and are low throughout most streets within Parkmerced.

Pedestrian access into and out of the Parkmerced neighborhood is very limited on 19th Avenue / Junipero Serra Boulevard, Brotherhood Way and Lake Merced Boulevard. Along 19th Avenue, four pedestrian access points are provided in succession at Holloway Avenue, Crespi Drive, Cardenas Avenue, and 200 feet south of Cardenas Avenue, but the next access point is not provided until Font Boulevard, about 2,000 feet to the south. In addition, pedestrians can only cross 19th Avenue at Holloway Drive and Junipero Serra Boulevard. Along Brotherhood Way, a pedestrian bridge is provided across Brotherhood Way at Chumasero Drive, but no other connections are provided. Along Lake Merced Boulevard, pedestrian access is provided only at Higuera Avenue and at two points along Vidal Drive. As a result, connections to nearby uses and the surrounding neighborhoods are fairly limited and can be substantially improved.

Throughout the area, bicycle facilities consisting of bike paths (Class I), bike lanes (Class II), wide curb lane bike routes, and bike routes (Class III) are provided. These routes are interconnected to the Citywide Bicycle Network and provide access between the Parkmerced area and other locations throughout San Francisco. Bike paths are separated from the roadway with dedicated paths for bicyclists. Bike lanes include a dedicated lane on the street

adjacent to the curb lane for bicyclists' use. Wide curb lane bike routes are designated on wider roadways, where bicyclists may be able to ride outside the path of motor vehicle travel. Bike routes are signed routes only, where bicyclists share travel lanes with vehicles. The existing major bicycle facilities in the area are illustrated in **Figure 5** and consist of the following:

- Route 50 is a bike route that runs eastbound-westbound along Sloat Boulevard.
- Route 60 is a wide curb lane bike route that runs eastbound-westbound along Vicente Street.
- Route 75 runs northbound-southbound from the Daly City BART station as a bike route on roadway east of Junipero Serra Boulevard (i.e., St. Charles Avenue, 19th Avenue, Beverly Street, Junipero Serra Boulevard frontage), runs through SFSU and Stonestown Galleria as a bike route, and runs along 20th Avenue as a wide curb lane bike route north toward Golden Gate Park.
- Route 84 is a bike route that runs eastbound-westbound along Ocean Avenue.
- Route 85 is a wide curb lane bike route that runs northbound-southbound along 34th Avenue and Lake Merced Boulevard.
- Route 86 circles Lake Merced as a bike path, extends east along Winston Drive as a bike lane and a bike route, and continues along Cerritos Avenue as a wide curb lane bike route to Ocean Avenue, where it terminates.
- Route 90 runs eastbound-westbound along Holloway Avenue as a bike route, bike lane, and a wide curb lane bike route for various segments.
- Route 91 is a bike route that runs northbound-southbound along Skyline Boulevard and John Muir Drive.
- Route 95 is a bike route that runs northbound-southbound along Skyline Boulevard.

In addition, as part of the new *San Francisco Bicycle Plan* (which was recently approved in the *2009 San Francisco Bicycle Plan Environmental Impact Report*) new bicycle lanes and bicycle routes are proposed on streets surrounding the neighborhood, which would facilitate bicycle access to and from Parkmerced. These include:

- New bicycle lanes on Sagamore Street and Sickles Avenue generally between Plymouth Avenue and Orizaba Avenue;
- New bicycle lanes on Portola Avenue between Sloat Boulevard and O'Shaughnessy Boulevard;

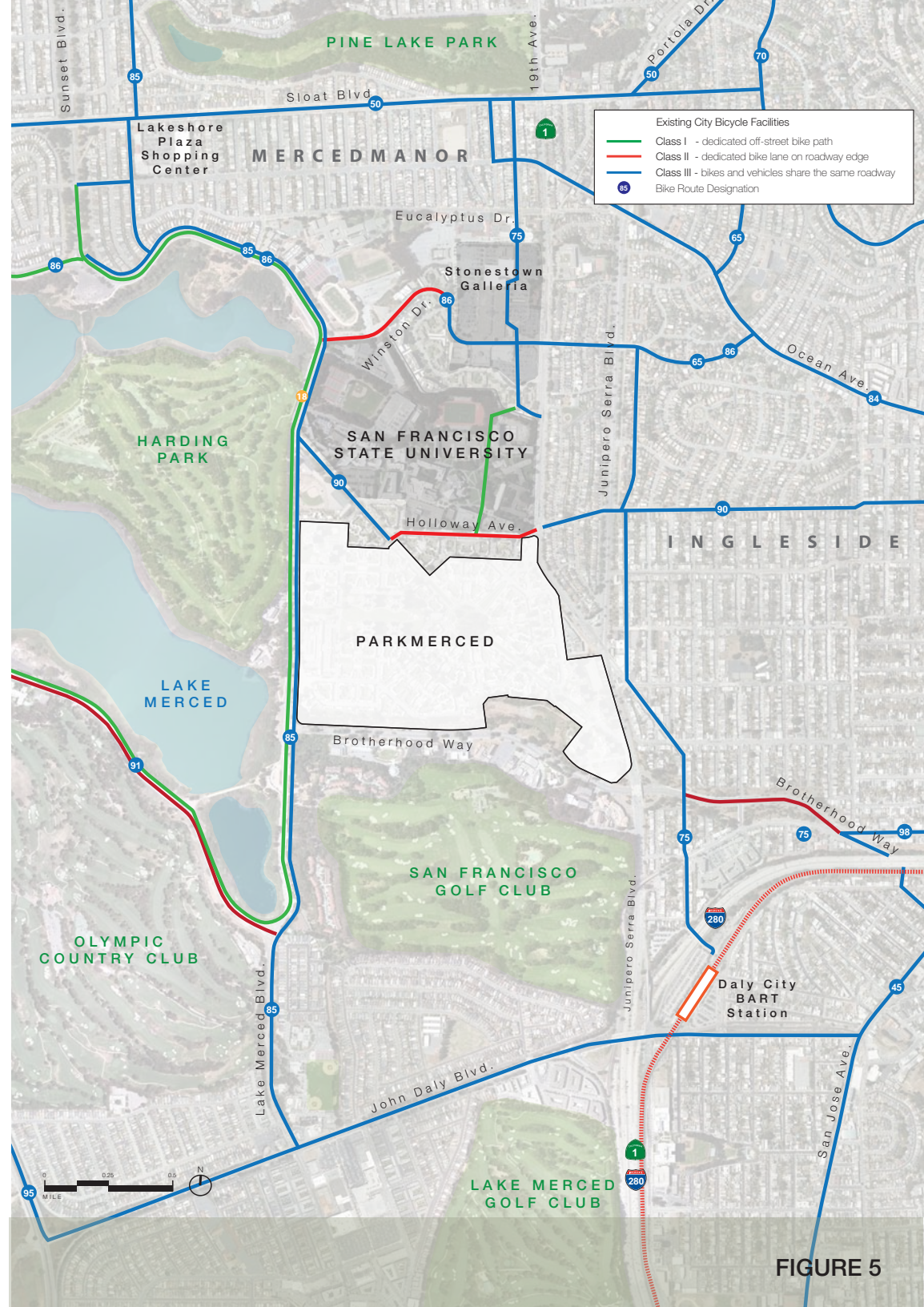


FIGURE 5



- New bicycle lanes on Buckingham Way to the west of 19th Avenue;
- New bicycle lanes on Holloway Avenue between Varela Way and Junipero Serra Boulevard;
- New bicycle lanes on John Muir Drive between Lake Merced Boulevard and Skyline Drive; and
- Long-term improvements on Brotherhood Way between Arch Street and Lake Merced Boulevard, and on Holloway Avenue between Junipero Serra Boulevard and Harold Avenue (note that these projects were not assessed in the environmental review document).

As with pedestrian conditions, bicycle volumes were relatively low along the established bicycle routes in the area, specifically near 19th Avenue. However, high bicycle volumes were observed near destinations like Stonestown and SFSU.

Similar to pedestrians, bicycle access into and out of the Parkmerced neighborhood is limited, with few connections available along 19th Avenue, Junipero Serra Boulevard, Brotherhood Way, and Lake Merced Boulevard. In addition, Parkmerced does not directly connect to any of the major existing on-street bicycle facilities except those on Lake Merced Boulevard and Holloway Avenue, and no citywide bicycle routes are provided or proposed internal to Parkmerced. As a result, connections to nearby uses and the surrounding neighborhoods are fairly limited and can be substantially improved.

## 2.4 / existing parking

On-street parking is provided throughout Parkmerced, including approximately 1,600 parking spaces. All on-street spaces are under the San Francisco Municipal Transportation Agency's (SFMTA) residential parking permit district "E", which allows residents to park throughout the day, but restricts non-permit holders to one- or two-hour parking.

In general, on-street parking within Parkmerced and the nearby areas is generally available throughout the day and

overnight, except when SFSU is in session. Throughout the SFSU school year, on-street parking on all nearby streets is almost fully occupied. With the current one-hour and two-hour time limits, students are able to park for one or two classes. As a result, it is difficult for Parkmerced residents and visitors to find parking during these times.

## 2.5 / existing travel characteristics

In September of 2007, a survey was issued to people living in Parkmerced and the nearby residential neighborhoods to determine travel patterns and behaviors and to obtain input on important transportation issues. In total, about 16,000 surveys were distributed and about 1,300 surveys were returned, for approximately an 8 percent response rate.

The survey was separated into two sections. The first half provided space for up to three respondents to identify individually where they work, their means of getting to and from work, and details regarding other trips made throughout the day. Additional questions were asked to determine why respondents did not utilize transit as their primary mode. The second half of the survey was to be completed on a household basis and asked questions regarding the existing transportation conditions in the vicinity, including listing major concerns about different travel modes.

The following are the general findings and conclusions developed from the survey results:

- Over 85 percent of respondents worked in San Francisco, and another 10 percent worked in the Peninsula/South Bay area;
- Approximately 55 percent of respondents drive alone to and from work, 31 percent take transit, and the remainder use other modes (like carpool, bicycle, walk or others);
- Of those using transit to/from work, close to 80 percent use Muni bus or light rail and close to 20 percent use BART (the remainder use Caltrain or SamTrans);
- About 20 percent of the transit riders drove to and from transit – primarily those riding BART;

- Respondents who did not take transit to/from work did not do so primarily because of long travel times, the need for transfers and the need for a car for work or for trips before and after work;
- The average household takes approximately six round trips per day for non-work purposes, such as for grocery shopping (35 percent), entertainment (23 percent), school (18 percent), and retail shopping (15 percent); and
- With regards to areawide transportation issues, the top concerns were: infrequent and unreliable transit service, difficult pedestrian and bicycle crossings due to dangerous vehicle speeds and high volumes, and high levels of traffic congestion.

Overall, the survey identified a high level of transit use by Parkmerced residents for their trips to and from work. However, those using BART end up driving to and from the BART station, which adds unnecessary traffic to the roadway network. In addition, of the daily non-work trips made by residents, a substantial portion of the trips were to destinations like grocery shopping or general retail that could be accommodated within Parkmerced if the appropriate land use program were developed.

These results were used in developing the recommendations, programs and policies presented in the Plan.

## 2.6 / existing circulation and access issues

In addition, the travel survey asked respondents to identify locations where they had concerns about transportation conditions, be it unsafe pedestrian crossings or high volumes of cut-through traffic. Figure 6 illustrates the key circulation and access issues with Parkmerced today, as developed through extensive review of current conditions and through information obtained from the survey.

In addition, the following are some of the major circulation and access issues with the current Parkmerced neighborhood:

- Because its street pattern does not match the surrounding grid, Parkmerced is confusing to navigate.
- Movements in and out of Parkmerced are concentrated at a limited number of entrances/exits, shown by red arrows in Figure 6. For instance, left-turns are generally not permitted along Highway 1. As such, vehicles destined to Parkmerced from points south can only enter the site via Brotherhood Way and Chumasero Drive at the southeast corner, or travel through the adjacent neighborhood to make a left turn only at Holloway Avenue.
- No access points are provided along Brotherhood Way (except at Chumasero Drive) and only one access point is provided along Lake Merced Boulevard. It should be noted, however, that the northern edge of Parkmerced directly connects with SFSU and blocks of off-campus housing. Overall, Parkmerced has relatively poor connectivity to the adjacent residential neighborhoods.
- As pedestrian safety is a concern throughout the 19th Avenue corridor, 19th Avenue and Junipero Serra Boulevard form a barrier between the neighborhoods on either side, especially at the locations marked by blue bars in Figure 6.
- The overall automobile-focused orientation encourages speeding, which is a particular problem on Font Boulevard and Brotherhood Way, shown by the dashed yellow lines in the figure.
- Most of the pedestrian crossings into and out of Parkmerced have noticeable constraints, including pedestrians needing to cross dangerous channelized right-turns at Lake Merced Boulevard / Brotherhood Way, missing crosswalks and high vehicular travel speeds at Junipero Serra Boulevard / Brotherhood Way, Junipero Serra Boulevard / Font Boulevard and 19th Avenue / Junipero Serra Boulevard, and heavy pedestrian volumes at 19th Avenue / Holloway Avenue. In addition, crosswalks across 19th Avenue are only provided at Holloway Avenue and Junipero Serra Boulevard.

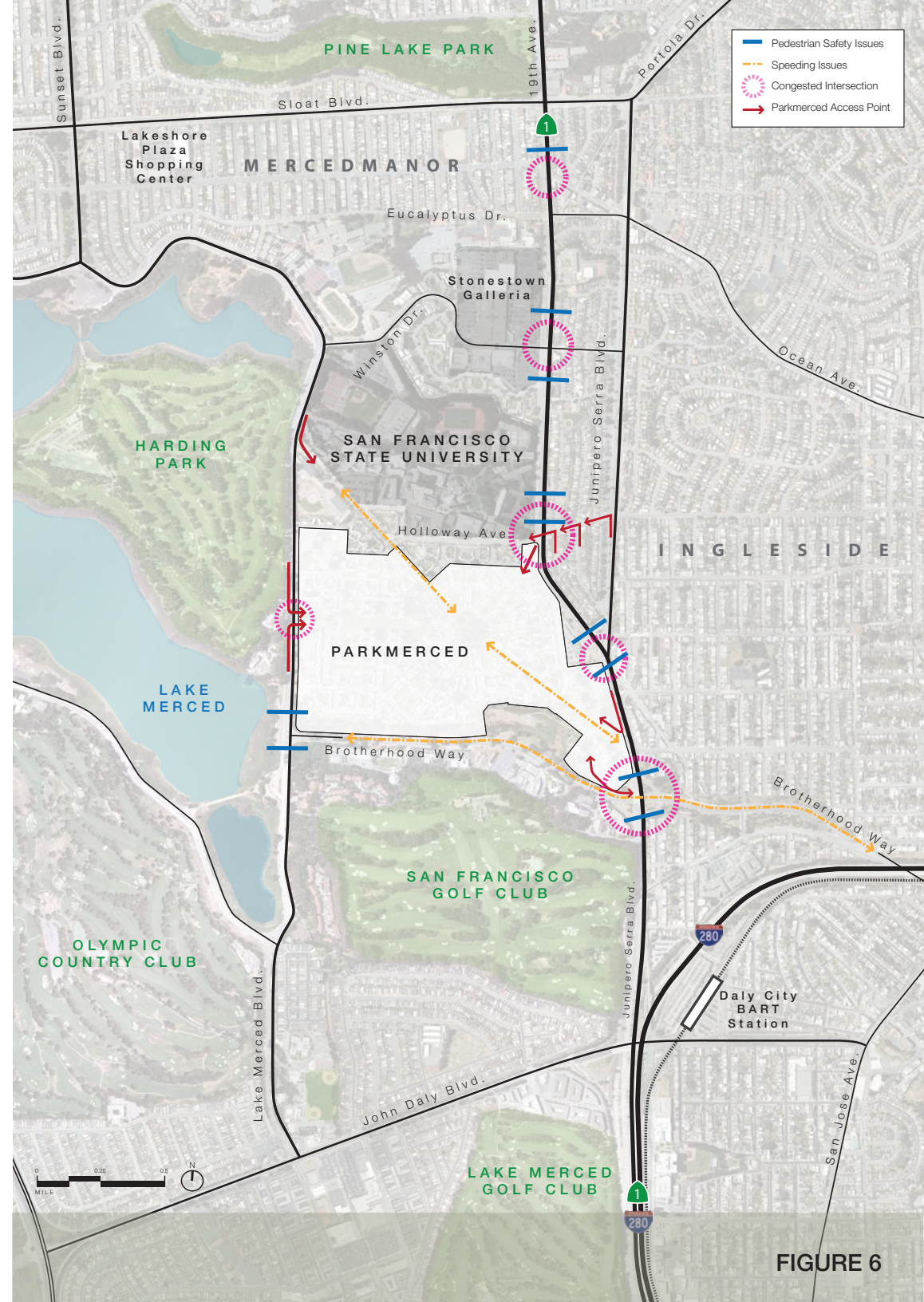


FIGURE 6





proposed development  
and infrastructure

Land Use Program	20
Internal Street Network	22
External Intersection and Roadway Improvements	24
Transit Modifications	28
Pedestrian and Bicycle Circulation	32
Access Improvements	
Possible Long-Term Projects	33

03

The success of transforming Parkmerced into a vibrant transit-, walk- and bike-oriented neighborhood will depend upon implementation of the correct development and urban form designs, plus the infrastructure and circulation projects to support the goals and objectives. This chapter outlines the land use and physical roadway improvements that will be implemented to facilitate transit, pedestrian and bicycle circulation, both inside Parkmerced and through the surrounding area. In addition, modifications and enhancements to internal and external intersections and streets are included to accommodate the projected increase in vehicular traffic, while maintaining a positive environment for non-vehicular users.



### 3.1 / land use program

The foundation for any successful mixed-use development is the provision of an appropriate spectrum of land uses. The land use program for Parkmerced is particularly important as the project seeks to promote the establishment of a strong residential community and to provide the right mix of uses to keep discretionary trips within the neighborhood.

To this end, the proposed Parkmerced land use program includes approximately 8,900 residential units, 230,000 square feet of community-serving retail space, 80,000 square feet of professional office space, 25,000 square feet of daycare and school space and 64,000 square feet of recreation and amenity space. The locations of the project's proposed land uses are shown in **Figure 7**.

The total of about 8,900 homes will include keeping 1,683 existing units and the construction of 7,217 new units.

The retail and professional office center will serve as the community's social heart and will be centrally located. It will include a variety of uses such as a grocery store, coffee and sandwich shops, hardware store, restaurants, a dry cleaner, banks, and other businesses to meet the everyday needs of residents. The office space will house professional services to meet basic needs, such as medical and dental practices, accountants and travel agencies.

Six smaller neighborhood retail centers will be located throughout the neighborhood within a short walking distance of all residences. Parkmerced will also have a preschool, day care center and/or K-5 school to meet resident needs, a community and fitness center, and athletic fields on-site.



# SAN FRANCISCO STATE UNIVERSITY

- Retail
- Ground Level Retail, Office Above
- Above Grade Structured Parking
- Leasing Office
- School
- Community/ Fitness
- Organic Farm Buildings
- Residential



SAN FRANCISCO GOLF CLUB

FIGURE 7

### 3.2 / internal street network

To support the capture of trips internal to Parkmerced and to promote the use of non-automobile modes, substantial improvements to the internal street network are needed. By accommodating all modes of travel, these streets will provide the needed connections between the various land use elements, the transit options, and the parking facilities. Although the streets will continue to service vehicular activities, emphasis will be placed on enhancing the streets for pedestrians and bicyclists.

As noted earlier, Parkmerced occupies a site in southwestern San Francisco bounded by major arterial streets. The prevailing street grid of surrounding neighborhoods does not continue on the site; instead, the existing streets form a radial pattern focused on Juan Bautista Circle, the neighborhood's central green space. This existing street pattern results in very large car-oriented blocks that make short trips difficult and reduce the attractiveness for walk and bicycle activity.

The addition of new homes and services to the existing community justifies the provision of additional streets and a finer grain of street classifications. Existing streets will be modified and new streets will be designed to emphasize non-auto travel and to moderate the speed of auto traffic where required, thereby providing a safe and comfortable environment for pedestrians and bicycles while still maintaining adequate vehicular circulation.

**Figure 8** provides an overview of the street network proposed for Parkmerced. The design requirements for each street type are included in the *Parkmerced Design Standards + Guidelines*. In general, the internal street network builds upon the ideas and principles of the San Francisco *Better Streets Plan*, which lays out a comprehensive set of guidelines to improve the streets and streetscape within the City. The *Better Streets Plan* focuses on making streets more compatible with and accommodating of all modes. The existing traffic circles, which do not require vehicles to stop for pedestrians, will be removed from

Font Boulevard, which transects the site from northwest to southeast. Midway through the site, Font Boulevard is interrupted by Juan Bautista Circle (JBC), which surrounds a central green. Crespi Drive, connecting Juan Bautista Circle to 19th Avenue, will lose its broad median and be newly configured as a neighborhood retail street. Gonzalez Drive, which currently loops around the east and south sides of Juan Bautista Circle, will be extended to reach Lake Merced Boulevard and form the southern boundary of the community. Within this framework, new streets will be introduced to provide connectivity, better circulation, and to facilitate walking and biking.

**Figure 9** illustrates several of the street typologies that are proposed within Parkmerced, including typical north/south streets, east/west streets, boulevards, alleyways, retail streets, and pedestrian paseos. Controls governing the design of each of these street types are included in the *Parkmerced Design Standards + Guidelines*. In general, these streets have one to four travel lanes for vehicles, bicycle paths or lanes, sidewalks, crosswalks and corner bulbs, and parallel or perpendicular on-street parking. All streets have been designed to maintain acceptable vehicular movements while providing enhanced facilities for all users. As such, pedestrians and bicyclists will be comfortable traveling along all streets within the neighborhood, thereby promoting and encouraging use for non-vehicle modes.

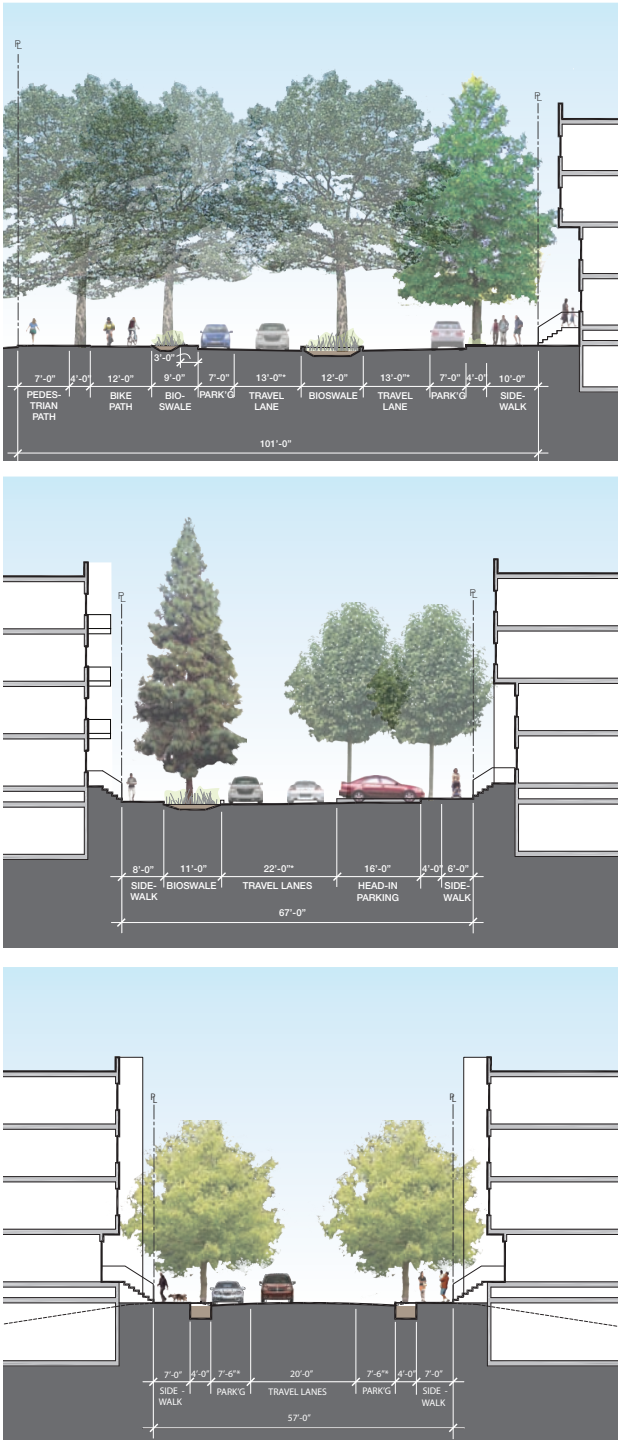


FIGURE 9

# SAN FRANCISCO STATE UNIVERSITY



FIGURE 8



### 3.3 / external intersection and roadway improvements

Although the Parkmerced project would reduce the use of private vehicles by residents on a per capita usage, the overall number of automobile trips would increase due to the proposed increase in residential, commercial and community uses. Several roadways and intersections that surround Parkmerced already operate at or near capacity, conditions that will be worsened in the future with the anticipated growth along the 19th Avenue corridor and the regional growth impacts.

The planned reconfiguration of the M-Ocean View light rail line, as described later in Section 3.4, would require revisions to the 19th Avenue / Holloway Avenue and Junipero Serra Boulevard / 19th Avenue intersections that would reduce their capacity to process vehicles. As a result, operations at these intersections could substantially worsen, leading to increases in congestion and delays to vehicular and transit travel times.

In addition, as documented in Section 2.6, there are numerous existing transportation and circulation issues in and around Parkmerced (such as a lack of connection points and difficult pedestrian crossings), conditions that would be magnified with the increase in activity associated with the new development.

To address these issues and provide pedestrian safety improvements, modifications to the adjacent streets and intersections would be needed. At each affected location around Parkmerced, the project team created a summary of the existing and future issues and developed a series of solutions to address each issue. These conceptual plans were reviewed with the local and state agencies (including San Francisco Planning Department, SFMTA, San Francisco County Transportation Authority, and Caltrans). Based on comments and feedback, modifications and refinements were made, and final conceptual plans were prepared and acknowledged by the agencies.

Overall, these proposed modifications to the adjacent streets and intersections would allow for preexisting conditions to be improved, for the new land uses to be implemented without substantially worsening problem locations, and for secondary transportation impacts to be addressed. In addition, these changes to the roadway facilities would allow for substantial improvement to the pedestrian environment, which would enhance pedestrian circulation, pedestrian safety and access to the surrounding neighborhoods.

All proposed intersection and street modifications were developed in conjunction with the above referenced agencies and are shown in **Figure 10** and described as follows:



# SAN FRANCISCO STATE UNIVERSITY

# SAN FRANCISCO GOLF CLUB

INTRODUCE NEW MERGE LANES TO BROTHERHOOD WAY AND RECONFIGURE NORTHBOUND ON-RAMPS

MODIFY INTERSECTION ALIGNMENT AND ADD DEDICATED NORTHBOUND LEFT-TURN FROM NORTHBOUND JUNIPERO SERRA BOULEVARD INTO PARKMERCED

REALIGN CHUMASERO WITH DEDICATED RIGHT TURN LANE INTO PARKMERCED FROM WESTBOUND BROTHERHOOD WAY

ADD ADDITIONAL POINTS OF ENTRY TO/ FROM PARKMERCED

RECONFIGURE INTERSECTION TO IMPROVE TRAFFIC FLOWS

ADD DEDICATED LEFT TURN FROM NORTHBOUND 19TH AVENUE INTO PARKMERCED AND ADD SOUTHBOUND THROUGH LANE ALONG 19TH AVENUE

SIDEWALK IMPROVEMENTS

MODIFY TO IMPROVE CAPACITY INCLUDING ADDITIONAL SOUTHBOUND LANE AND NORTHBOUND LEFT-TURN LANE

ADD ADDITIONAL SOUTHBOUND THROUGH LANE

PROJECT BOUNDARY

MODIFY TO IMPROVE CAPACITY

ADD ADDITIONAL POINTS OF ENTRY TO/ FROM PARKMERCED

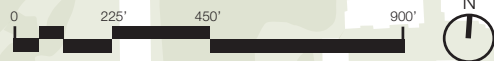
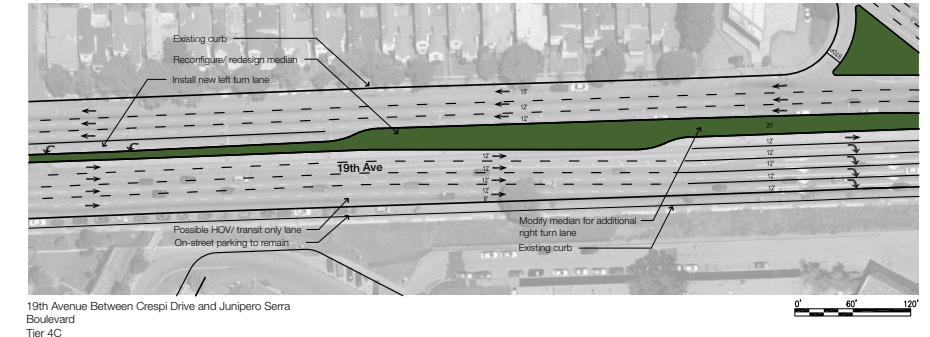
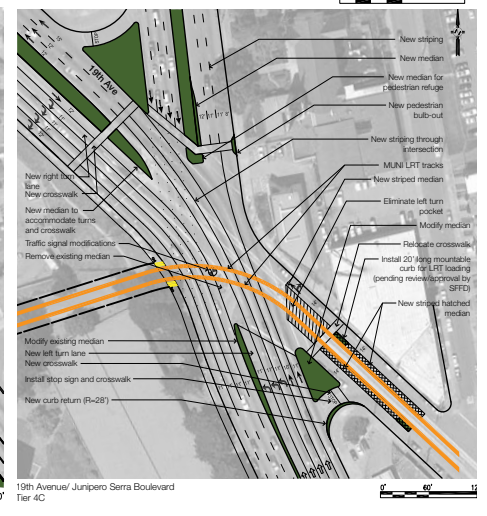
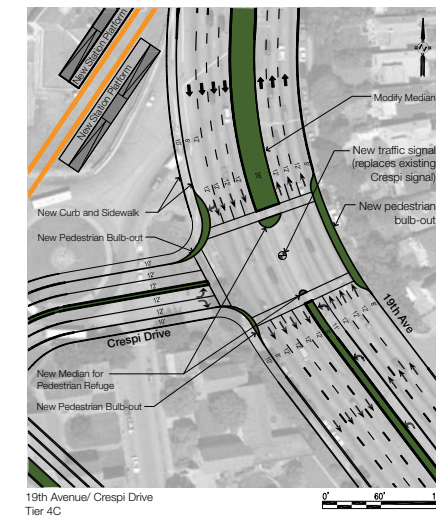
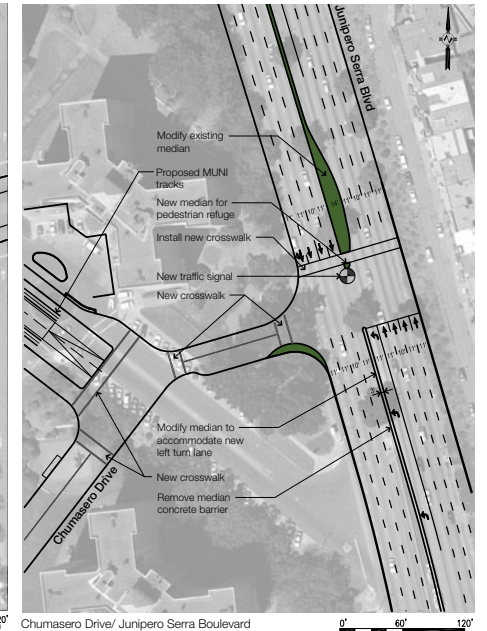
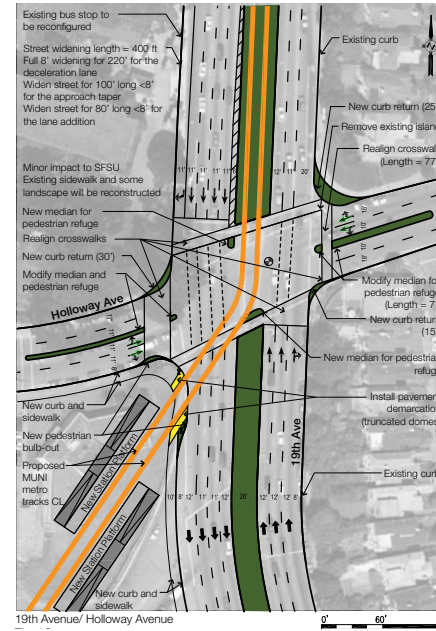
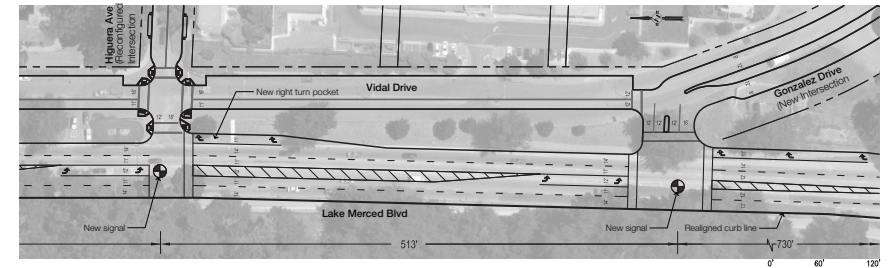
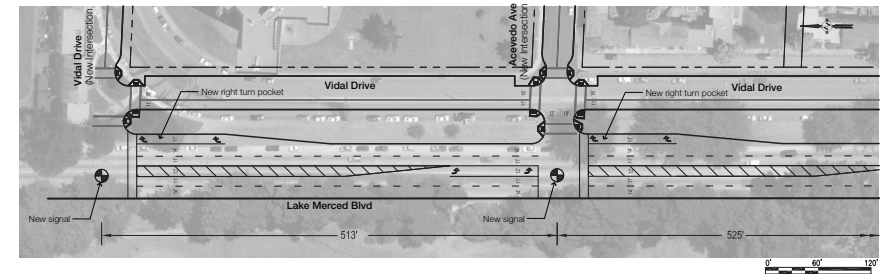
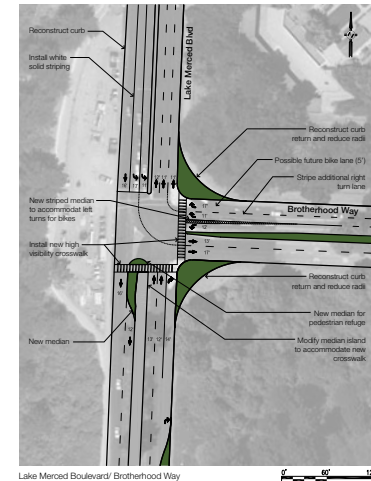
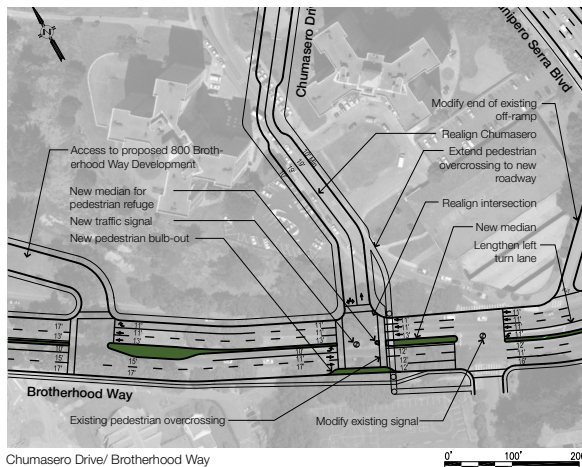
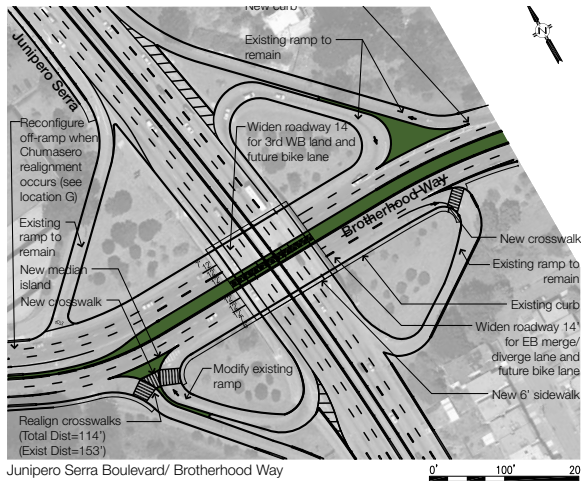


FIGURE 10

- 19th Avenue / Holloway Avenue: The intersection would be modified to provide a fourth southbound lane along 19th Avenue to mitigate the effects of the new M-Ocean View light rail crossing. This lane would be provided by narrowing the existing lanes and widening the street to the west. To improve pedestrian conditions, the free right-turn movements would be eliminated and sidewalks and crosswalks would be improved.
- 19th Avenue / Crespi Drive: Crespi Drive would be realigned to the south to provide sufficient space for the proposed transit plaza at the southwest corner of 19th Avenue / Holloway Drive, and a dedicated left-turn pocket from northbound 19th Avenue would be established in the existing light rail median to provide a new access point into Parkmerced from the south (thereby reducing the need to circulate through the adjacent residential neighborhood). In addition, new crosswalks with pedestrian signals would be created.
- 19th Avenue: From just north of Holloway Avenue to Junipero Serra Boulevard, 19th Avenue would be reconfigured (by utilizing the space in the existing light rail median) to provide a fourth southbound through travel lane to improve traffic flow, especially during the evening commute period. (Note that a High Occupancy/Toll (HOT) lane was studied for the additional lane but was rejected due to its short length). With the exception of the section to the north of Holloway Avenue, this widening would occur within the existing light rail median and not increase the curb-to-curb width of the street.
- Junipero Serra Boulevard / 19th Avenue: This intersection would be modified to improve vehicular traffic flow throughput, including providing additional capacity on northbound Junipero Serra Boulevard (via an additional left-turn pocket), eliminating the conflicting northbound 19th Avenue left-turn movement, and providing additional capacity on southbound 19th Avenue (through an additional right-turn lane to southbound Junipero Serra Boulevard) to address existing traffic flow and to mitigate the effects of the new M-Ocean View light rail crossing. In addition, STOP signs would be established at the channelized right-turn movements to improve pedestrian crossings, as well as other sidewalk and crosswalk treatments.
- Junipero Serra Boulevard / Font Avenue: The Font Avenue approach to this intersection would be replaced with an extension of Chumasero Drive, including a new northbound left-turn pocket from Junipero Serra Boulevard and a new traffic signal to provide a new access point into Parkmerced from points south. In addition, a new crosswalk with a pedestrian-activated signal would be created.







- Junipero Serra Boulevard / Brotherhood Way: To improve the merge/diverge movements at the on- and off-ramps and to provide additional capacity for vehicles destined to Parkmerced via Chumasero Drive, a third travel lane would be provided on westbound Brotherhood Way from the northbound Junipero Serra Boulevard off-ramp to Chumasero Drive. In addition, new pedestrian crosswalks and sidewalks would be created to facilitate pedestrian circulation through this challenging interchange.
- Brotherhood Way / Chumasero Drive: Chumasero Drive would be realigned to the west and a new "T" intersection with Brotherhood Way would be created to simplify movements with the adjacent Thomas More Way, thereby reducing the current traffic congestion in the area. This intersection reconfiguration would also allow for a new at-grade pedestrian crossing location to be established. (Currently, pedestrians are required to use an inconvenient pedestrian overcrossing.)

- Lake Merced Boulevard / Brotherhood Way: This intersection would be modified to improve traffic flow between Brotherhood Way and the north segment of Lake Merced Boulevard, which would address existing traffic congestion and accommodate the anticipated vehicular increase with the Parkmerced project. To improve pedestrian conditions, the free right-turn movements would be eliminated and pedestrian sidewalk and crosswalk improvements would be made.
- Lake Merced Boulevard at Vidal Drive, Acevedo Avenue, Higuera Avenue, and Gonzalez Drive: To better distribute vehicles along Lake Merced Boulevard, thereby reducing the current traffic congestion at Higuera Avenue, additional access points for Parkmerced would be established. At each location, dedicated right-turn and left-turn pockets would be created, with new interconnected traffic signals to facilitate movements, to minimize the effect to through traffic. In addition, these new access points would improve pedestrian circulation by providing additional crossing locations to Lake Merced Boulevard; each location would include new crosswalks and sidewalks.

Combined, these improvements would lead to significant modifications to the intersections and roadways surrounding Parkmerced, and would help the streets accommodate the projected increase in vehicular travel associated with the proposed land use plan. In addition, these elements would reduce some of the current barriers to access into and out of Parkmerced, and would enhance the attractiveness of non-auto modes as viable alternatives to driving.

In addition to facilitating vehicular movements and improving currently-constrained locations, these proposed roadway and intersection modifications were designed to enhance the pedestrian and bicycle experience. For example, the elimination of channelized right-turn movements would improve pedestrian conditions by requiring all vehicles to come to a complete stop prior to crossing the crosswalks and entering intersections. Furthermore, modifications to the intersections will shorten pedestrian walk distances, increase visibility (such as with the provision of corner bulbs and median islands), and allow for additional safe crossing locations (such as with the provision of new crosswalks and automatic pedestrian signals). The following are the typical pedestrian-scale improvements that have been proposed at these locations:

- Roadway travel lanes would be narrowed to reduce travel speeds and shorten the crossing distances for pedestrians;
- Corners at the intersection would be tightened to provide additional space for pedestrians and to reduce excessive speeds of vehicles making turns;
- Bulb-outs would be installed at corners to improve pedestrian visibility and shorten walk distances;
- Crosswalks would be realigned to allow for more direct crossings;
- Medians would be extended to provide refuge areas for pedestrians crossing the streets;
- New crosswalks would be created at locations where new traffic signals are provided; and,
- Automatic pedestrian signals would be included as part of the overall traffic signal schemes and sufficient pe-

destrian crossing times would be provided to allow for safe crossings.

It should be noted that the proposed intersection and roadway modifications (including the changes to 19th Avenue and Junipero Serra Boulevard, the new access points, and the improved pedestrian facilities) will require the approval of Caltrans, SFMTA, SFCTA, the San Francisco Department of Public Works (SFPDW), and the California Public Utilities Commission (CPUC). Parkmerced will continue to work with these agencies to advance the design, environmental clearance, approvals, and implementation of each proposed intersection and roadway improvement. Parkmerced will conduct the required design, approval and construction activities, under supervision and guidance from the appropriate city, county and state agencies.

### 3.4 / transit modifications

To reduce the amount of private automobile use and to maximize the utility of the existing capacity available on the nearby transit lines, improvements and enhancements to transit service will be needed. Although local (in terms of Muni light rail and bus) and regional (in terms of SamTrans bus and BART commuter rail) transit service is provided in and around Parkmerced, there are notable limitations to their usability and usefulness. Successful implementation of the Parkmerced land use plan and urban form requires the integration of the neighborhood with all travel modes, with transit as the backbone.

As a result, the following modifications to existing and future transit routes are proposed to be implemented by Parkmerced, working in conjunction with SFMTA and other agencies, as shown in **Figure 11**. Several of these elements continue the themes and goals of SFMTA's recent Transit Effectiveness Project (TEP), which is focused on improving the operations and reliability of transit service throughout the city.

#### M-Ocean view light rail line elements

The M-Ocean View currently operates in the median of 19th Avenue adjacent to Parkmerced. The train enters an ex-

clusive median to the north at Eucalyptus Street, traveling south with stations at Winston Drive (for Stonestown) and Holloway Avenue (for SFSU and Parkmerced). After the train passes through the intersection of 19th Avenue / Junipero Serra Boulevard, it heads south on 19th Avenue and east on Randolph Street in a shared right-of-way (as the line continues east, it operates in mixed-flow with regular vehicular traffic).

As previously discussed, this median configuration of the M-Ocean View line results in several functional and practical issues, in particular at the 19th Avenue / Holloway Avenue station, including: station overcrowding, insufficient waiting areas, difficult pedestrian crossings, and inaccessibility for a substantial portion of Parkmerced residents. In addition, the train operating in the median of a heavily trafficked highway does not support transit-oriented communities or strong mixed-use neighborhoods, which does not promote the use of transit as a convenient and viable alternative to private automobiles.

The following modifications to the M-Ocean View line are being proposed by Parkmerced to address these issues and to allow for the new Parkmerced neighborhood to be fully integrated with transit.

- Immediately south of 19th Avenue / Holloway Avenue, the M-Ocean View would be rerouted into Parkmerced;
- A new multimodal station and Transit Plaza would be provided at the southwest corner of the intersection to replace the existing station in the middle of 19th Avenue. The new multimodal station would include wide platforms, multiple access points, and connections to other transit lines;
- The train would continue south along an exclusive alignment to a new station that would directly serve retail and office center located at the heart of Parkmerced;
- After this station, the train would travel southeast in the median of Font Boulevard;
- Near the intersection of Font Boulevard / Felix Avenue, the M-Ocean View line would split, with approximately half the



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- 28/28L Bus Line
- 91A Bus Line
- 29 Bus Line
- 17 Bus Line
- Muni M Oceanview

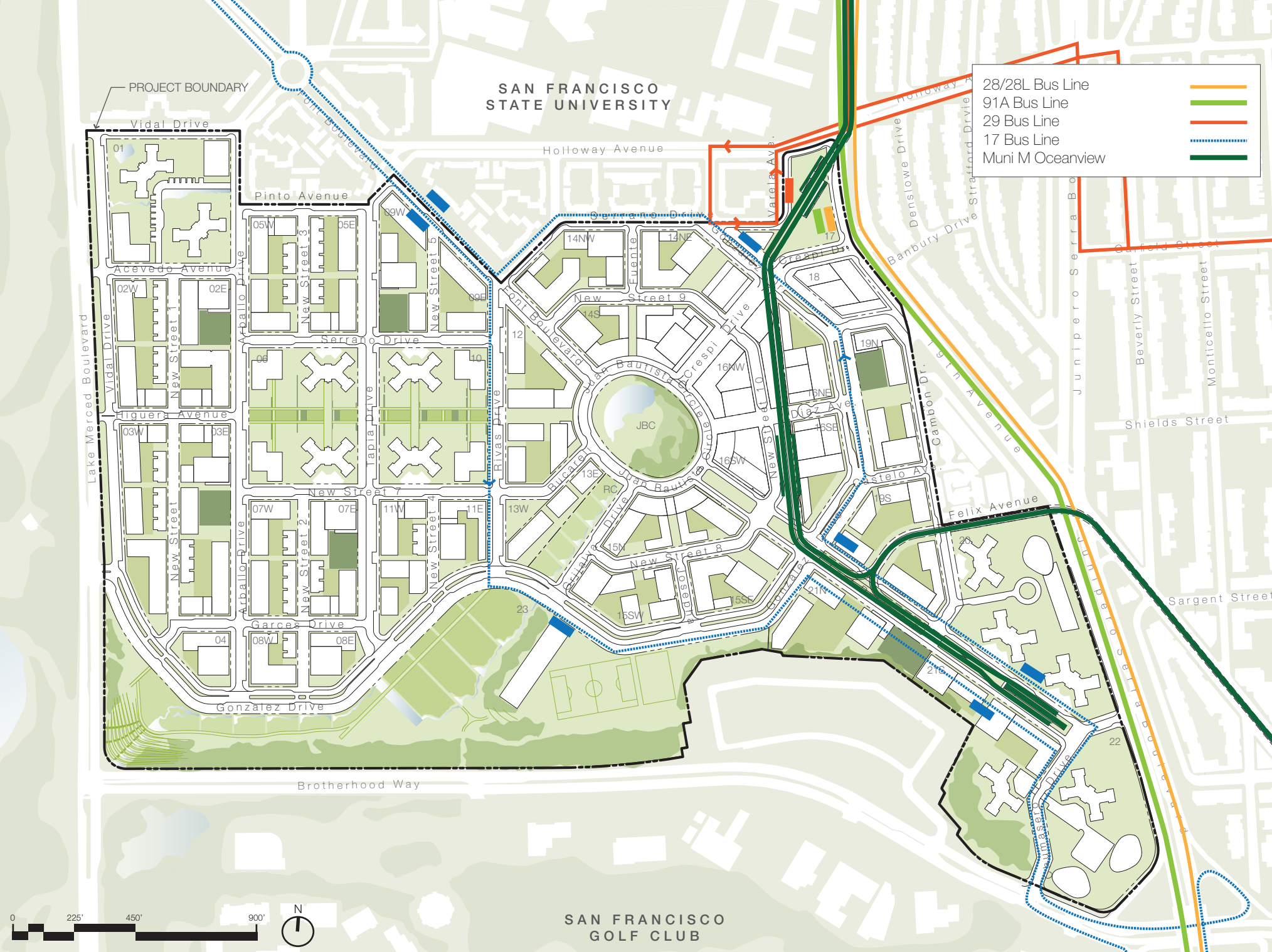


FIGURE 11

service continuing south on Font Boulevard and terminating at Chumasero Drive, and approximately half the service exiting Parkmerced along Felix Avenue and returning to the current alignment at 19th Avenue / Junipero Serra Boulevard;

- A new end-of-the line terminal station would be provided at the intersection of Font Boulevard / Chumasero Drive; and
- Transit signal priority would be established for all signalized intersections within Parkmerced where the trains interact with vehicles and pedestrians.

This proposed reconfiguration of the M-Ocean View line would include one relocated station and two new stations. Combined, these three stations would be located within a convenient walking distance (less than 10 minutes) of all Parkmerced residents.

- The first station would be relocated from the median of 19th Avenue to a new station located within a transit plaza at the southwest corner of 19th Avenue / Holloway Avenue. Since the majority of the users of this station, SFSU students and Parkmerced residents, come from the western side of 19th Avenue, this relocation would substantially improve pedestrian conditions by reducing walking distances and conflicts with crossing 19th Avenue.
- A new station would be located at the heart of the neighborhood at the retail and office center. This location would allow users to fully integrate their daily shopping, services, and business needs as part of their regular commute trip without necessitating use of a private automobile.
- A new station and new terminal facility would be constructed at the southeast corner of the site where a grouping of mid-rise towers are proposed. The terminal facility would include required functions for Muni operations (such as operator facilities). The end of the line for the tracks would also be designed to facilitate the potential extension of service to the Daly City BART Station (as noted later in this chapter). Parkmerced will work with the SFCTA, Caltrans, and other local and regional

organizations to coordinate this potential project and other related area-wide transportation planning efforts.

In addition, the current M-Ocean View light rail stop at the southeast corner of 19th Avenue / Junipero Serra Boulevard are proposed to be enhanced by new high-visibility crosswalks, revised platform locations, and dedicated boarding and alighting areas.

It should be noted that the proposed realignment of the M-Ocean View light rail line (including the new track, new stations, and modifications to existing facilities) will require the approval of Caltrans, SFMTA, SFCTA, and CPUC. Parkmerced will conduct the required design, approval and construction activities, under supervision and guidance from the appropriate city, county and state agencies.

It should also be noted that SFMTA, as part of their TEP, has proposed to reconfigure the light rail service in this portion of the City, with the M-Ocean View line terminating at the SFSU/Parkmerced station at 19th Avenue / Holloway Avenue and the J-Church line extending from its current terminus at Balboa Park to cover the southern portion of the M-Ocean View line. This proposed rerouting of the M-Ocean View line detailed in this Plan would not preclude future changes to the M-Ocean View and J-Church operating plans.

Except for the relocated station at 19th Avenue / Holloway Avenue, no other stations or stops for the M-Ocean View would be eliminated. As a result, there would be no loss in transit accessibility by the adjacent residential neighborhoods. In fact, access for these neighborhoods would be improved with the project, as residents and visitors would be able to take advantage of the convenient retail, services and professional offices provided within Parkmerced.

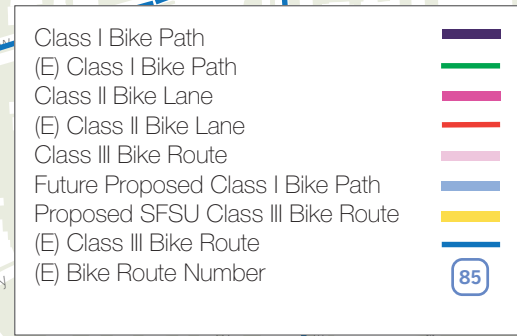
This transit approach is the foundation for the land use and urban design plan of Parkmerced. The higher density residential and commercial uses will be clustered around these new stations, thereby creating robust nodes of activity and place-making. Additional support services will also be provided at these stations to further enhance the

walkability and bikeability for Parkmerced residents, visitors and workers. Further details of these programs are included in Chapter 4.

#### Bus elements

The following are the proposed modifications to the Muni bus lines that operate in the vicinity of Parkmerced which were previously shown in Figure 11. In general, these changes would help improve access to the lines, allow for improved transfers between lines, or are necessitated by the reconfiguration of the roadway network within Parkmerced. The routes are substantially consistent with SFMTA's proposed TEP routes, except where altered to conform to the proposed improvements to the Parkmerced street grid or to better serve new Parkmerced land uses. Reconfiguration of the lines would help reduce delays in service at some key problem locations, which should help Muni improve service reliability and efficiency.

- The route of the 17-Parkmerced bus line would be modified within Parkmerced to improve connections to the major centers within the neighborhood (such as the transit plaza, community center and the pre-school/day care/elementary school site). These changes would allow for increased use by Parkmerced residents, workers, and visitors, and will also strengthen the connections to the nearby residential neighborhoods to the north and south of Parkmerced.
- The 19th Avenue / Holloway Avenue stop location for the 28/28L-19th Avenue/19th Avenue Limited bus lines would be relocated from the north side of the intersection to the south side of the intersection, adjacent to the proposed new M-Ocean View station. This relocation of the bus stop would increase the ability for riders to transfer between lines, thereby increasing the functionality of the transit system.
- The 29-Sunset bus line currently travels through a portion of Parkmerced to connect between southbound 19th Avenue and eastbound Holloway Avenue. Since left-turns are not permitted at this intersection, buses need to continue on 19th Avenue past Holloway Avenue, loop around Crespi Drive, turn left onto northbound 19th Avenue, and finally turn right onto eastbound Holloway Avenue. This routing can cause delays to bus operations, as the northbound and southbound through



06.23.11 / PARKMERCED TRANSPORTATION PLAN | 31



movements on 19th Avenue often encounter congestion during peak times. Instead, the 29-Sunset would be re-routed to a loop off Holloway Avenue, where operating conditions are better than 19th Avenue. In addition, a new stop location will be provided on the west side of the proposed new M-Ocean View transit station.

It should be noted that any modifications to existing and future Muni bus routes to better serve the future Parkmerced land uses or to account for revised street patterns will be approved and implemented by SFMTA.

### 3.5 / pedestrian and bicycle circulation

One of the key goals of the Plan is to promote walking and bicycling as viable alternative modes to driving. Pedestrian and bicycle access to the new transit options (such as the M-Ocean View stations or the proposed BART shuttle) will be critical to their success. The proposed residential parking program and “car storage” concepts (as discussed in Chapter 4) will also likely increase the amount of pedestrian and bicycle activity.

The density and arrangement of land uses in the Parkmerced land use plan are designed to actively encourage the use of walking and bicycling as primary travel modes within the community. The Parkmerced land use plan is more particularly described in the *Parkmerced Design Standards + Guidelines*.

Currently, there are no designated bike routes or bicycle lanes within Parkmerced. Nearby off-site bicycle facilities include a dedicated off-street bike path along the west side of Lake Merced Boulevard and dedicated bike lanes on Holloway Avenue west of 19th Avenue. Bike routes are designated on Holloway Avenue east of 19th Avenue, on Font Boulevard north of Holloway Avenue, on Lake Merced Boulevard, and on sections of Beverly Street, 19th Avenue and Saint Charles Avenue connecting to the Daly City BART Station. In addition, as part of the new *San Francisco Bicycle Plan*, new bicycle lanes and bicycle routes are proposed on sections of Holloway Avenue, Lake Merced Boulevard and Portola Drive, and long-term improvements are being considered for Holloway Avenue and Brotherhood Way, which would facilitate bicycle access to and from Parkmerced.

The proposed Parkmerced bicycle and pedestrian route networks are illustrated in **Figure 12**. The design requirements for each street typology are included in the *Parkmerced Design Standards and Guidelines*. The following are the general design principals used to develop the specific proposed improvements contained in the document.

#### Street network elements

- Streets have been designed for slow vehicular travel, creating an environment that is attractive and safe for walking and bicycling;
- Designated trucks routes have been developed to minimize oversized vehicles on neighborhood streets and the extent to which oversized vehicles cross pedestrian and bicycle pathways;
- Curb cuts and driveways have been minimized to improve pedestrian and cyclist safety and to reduce the potential for conflicts with vehicles; and
- Traffic calming devices have been designed throughout the site, including curb extensions, raised crosswalks, tight corner radii, street trees, narrow lanes, and short blocks.

#### Bicycle elements

- A complete bike route system has been introduced that fully serves the neighborhood and is a natural extension of and integrated into the City’s and SFSU’s network;
- New dedicated off-street bike paths, consistent with the City’s current guidelines and the *San Francisco Bicycle Plan*, have been included along Gonzalez Drive and Tapia Drive (additional bike lanes on the southern portion of Font Boulevard and Chumasero Drive are being explored with SFMTA);
- Space for a bike shop has been reserved with Block 17 (Transit Plaza), which could include bicycle sales and drop-off repairs;
- Throughout the neighborhood, bikeshare stations offering bikes on loan shall be provided (additional details and limitations regarding the proposed bikeshare program are included in Chapter 4); and
- Safe and secure off-street bicycle parking shall be provided for each residential building and within the retail center (also described in Chapter 4).



### Pedestrian elements

- All new traffic signals have been designed to provide pedestrian signals and allow for adequate crossing times for all pedestrians;
- Intersections surrounding the site are proposed to be modified to provide crosswalks and design treatments to improve pedestrian conditions;
- All residences shall be within a two-minute walk of one of the neighborhood centers, which will offer retail, business centers, carsharing hubs, and bike stations; within a five-minute walk of a shuttle or bus stop; and within a ten-minute walk of a Muni light rail station;
- Off-street pedestrian paths (paseos) have been included to connect through certain blocks surrounding Juan Bautista Circle, and to form east-west axes through certain western blocks of Parkmerced to provide direct routes to the community's mixed-use center;
- A pedestrian path has been included to provide access through the southern portion of the site, starting from Juan Bautista Circle, connecting through the open space on the south, and ending at the Lake Merced Boulevard / Brotherhood Way intersection; and
- A pedestrian path has been included from the Community Center southward to Brotherhood Way to provide access between Parkmerced and the schools and institutions along Brotherhood Way.

### 3.6 / possible long-term projects

In addition to these transportation network improvements proposed as part of the Parkmerced project, several “big picture” roadway and transit improvements have been identified, which may be implemented by others. These projects, although not currently funded or included in any published plans or programs, could substantially improve future conditions in the area and along the 19th Avenue corridor. Parkmerced shall continue to coordinate with the appropriate city, county and state agencies regarding future implementation of these projects:

- Traffic calming on Brotherhood Way;
- Improving 19th Avenue operations on the intersecting east-west streets, such as Ocean Avenue, Eucalyptus Drive and Winston Drive, through configuration improvements and signal upgrades;
- Providing real-time signal coordination with advanced controllers along 19th Avenue and Junipero Serra Boulevard to increase the capacity of the roadway;
- Creating signal pre-emption or signal priority for buses and trains along 19th Avenue;
- Installation of transit-only or High Occupancy/Toll (HOT) lanes on 19th Avenue and Junipero Serra Boulevard;
- Reconfiguring the I-280 / Junipero Serra Boulevard / Alemany Boulevard interchange to eliminate congestion points;
- Upgrading stops and platforms for the M-Ocean View to facilitate passenger boarding and alighting;
- Installing traffic signals along the mixed-flow segments of the M-Ocean View line, with transit signal pre-emption or signal priority;
- Shifting the light rail tracks from the median to the west side of the 19th Avenue, with new west side stations;
- Grade separation of light rail crossings;
- Extension of the M-Ocean View line to the Daly City BART Station; and

- A direct connection from I-280 southbound to Junipero Serra Boulevard.

Parkmerced is committed to working with city, county and state agencies to promote, refine and develop these concepts, as they would address congestion in the 19th Avenue corridor, improve transit access and operations, and enhance pedestrian and bicycle conditions. It should be noted that none of the proposed improvements in and around Parkmerced (each as described in this Plan) would preclude these from being implemented.

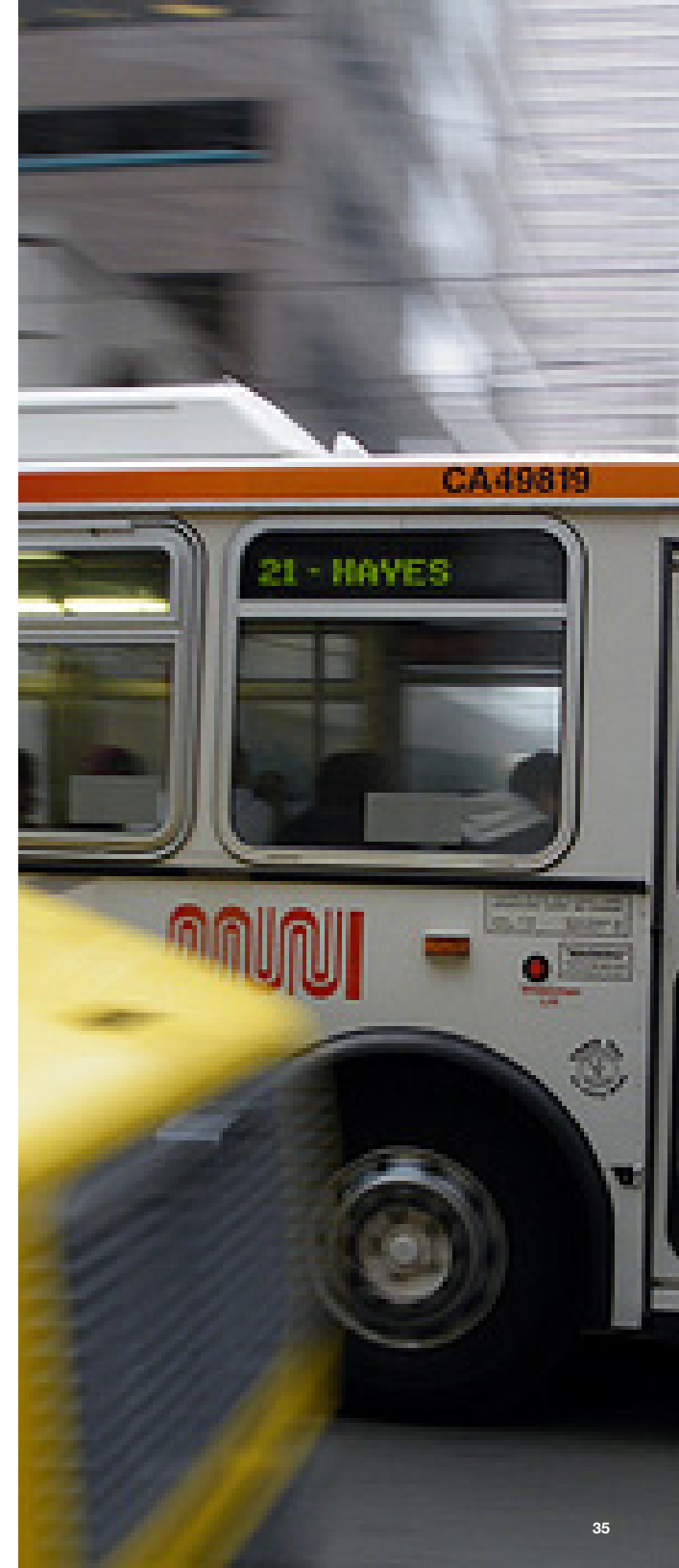
# proposed transportation program and policies

Strategies

36

04

Currently, the majority of automobile trips in the southwest quadrant of San Francisco are focused on Highway 1, which results in considerable congestion at peak times and substantial delays to vehicle and transit operations. To minimize the new auto trips generated by the proposed land use plan, thereby reducing the contribution to the local and regional roadway network, the Plan targets a substantial redistribution of trips from auto to transit and non-motorized modes. The following sections outline the specific policies and programs designed to encourage the use of modes other than the private automobile. Parkmerced is committed to implementing the proposed transportation programs and policies, in accordance with the Development Agreement between Parkmerced Investors LLC and the City and County of San Francisco (Development Agreement) and as warranted by project-generated demand. An overview of this phasing plan is provided in Chapter 5.





## 4.1 / strategies

### 4.1.1 Maximize internal trip capture

Aside from San Francisco State University and Stonestown Galleria, which are located to the north, and Westlake Shopping Center approximately one mile to the south, Parkmerced is not adjacent to existing employment, shopping and activity centers, making travel to them on foot or by bike impractical. The establishment of neighborhood-serving retail and office uses to meet the needs of residents will greatly reduce demand for auto and transit trips to destinations external to the Parkmerced. New jobs will be provided at Parkmerced as well, and these will have the potential to capture trips within the site. Since internally-captured trips would be of shorter length, they would mostly shift from auto to non-auto modes.

Internal trip capture will be maximized by the following strategies:

- The land use program shall include uses and services required for daily activities, such as a grocery store and a bank. As such, non-work trips outside the site will be lessened. Commercial and retail uses have been located in a manner that minimizes the need for auto trips within the neighborhood;
- Site design elements such as the configuration of buildings and streets shall be planned with considerations to sun and wind to provide a better environment for pedestrians and bicyclists;
- A shuttle system, as described below, shall be implemented to provide convenient connections between major destinations, and be located a short walk from every resident; and,
- Opportunities for residents to work from home shall be encouraged through the presence of business centers in each neighborhood center.

### 4.1.2 Provide low-emission shuttle system

To reduce the number of auto trips taken, the project will provide two free shuttle services – one to the Daly City BART Station and the other to local shopping destinations – for Parkmerced residents and employees of the on-site commercial and service uses. In addition to connecting riders to BART and the shopping destinations, the shuttle will also provide circulation within Parkmerced and connect residents to the Mixed Use – Social Heart area of Parkmerced and the Muni lines operating on the eastern side of the project. Each shuttle will be a low-emission vehicle and will have the capacity to transport at least 25 passengers.

The Transportation Coordinator (TC) (described below) will provide a non-transferable shuttle pass to each Parkmerced resident and employee of the on-site commercial and service uses, which will allow the holder to board and ride the shuttle at no cost.

The shuttle service will be implemented upon occupancy of the first residential development phase.

#### BART Shuttle

As noted in Chapter 2, a substantial portion of Parkmerced transit trips originate or have a destination on the BART system. The majority of Parkmerced residents that take BART drive to the Daly City BART Station, as inexpensive off-street parking is provided at this location (between a \$2.00 and \$3.00 daily fee) and access by transit is relatively limited or slow (the Muni 28/28L-19th Avenue / 19th Avenue Limited serve the Daly City BART Station and the 29-Sunset and M-Ocean View serve the Balboa Park BART station, the nearest stop for each line is at 19th Avenue / Holloway Avenue).

To accommodate this demand for service, a dedicated shuttle service from Parkmerced to the Daly City BART Station shall be implemented.

The proposed routing of a Parkmerced–Daly City BART Station shuttle is shown on **Figure 13**. Shuttles would enter Parkmerced via Chumasero Drive and circulate through the neighborhood, with stops near major destinations (such as the retail center) and high-density residential areas.

The BART shuttle will operate between 6:00 AM and 10:00 PM on weekdays and between 8:00 AM and 10:00 PM on weekends and holidays.

#### Shopper Shuttle

During midday and evening periods, a “shopper shuttle” shall be provided to Stonestown Galleria and Westlake Shopping Center via Lake Merced Boulevard, as shown by the dashed red line in **Figure 13**. The shopper shuttle will operate between 9:00 AM and 4:30 PM, and between 7:00 PM and 10:00 PM, on weekdays, and between 10:00 AM and 9:00 PM on weekends and holidays.

#### Service Levels

Demand for shuttle services is expected to increase as additional development phases are completed. To accommodate increasing demand, Parkmerced will reduce headways and/or utilize larger capacity shuttles as additional residential development phases are occupied.

**Tables 1 and 2** set forth estimated headways based on shuttle size for each shuttle service. Service for the BART shuttle and the shopper shuttle will be provided at the estimated headways set forth below that corresponds to the shuttle passenger capacity and the number of net-new units occupied. If the Parkmerced shuttle fleet is comprised of more than one type of shuttle, the average capacity of the fleet will determine the applicable estimated headway.

To ensure that shuttle service levels reflect demand, the TDM committee (described below) will evaluate

ridership rates at least once per year. If the TDM committee determines, based on actual ridership rates, that the estimated headways exceed those necessitated by demand, the TDM committee may recommend to Parkmerced that headways be increased and Parkmerced may so increase. In no event, however, shall headways be increased by more than 25 percent over the applicable Estimated Headways. Prior to the time the TDM committee is formed, Parkmerced shall perform the obligations set forth in this chapter.

**TABLE 1: Estimated Headways for BART Shuttle**

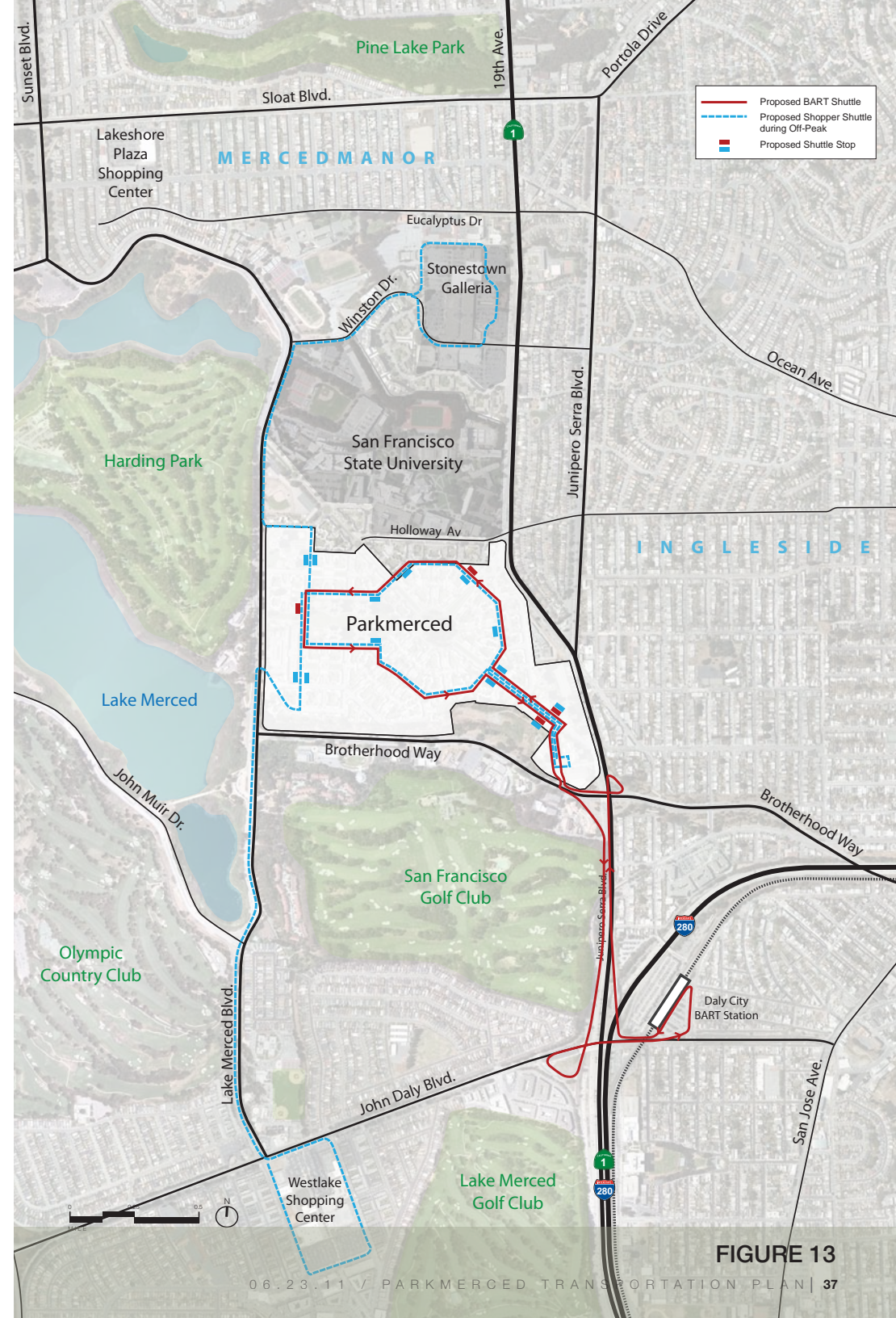
Shuttle Vehicle Size	Between 1 and 479PM peak hour inbound vehicle trips	Between 480 and 1,014PM peak hour inbound vehicle trip	Between 1,015 and 1,623PM peak hour inbound vehicle trips	Between 1,624 and 2,483PM peak hour inbound vehicle trips	Between 2,484 and 3,101PM peak hour inbound vehicle trips
25-passenger shuttle	7 min.	5 min.	5 min.	4 min.	4 min.
30-passenger shuttle	8 min.	7 min.	6 min.	5 min.	5 min.
35-passenger shuttle	10 min.	8 min.	7 min.	6 min.	5 min.
40-passenger shuttle	11 min.	9 min.	8 min.	7 min.	6 min.
45-passenger shuttle	12 min.	10 min.	9 min.	8 min.	7 min.
50-passenger shuttle	14 min.	11 min.	10 min.	9 min.	8 min.

Source: AECOM – March 2010

**TABLE 2: Estimated Headways for Shopper Shuttle**

Shuttle Vehicle Size	Between 1 and 479PM peak hour inbound vehicle trips	Between 480 and 1,014PM peak hour inbound vehicle trip	Between 1,015 and 1,623PM peak hour inbound vehicle trips	Between 1,624 and 2,483PM peak hour inbound vehicle trips	Between 2,484 and 3,101PM peak hour inbound vehicle trips
25-passenger shuttle	20 min.	20 min.	20 min.	15 min.	15 min.
30-passenger shuttle	20 min.	20 min.	20 min.	15 min.	15 min.
35-passenger shuttle	20 min.	20 min.	20 min.	15 min.	15 min.
40-passenger shuttle	20 min.	20 min.	20 min.	15 min.	15 min.
45-passenger shuttle	20 min.	20 min.	20 min.	15 min.	15 min.
50-passenger shuttle	20 min.	20 min.	20 min.	15 min.	15 min.

Source: AECOM – March 2010



**FIGURE 13**



#### 4.1.3 Maximize usefulness of walking and bicycling

Parkmerced will be served by a fine-grained network of pedestrian and bicycle routes, and parking and amenities for cyclists will be provided. The following measures are proposed to encourage use of the pedestrian and bicycle network:

- A wayfinding signage program shall be prepared to guide residents and visitors along routes and paths;
- Maps highlighting all pedestrian and bicycle routes and bicycle parking spaces shall be prepared by the TC, who will ensure that they are included on the Parkmerced website and posted at transit kiosks;
- Safe and secure bicycle parking shall be provided within each residential, retail and commercial building, and supplemental on-street bicycle parking racks shall be provided near major destinations (as discussed later in Section 4.1.7);
- Efforts to attract a bicycle shop tenant providing repair services and bike-related retail to the location illustrated in **Figure 14** shall be made;
- As discussed in Section 4.1.6, efforts shall be made to contract with a bikeshare company to install and operate bikeshare stations at the locations shown in **Figure 14**, or at other locations deemed appropriate by Parkmerced and the bikeshare company; and,
- Streets shall be designed as required by the *Parkmerced Design Standards and Guidelines* to maximize sunlight and mitigate wind for improved pedestrian and bicycle comfort.

#### 4.1.4 Improve transit services

The Plan seeks to maximize the effectiveness and convenience of transit service to, from and within the project site. In addition to the improved transit services described previously, the following elements will support and encourage transit ridership:

- If the proposed M-Ocean View light rail line is re-routed through Parkmerced, transit plazas shall be created around the relocated SFSU / Parkmerced station and at the retail center station and include rider services and amenities, such as maps, wayfinding devices, and interactive informational and transfer kiosks. SFMTA will be encouraged to install ticket/pass sales machines;
- Infrastructure to support SFMTA's real-time transit arrival information (using NextBus or other similar technology) and passenger shelters shall be provided at all bus stops and at the Muni light rail stations;
- All bus stops shall be clearly marked on the pavement of all newly built or reconstructed streets, and will include either bus bulbs or bus pull-outs as requested by the transit operators;
- Passenger drop-off/pick-up areas shall be established at the transit plaza to be located on Block 17 at the corner of 19th Avenue and Holloway Avenue; and,
- Transit maps, schedules, opportunities to purchase passes on-line, real-time arrival information and internet links (each to the extent such service or information is provided by the relevant transit agency) shall be provided on the Parkmerced website for all transit operators serving Parkmerced.

The current SFMTA Fast Pass does not include travel to or from the Daly City BART Station. As such, riders at this station need to purchase individual BART tickets. Expansion of the Fast Pass coverage to include Daly City BART Station shall be explored by Parkmerced with the appropriate transit agencies.

#### 4.1.5 Implement transportation demand management plan

An effective Transportation Demand Management (TDM) plan reduces the amount of auto use and encourages residents, employees and visitors to use alternative modes of travel, such as transit, walking

and bicycling. In addition, a TDM plan provides measures to reduce the demand for travel by all modes during peak times.

Given the phased development of Parkmerced, elements of the TDM plan will be introduced as additional dwelling units are occupied, in accordance with the Development Agreement Phasing Plan described in Chapter 5.

The TDM Plan for Parkmerced is consistent with the policies of the various City agencies, and works seamlessly with similar programs at neighboring San Francisco State University. The TDM Plan targets residents, employees and visitors, and includes implementation of the strategies described in the following sections. In addition, the TDM Plan relies upon parking policies and programs, which are described in more detail in Section 4.1.8.

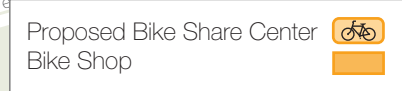
#### Transportation coordinator

An on-site Transportation Coordinator (TC) shall be employed, whose job will be to educate residents, employers, employees and visitors about the range of transportation alternatives available to them.

The TC shall implement and administer the various TDM Plan elements described below, and shall coordinate with the City and other neighboring entities as required to implement the TDM Plan. The TC will be in regular communication with the transit agencies and will coordinate with them to monitor transit usage and will recommend transit service changes where appropriate to meet demand.

All carpool/vanpool, carshare, transit and bicycle users will be requested to register with the TC to allow for easier implementation of TDM Plan elements, such as the sale of subsidized transit passes. This registration could be done through the Parkmerced website or at the TC's office, and will require proof of residence or employment at Parkmerced.





06.23.11 / PARKMERCED TRANSPORTATION PLAN | 39

The TC will conduct a personalized consultation with all new residents and employees, advising them of the various transportation alternatives available for the trips that they make. Custom trip planning, maps and schedules will be provided. The TC will continue to be available for subsequent consultations and will keep residents, employees and employers apprised of non-auto travel incentives or changes to non-auto travel options. In addition, the TC's services will also be available to visitors and groups holding large events on the project site.

The TC will institute a TDM committee composed of the TC, three residents, one retail/commercial business owner or employee, one representative of SFMTA and one representative of the Planning Department. The resident and business owner/employee members of the committee will be elected. The representatives from SFMTA and the Planning Department will be appointed by the Director of the SFMTA and the Director of the Planning Department, respectively. The TC will be the chairperson of the committee. All actions of the committee will require a majority vote of the committee. The committee will participate in setting TDM goals and developing programs, giving residents and employees a greater stake in its success. The TDM committee shall establish performance goals upon occupancy of each phase of development. Goals might include a decrease in single-occupant vehicle mode split or a reduction in peak hour traffic volumes at driveways. Challenges between different areas of Parkmerced could be established, with prizes for the lowest parking demand, auto use or other TDM metrics.

Each year, the TC will be responsible for conducting surveys of residents, employees and visitors to assess the current mode split (percentage of trips made by driving alone, carpooling, riding transit, walking or bicycling) and gather demographic information (such as location of work and travel time to and from work). This information will be used to improve the effectiveness of the TDM programs. All annual surveys and assessments will be submitted to the City and

reviewed by the City's representative on the TDM committee.

Additional responsibilities of the TC shall include the following:

- Conducting annual shuttle ridership surveys, and working with the TDM committee to adjust service levels to meet demand, if necessary;
- Conducting annual assessments to determine the market price for parking, and make adjustments accordingly;
- Conducting (in conjunction with the operators) annual surveys of carshare and bikeshare use to determine the need for additional spaces and equipment;
- Managing the carpooling/vanpooling database and Guaranteed Ride Home (described below) program;
- Coordinating the offerings of carsharing organizations on the project site;
- Monitoring bikeshare station usage and reporting maintenance issues; and
- Developing and maintaining a master schedule for commercial deliveries.

The TC's salary shall be paid jointly by the landlord(s) of the rental residential units, the landlord(s) of the commercial/retail spaces, and the homeowners associations governing the for-sale residential units.

#### Online transportation information

The TC shall also be responsible for operating and maintaining transportation-related data and real-time transit information on the Parkmerced transportation website, which could include:

- Transit route maps, schedules and fees;
- Bicycle route maps and bikeshare station locations;
- Real-time carshare availability; and,
- Real-time transit arrival information.

#### Commercial use TDM programs

Transit usage and carpools/vanpools need to be supported on both ends of a trip to be successful. There is a higher incentive to use transit if free parking is not provided at the workplace. The TC will work to coordinate with major employers of Parkmerced residents in San Francisco and the Peninsula to aide in the development of employer-based TDM measures. For example, employers could offer alternative work hours or telecommuting programs and Parkmerced housing could be marketed to new employees at major employers that can be conveniently reached from Parkmerced by transit.

In addition, the TDM Plan includes programs designed to assist the commercial uses on the site to improve the use of transit and facilitate walking and bicycling by their employees. All employers within Parkmerced will be required to participate in TDM programs, and the TC will coordinate with employers to monitor progress and provide support. Each employer will be required to designate a single contact to work with the TC.

In addition, each building tenant or employer with over 15,000 gross square feet of space shall be required to provide or participate in the following, in coordination with the TC:

- Provide carpool and vanpool ridematching services, with participation in the Guaranteed Ride Home program for registered carpool and vanpool riders in limited emergency situations (as described below);
- Provide access to employees to the Parkmerced transportation website to obtain information regarding transit routes and schedules, carpooling and vanpooling, and bicycle routes and facilities;
- Provide alternative commute subsidies (such as the Commuter Check program) to employees using transit or alternative modes;
- Provide opportunities to employees to purchase commuter checks, Muni/BART Fast Passes and Clipper cards (or other current pass type);
- Provide information to customers on alternative

travel options (such as directions to the business using transit) on the business's website (if one is provided);

- Permit compressed work week and flextime to employees, permitting employees to adjust their work schedule to reduce vehicle trips to the worksite, where compatible with the employer or tenant's business model; and,
- Provide telecommuting options where compatible with the employer or tenant's business model.

The TC will coordinate with employers to ensure that employees are kept fully informed of the available programs and promotions, and will be available to assist with new employee orientation.

#### Carpool / Vanpool elements

Carpool and vanpool ridematching services will be offered through the TDM program, and designated spaces in parking facilities will be provided free to vanpool vehicles. Carpool and vanpool measures shall include the following:

- A database of carpool/vanpool participants will be collected and maintained by the TC;
- A carpool matching feature will be provided on the Parkmerced website and managed by the TC;
- Vehicles will be provided for vanpools to be formed by residents with a maximum of 10 vehicles. Trip destinations and resident participation will be coordinated and approved by the TC.;
- Vanpools to area schools will be established with a maximum of 6 vans, with trip destinations and resident participation approved by the TC.;
- Casual carpool pick-up points will be designated; and,
- Guaranteed Ride Home Program: Registered carpoolers and vanpoolers will be guaranteed a ride home (via reimbursement of cab fare from their place of employment to Parkmerced) in limited emergency situations and up to two times per calendar year, subject to approval by the TC.

#### Subsidized Transit Pass Program

To encourage the use of transit by residents for their daily trips, residents will be able to purchase monthly SFMTA transit passes from the TC. For residents of rental units, one transit pass per household will be subsidized in the amount of \$20 by the landlord (acting through the TC). For residents of ownership units, the household's homeowners association (acting through the TC) will provide the \$20 subsidy.

#### Additional elements and implementation strategies

Additional TDM measures shall include the following:

- Work with internet providers to establish reduced cost (through agreements with providers) internet access to encourage telecommuting and online shopping;
- Establish business centers equipped with computers capable of videoconferencing and printers, in each neighborhood center;
- Schedule deliveries to the grocery store and other high-volume commercial uses to avoid peak commute periods; retailers would be encouraged to receive deliveries on behalf of residents to encourage and facilitate telecommuting;
- Lease space to a car rental company (at commercially reasonable rates), if any such company wishes to establish a location at Parkmerced,

which would cater to long-term car rental needs or to those who do not have a carshare membership; and

- If the City establishes a compatible parking card, offer a "smart card" that allows users to pay for parking meters or borrow bikeshare bicycles using one card.

#### 4.1.6 Provide carshare and bikeshare programs

##### Carshare elements

Carsharing provides an effective incentive for participants to forego car ownership and rely on transit as a primary mode of travel because they know that a car is readily available when they need one. The growth and success of these programs in the Bay Area and in other urban areas throughout the country has shown their effectiveness in reducing auto dependency. Members pay based on how much they drive, thus reducing the fixed costs associated with private automobile ownership. Typically, carshare members are able to reserve a car by phone or online on an as-needed basis, and pick-up and drop-off the vehicle at each established carshare hub.

The TC will work with local carsharing organizations to establish a network of carshare vehicles parked in hubs located throughout Parkmerced. The carshare

**TABLE 3: Required Carshare Parking Spaces (per *San Francisco Planning Code*)**

Land Use	Required Carshare Spaces
Residential	0 – 49 units = 0 carshare spaces
	50 – 200 units = 1 carshare space
	201 or more units = 2 carshare spaces, plus 1 carshare space for every 200 units over 200 units
Non-Residential	0 – 24 parking spaces = 0 carshare spaces
	25 – 49 parking spaces = 1 carshare space
	50 or more parking spaces = 1 carshare space, plus 1 carshare space for every 50 parking spaces over 50 parking spaces

Source: AECOM – March 2010





**FIGURE 15**

operators will determine the appropriate number and distribution of cars to be located at each location. In general, the carshare facilities have limited physical infrastructure and therefore can be modified as needed to meet changes in future demand. It is anticipated that these hubs will be centralized at gathering areas, and therefore will serve multiple buildings and uses (accommodating between 5 and 15 vehicles at each location). **Figure 15** identifies the proposed locations of the ten carshare hubs.

Section 166 of the *San Francisco Planning Code* (as presented below in **Table 3**) lists the requirements for the provision of carshare parking spaces based on the number of residential units (for residential uses) and the number of off-street automobile parking spaces (for commercial uses), which Parkmerced is committed to meeting at each phase of development. In addition, additional carshare spaces will be provided if warranted by demand (as determined by the TC). In addition, in the event that the City at a later date adopts car sharing requirements that require a greater number of carshare spaces than shown in the table below, that later requirement shall apply to all new construction at Parkmerced.

Proposed carshare measures shall include the following:

- The TC will encourage carshare providers to offer reduced membership fees or incentives for residents and employees;
- Long-term contracts with carshare operators will be established to ensure continuity and reduce costs;
- The TC will encourage carshare providers to offer reduced fees for long-term carshare use. This would reduce the need for private vehicle ownership for vacations or weekend trips;
- The availability of carsharing and information on the various carshare operators will be included in

all rental and leasing information and in real-time on the Parkmerced website (to the extent such information is provided on the carshare operators' websites); and

- Carshare hub locations will be clearly identified by directional signage.

#### Bikeshare elements

Similar to carsharing, bikesharing (also referred to as "bicycle libraries") is a program that allows users to rent a bicycle for a given period of time. Bicycles are "checked out" at one station and returned at any other station within the system. Members pay based on the length of time they use the bicycle, thus reducing the costs associated with personal bicycle ownership. Typically, bikeshare members are able to identify the location of the nearest bicycle by phone or online.

With stations located all over Parkmerced, these bicycles are meant to be used for short time periods

only, and checked in and checked out at the start and end of each trip. Bikeshare programs are currently being implemented in the Bay Area and in other urban areas throughout the country, in Canada and in Europe, and have been gaining popularity in providing non-bicycle owners the opportunity to use bicycling for work, shopping or recreation trips.

Parkmerced will work to attract a bikeshare company to install and operate bikeshare stations throughout Parkmerced. (Although Parkmerced may contract with an independent operator, efforts will be made to coordinate with City-sponsored bikeshare operators or programs, if any.) It is anticipated that these will be a series of small facilities (accommodating up to five bicycles at most locations), with larger stations (accommodating up to 10 bicycles) provided at the transit stations and the retail center. Figure 14 identifies the proposed locations of the 14 bikeshare centers, however alternate locations may be used if deemed appropriate by Parkmerced and the bikeshare operator.

**TABLE 4: Proposed Minimum Off-Street Bicycle Parking Supply**

Land Use	Minimum Bicycle Parking Rates
Residential	1 space per 2 units
Grocery	1 space per 2,000 gsf
Retail / Office / Professional Services	0-10,000 gsf = 2 spaces 10,001 - 20,000 gsf = 4 spaces 20,001 - 40,000 gsf = 6 spaces > 40,000 gsf = 12 spaces
School	1 space per 4,000 gsf
Fitness / Community Center	1 space per 4,000 gsf

Source: AECOM – March 2010

Notes: gsf = gross square feet; bicycle parking for the newly-constructed residential units only (existing units currently have bicycle parking facilities).

The bikeshare operator will determine the appropriate number and distribution of bicycles to be located at each location. Typically, bikeshare stations are modular, and can be expanded to provide additional bicycle parking spaces. In addition, the bikeshare operator will be responsible for redistributing the bicycles throughout Parkmerced on a daily basis, or as needed based on parking locations.

Proposed carshare measures shall include the following:

- The TC will encourage the bikeshare operator to offer:
  - Reduced membership fees or incentives for residents and employees; and
  - Separate fees for residents and employees at Parkmerced versus visitors;
- Where feasible, the TC shall establish a long-term contract with the bicycle operator in order to ensure continuity of service and minimize costs to bike-share users;
- The availability of bike sharing and information on the various bikeshare operators will be included in all rental and leasing information and in real-time on the Parkmerced website (to the extent such information is available on the bikeshare operators' websites);
- Bikeshare center locations will be clearly identified by directional signage; and,
- At full buildout of Parkmerced, a guaranteed minimum number of bicycles and bikeshare spaces will be provided (80 bicycles), with more to be added as warranted by demand as determined by the bike-share operator.

#### 4.1.7 Improve bicycle facilities

To encourage the use of the bicycle as an everyday means of transportation, off-street bike parking will be incorporated in the renovation of existing buildings and included into new construction. Bicycle parking areas will be located on the ground floors of buildings,

close to activity to provide convenience and increase security.

The required off-street bicycle parking supply for the various new land uses proposed within Parkmerced is presented in **Table 4**, which meet or exceed the requirements listed in Section 155 of the *San Francisco Planning Code* and is consistent with the policy modifications proposed as part of the *San Francisco Bicycle Plan*. In the event that the City at a later date adopts bicycle parking requirements that require a greater number or different type of bicycle parking spaces than shown in the table below, those later requirements shall apply to all new construction at Parkmerced. It should be noted that for the retail and office uses, the amount of bicycle parking spaces to be provided will be based on the total square footage of the individual building, and not based on the size of individual tenants. Also, all existing residential units that will be retained currently provide bicycle parking; as such, no additional facilities for the retained residential buildings are required as part of this Plan.

A combination of Class I and Class II spaces should be provided to meet this bicycle parking supply requirements. Class I bicycle parking facilities provide secure long-term bicycle storage by protecting the entire bicycle, including its components and accessories, against theft and inclement weather. Examples include lockers, check-in facilities, monitored bicycle parking, restricted access bicycle parking and personal storage. Class II bicycle parking facilities provide short-term bicycle parking and include bicycle racks that permit the locking of a bicycle frame and one wheel and support the bicycle in a stable position without damage to wheels, frame or components.

Class I bicycle parking is required be provided at residential buildings, and a combination of Class I and Class II parking is required to be provided at retail and professional services uses, at the school and at the fitness/community center.

Off-street bicycle parking will be augmented by on-street parking provided by racks and posts throughout Parkmerced.

#### 4.1.8 Establish automobile parking program

The parking program is designed to control the overall usage of private automobiles through pricing, limitations to supply, new technology, and effective monitoring efforts. The following sections outline some of the key elements of the parking program.

##### **Off-street residential automobile parking strategies**

Residential parking will be based on a “parking storage” concept: many residents will not use their cars every day, and thus a resident’s parking space will not necessarily be adjacent to his or her unit. This approach will help reduce the amount of “convenience driving” and encourage residents to walk, bike or take the shuttle to access local destinations. Overall, less parking will be provided in the eastern half of the site, which will have enhanced transit service and high levels of walk/bike accessibility. In addition, this will help divert traffic away from Highway 1, and raise the competitiveness of walking, biking and transit in this high density residential area relative to driving. Residents choosing to live on the east side of Parkmerced can take advantage of easy proximity to the mixed-use center and its concentration of transit service, and therefore will not need to drive as often. As shown in **Figure 17**, this goal is accomplished by generally providing two levels of basement parking under the western blocks and one level under the eastern blocks of Parkmerced.

The specific residential parking strategies shall include:

- Residential parking will be unbundled from the units (e.g., each unit will not be sold or leased with a parking space);
- Each parking space will be sold or leased separately to individual units;
- Residential parking rates will be set to fair market



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Proposed Parallel Parking  
Proposed Head-In On-Street Parking

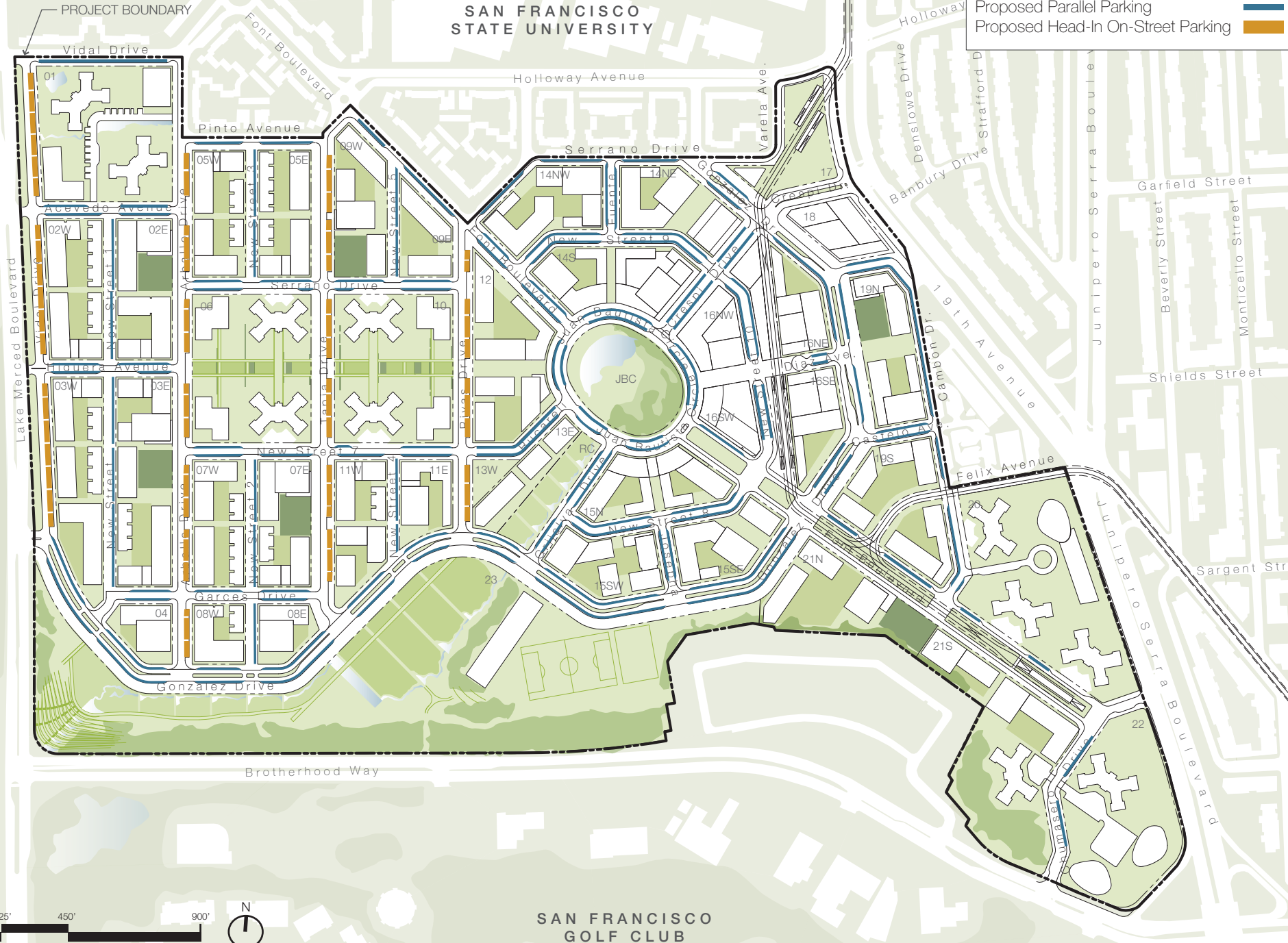


FIGURE 16

value (to be updated annually, based on surveys conducted by the TC); and

- At full build-out of Parkmerced, parking will be provided at overall maximum rate of one space per residential unit.

**Off-street commercial automobile parking strategies**

Off-street commercial parking will be provided within the retail center area to support the proposed new retail, restaurant, office, and business services spaces. The off-street facilities will be unbundled and designed to promote shared parking uses. In other words, parking spaces would not be designated for certain uses or businesses so that all commercial spaces may be used by any commercial patron, provided, however, that approximately half of the grocery store-permitted spaces will be reserved for grocery store use only during normal grocery store business hours. All commercial spaces will be paid spaces, with rates that discourage long-term use.

The specific commercial parking strategies shall include:

- All parking will be unbundled and designed to serve all commercial uses, with the exception of the spaces designed for exclusive use of the proposed grocery store (during store hours of operation only);
- Where shared parking opportunities exist (e.g., where parking supports service uses during the day and a restaurant during the evening), parking requirements will be reduced;
- All off-street parking will be paid parking, and will be charged at hourly rates;
- Parking rates will be set equivalent to fair market value (to be updated annually, based on surveys conducted by the TC) and will not be subsidized by tenants or building operators; and
- Discounts will not be allowed for “early bird” or “in-by / out-by” long-term parking, and discounted

monthly parking passes will not be offered.

**On-street automobile parking controls**

Currently, on-street parking within Parkmerced and the surrounding residential neighborhoods is generally available, except when SFSU is in session. During these times, on-street parking is nearly fully occupied, making it difficult for Parkmerced residents and visitors to find parking. To improve these conditions, future on-street parking throughout Parkmerced shall be under control of parking meters, time limits and/or residential permit districts, as follows:

- All on-street parking in the retail center and near major destinations will be paid parking. The City has indicated they will install “smart meters” that accept electronic payment methods.
- Two options for the remainder of the on-street parking spaces are proposed:
  - Improved permit districts: Parkmerced is currently under the “E” permit parking zone, which allows for one- or two-hour parking for non-residents or residents without permits. Under this option, the time limits would be eliminated or reduced to 30-minutes by the City, meaning that the vast majority of the on-street parkers would need to have permits. To accommodate visitors to Parkmerced, residents could obtain

short-duration (one or two days) visitor permit passes for their guests, and multiple guest on-street parking spaces could be provided on each block. The establishment of such passes would need to be approved by the City. Passes would be distributed by the TC. Or,

- Meters: All on-street parking spaces could be metered spaces, utilizing the City’s smart meters to help manage parking demand and to improve enforcement. If approved by the City, these smart meters could allow for reduced parking rates to be paid by Parkmerced residents and guests to help improve their parking conditions.

Parkmerced will work with the surrounding communities prior to implementing any changes to the on-street parking controls, and will work with SFMTA to improve enforcement of time limits and meter periods to ensure the proper utilization of the on-street parking spaces.

**Automobile parking supply**

The redesign of Parkmerced’s street network will result in approximately 1,680 on-street parking spaces, an increase of about 90 over the existing total. On-street parking will consist of approximately 520 “head-in” spaces, marked in orange in **Figure 16** and approximately 1,160 parallel spaces, marked in blue.

**TABLE 5: Maximum Automobile Off-Street Parking Supply at Full Build-Out**

Land Use	Maximum Automobile Parking Rates
Residential	1 space per dwelling unit
Grocery Store	1 space per 500 gsf
Retail / Office / Professional Services	1 space per 750 gsf
School	1 space per 1,000 gsf
Fitness / Community Center	1 space per 1,000 gsf

Source: AECOM – March 2010  
Notes: gsf = gross square feet

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- Below Grade Parking Zone 1
- Above & Below Grade Parking Zone 1a
- Below Grade Parking Zone 2
- Above Grade Parking Zone 2 Overlay
- Existing Parking Structure
- Preferred Garage Entry Locations
- Existing On Grade Parking

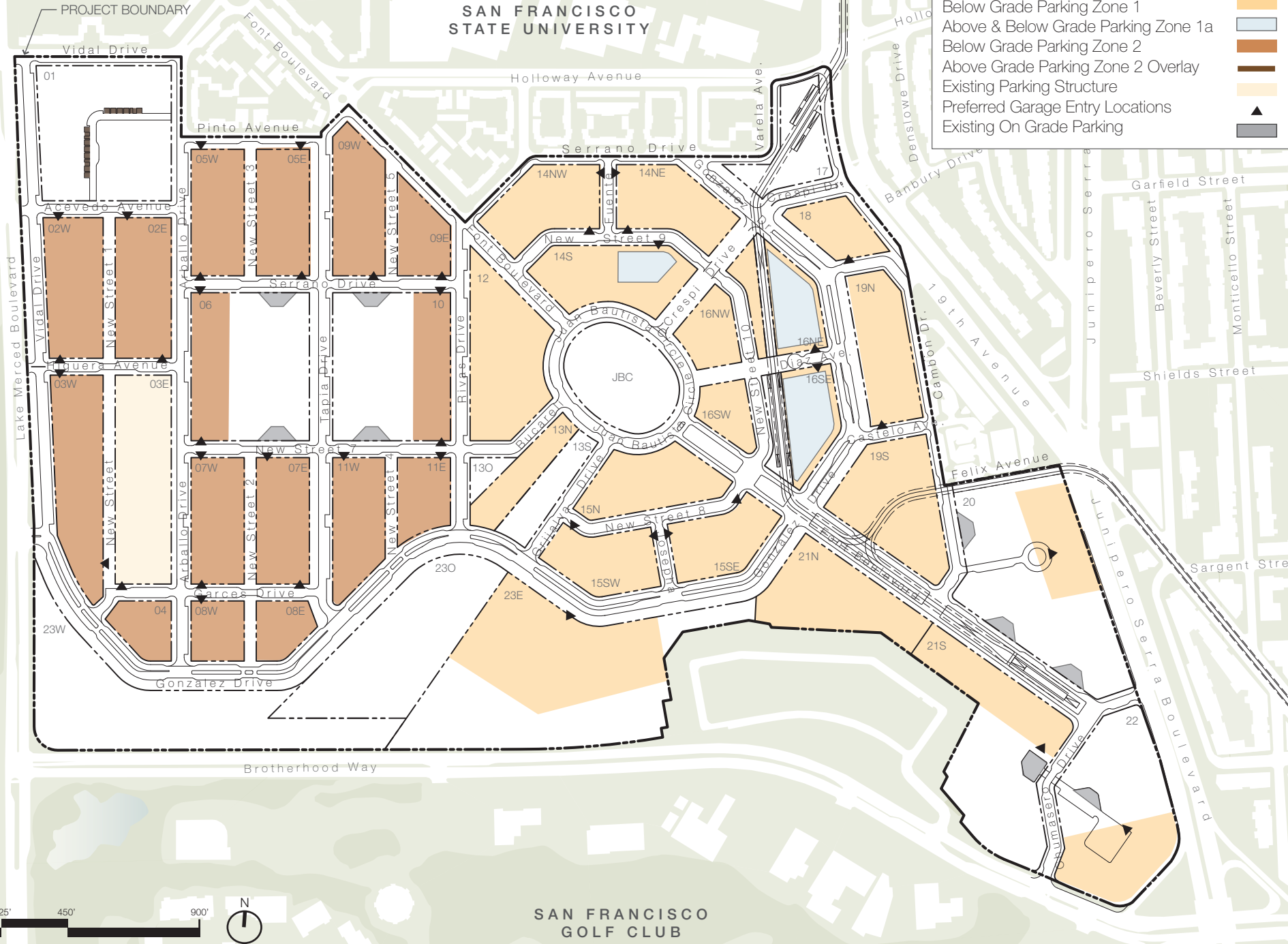


FIGURE 17



Separate off-street parking supplies shall be provided for the residential and commercial uses. **Figure 17** illustrates the proposed off-street parking locations throughout Parkmerced.

The allowable maximum off-street parking supply for the various land uses proposed within Parkmerced is presented in **Table 5**. It should be noted that for the retail and office uses, the amount of parking spaces to be provided will be based on the total square footage of the building, and not based on the size of individual tenants.

As shown in **Table 5**, a total of one off-street parking space will be permitted for each residential unit. As noted earlier, all residential parking will be unbundled from the units, so that residents have the option to lease no spaces or multiple spaces, depending on their needs. In addition, off-street parking spaces will be permitted for the non-residential uses. All parking for the retail/office uses in Parkmerced's mixed-use center will be housed in adjacent structures and basement parking levels. No off-street parking will be permitted for the smaller neighborhood-serving retail hubs that would be distributed throughout the area. In addition, off-street parking will be permitted at the school and at the fitness/community center.

Due to the phased nature of construction within Parkmerced, the concentration of parking in certain areas of the neighborhood, and the fact that each garage will serve multiple buildings, the ratio of constructed parking spaces to uses may exceed these maximums set forth in **Table 3** temporarily.

#### Electric vehicle parking

To promote the use of electric passenger vehicles, a minimum of 1 percent of off-street residential parking spaces will be constructed with electric wiring conduits to permit wiring and hook-up of an electric vehicle charger.

#### 4.1.9 Establish loading program

The loading program is designed to facilitate access required by freight vehicles (commercial delivery and moving trucks), service vehicles (regular sized commercial passenger cars, trucks and vans for service calls and deliveries) and passenger vehicles (private vehicles, vans and shuttles), while reducing the negative impacts that loading and unloading activities might have on pedestrians and cyclists. The following sections outline the key elements of the loading plan, as shown in **Figure 18**.

##### On-street loading

On-street passenger loading spaces are designed to facilitate short-term parking near building entrances to meet the needs of disabled individuals and as a general convenience for the pick-up and drop-off of residents and guests. They also allow package and other commercial deliveries to be made. Loading spaces can facilitate traffic flow by reducing the incidence of double-parking. However, even the frequent movements of vehicles in and out of loading spaces can hinder traffic flow, particularly on streets with transit service.

The following guidelines apply to the location and management of on-street loading spaces:

- Short-term loading zones shall be located as near to building entrances as possible;
- Loading spaces are discouraged on the block faces of local streets that have dedicated bike lanes;
- Loading spaces are encouraged on the block faces of local street that have perpendicular (head-in) parking; and
- Loading spaces are discouraged on streets with light rail operations; the loading needs of blocks adjacent to such streets will be accommodated on other block faces where possible.

##### Off-street loading

To provide access from the street, off-street loading spaces require curb cuts and driveways, which can be intrusive to the bicycling and pedestrian environment. In addition, the turning movements of vehicles leaving or entering the street can impede the flow of traffic, which is of particular concern with regard to transit vehicles. The following guidelines will apply to the location and design of any off-street loading spaces provided within Parkmerced:

- A maximum of one curb cut is permitted every 250 linear feet of street;
- Individual buildings are limited to one opening of up to 10 feet in width to provide access to off-street loading;
- Shared openings for parking and loading are encouraged when both are provided along the same building frontage, with a maximum width of 24 feet;
- Where possible, curb cuts and driveways providing access to off-street loading spaces will be consolidated into a single location on any block face;
- No curb cuts accessing off-street loading are permitted on streets with light rail operations or on the local streets with bike lanes, where alternative frontages are available;
- Off-street driveways to accommodate passenger loading or unloading (porte-cochères) are permitted only at high-density residential towers and may remain where currently existing;
- Individual buildings would be limited to one opening of up to 12 feet in width to provide access to off-street loading. Shared openings for parking and loading would be encouraged, with a maximum width of 24 feet; and
- Loading spaces shall be designed to serve all

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WB-40 Route

WB-50 Route

On-Street Loading

Off-Street Loading

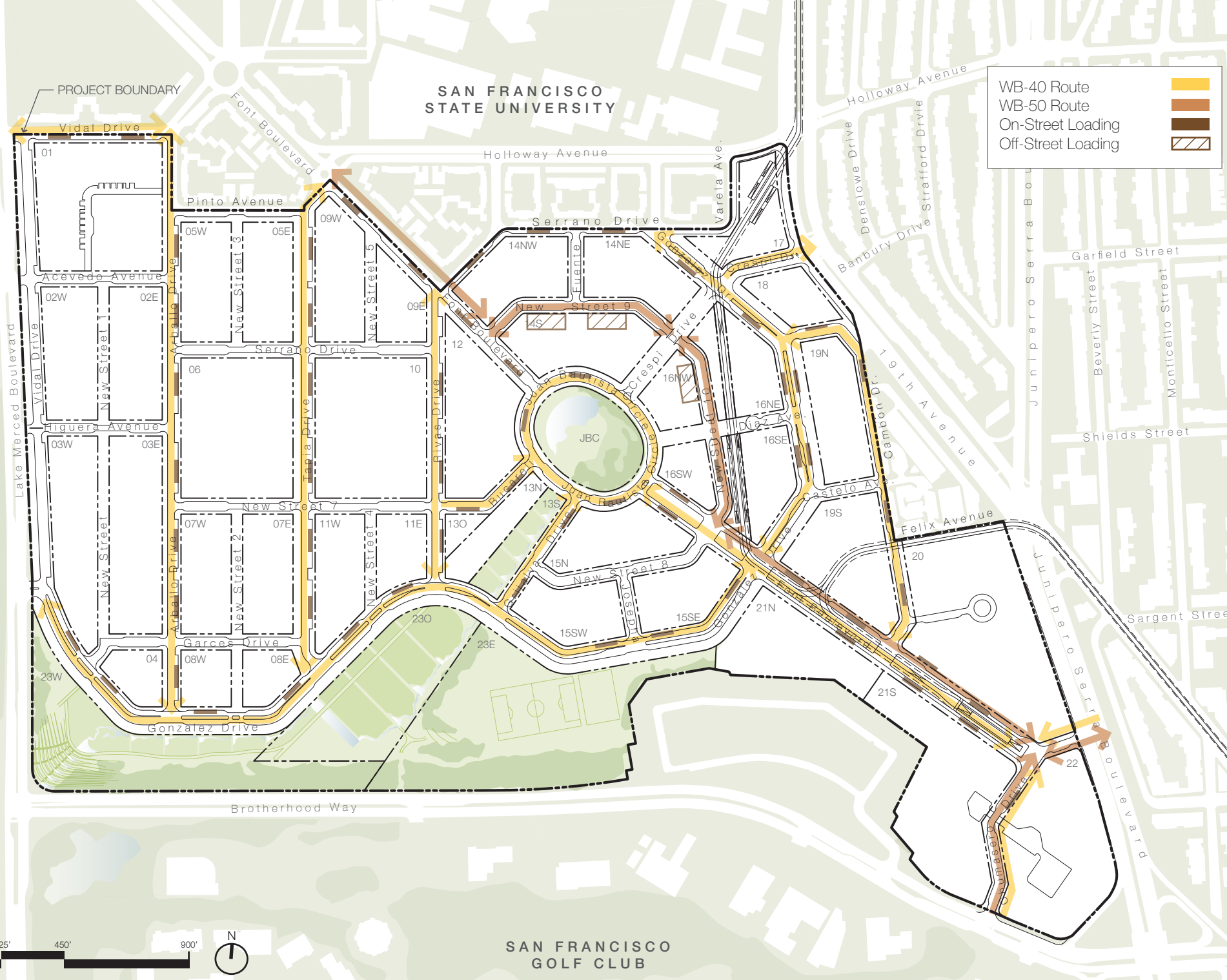


FIGURE 18

commercial land uses. Where opportunities to share loading spaces exist (e.g., loading area for the grocery store with a peak of morning deliveries and restaurants with afternoon deliveries), the off-street loading requirements will be reduced accordingly.

The required on-street and off-street loading supply for the various land uses proposed within Parkmerced is presented in **Table 6**. It should be noted that for the retail and office uses, the amount of loading spaces to be provided will be based on the total square footage of the building, and not based on the size of individual tenants.

In general, the residential buildings are not required to provide off-street loading spaces. However, to accommodate short-term loading requirements (such as for service calls), service vehicles spaces shall be included in the residential garages. As service vehicles are sized equivalent to standard passenger cars, trucks and vans, spaces may be provided where garages have a minimum ceiling height clearance of at least eight feet, two inches. These spaces should be located on the first level of the garage, with convenient access to a residential elevator. Two on-street loading spaces shall be provided per block, as

shown in **Figure 18**. These spaces could be used by pick-ups/drop-offs, or by delivery/service vehicles that would not fit within the residential garages.

Move-ins and move-outs may be accommodated either through the service vehicles spaces within the residential garages, or through the on-street loading spaces. If moving vehicles cannot fit in either location (for instance, a semi-tractor trailer), special arrangements with the Parkmerced management team shall be required. Residents needing accommodations for longer moving vehicles will be required to contact the management team the Friday prior to the move-in/move-out day. Each Monday, the management team will then coordinate with the appropriate agencies (SFMTA and the San Francisco Police Department) to temporarily reserve a section of on-street parking spaces for move-in/move-out use.

For the planned grocery store, at least two off-street freight loading spaces are required to accommodate the anticipated demand for the daily delivery of produce and goods. Also, two on-street loading spaces are required to accommodate pick-ups/drop-offs and taxis. In addition, the individual grocery store operator shall be required to develop a loading program to minimize disruptions to local streets and to limit the

number of trucks during peak commute times.

No off-street loading supply is required for the proposed office and business service land use. In general, these uses have a minimal demand for loading, usually limited to short-term deliveries or service calls. As such, all loading will be accommodated through on-street loading spaces which must be located at either the front or rear of the building.

**TABLE 6:** Proposed on-street and off-street freight loading space supply

Land Use	Required On-Street Loading Supply	Required Off-Street Loading Supply
Residential	1 space per block (between 0 and 199 units)  2 spaces per block (over 200 units)	None required  Service vehicle spaces should be provided within garages
Grocery Store	2 spaces	2 spaces
Retail / Office / Professional Services	1 space per building	None required

Source: AECOM – March 2010  
Notes: sqft = square feet





implementation and  
phasing

05

## Implementation and Phasing

The elements of this Plan will be implemented in phases during the development period. Due to the flexible nature of the Parkmerced development phasing program, it is critical that implementation of the Plan also afford flexibility as to the location and timing of improvements. Thus, rather than establishing a rigid implementation order and timeline, the project will use an innovative “trip allowance” implementation plan. Under this plan, the number of net new units supported by various elements of the Plan are set forth in a “menu”. The number of net-new units constructed in any phase of development cannot exceed the sum of the net new units supported by the Plan elements to be constructed and/or implemented in that development phase. The current transportation network can support 1,391 net new units, therefore no elements identified on the menu will be required until this net new unit threshold is exceeded.

The “menu” and further details regarding the phasing of the Plan are set forth in, and governed by, the Development Agreement.



conclusion

06

## Conclusion

The Parkmerced Vision sets a standard for sustainable living for residents and the surrounding community, and will become a model development. Parkmerced's transportation needs will be met with high-quality infrastructure and services that prioritize walking, bicycling and transit travel, and discourage use of private automobiles. Despite the addition of new homes, businesses and community amenities, the Plan targets minimal increases in peak hour vehicle trips to reduce the potential for impacts on the surrounding roadway network which is already congested during peak times.

Future residents will forego “convenience driving” and walk to stores and services within Parkmerced. Bicycling will not only be a recreational activity within the community's new green spaces, but also will be a viable transportation option both within Parkmerced and to outside destinations. Multiple transit options will bring residents to employment, school and activities elsewhere in the City and throughout the Bay Area. Demand management strategies will ensure a sustainable balance among transportation modes. By providing the required infrastructure, plans/policies, and programs, use of alternative travel modes will be encouraged and promoted.

To support the new development, an innovative phasing plan has been developed, that will allow for the construction of a given number of units provided that commensurate physical or program elements have been implemented. This approach will allow for the flexibility needed to realize this project, while ensuring that the infrastructure is in place to support the new travel demand generated.

Parkmerced will create a new gateway to San Francisco from the south, symbolizing the City's ambition to be one of the world's premier “green” cities. Parkmerced will serve as San Francisco's proving ground for the most advanced techniques to achieve sustainability and increase livability. This Transportation Plan, along with the Sustainability Plan and the other project documents, will guide Parkmerced through its transition from an insular, suburban community to a world-class model of integrated urbanism.



**Parkmerced**