HEXAGON TRANSPORTATION CONSULTANTS, INC.

421 Cypress Avenue

Transportation Demand Management Plan

Prepared for:

South San Francisco on Behalf of Mr. Peter Sodini

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1. Introduction

Transportation Demand Management (TDM) is a combination of services, incentives, facilities, and actions that reduce single–occupant vehicle (SOV) trips to help relieve traffic congestion, parking demand, and air pollution problems. The purpose of TDM is to (1) reduce the amount of traffic generated by new development; (2) promote more efficient utilization of existing transportation facilities and ensure that new developments are designed to maximize the potential for alternative transportation usage; (3) reduce the parking demand generated by new development and allow for a reduction in parking supply; and (4) establish an ongoing monitoring and enforcement program to guarantee the desired trip and parking reductions are achieved.

The main purpose of the proposed TDM plan for the 421 Cypress Avenue project is to evaluate the parking reduction requirements outlined in Section 20.330.007 (Downtown Parking) of the South San Francisco Municipal Code. The code states that for the Downtown Parking District, the Planning Commission shall review any request for a reduction in the number of required parking spaces and make a determination whether there is sufficient parking within the District to accommodate the proposed use. The City of South San Francisco may reduce the required number of parking spaces for a project, so long as (1) the reduction in parking will not adversely affect surrounding projects; (2) the reduction in parking will not rely upon or reduce the public parking supply; and (3) the project provides a detailed TDM plan and demonstrates that the TDM program can be maintained indefinitely.

This TDM Plan seeks to reduce the parking demand through a combination of appropriate measures to promote alternative forms of transportation. The project proposes to provide less on-site parking than what is typically required for downtown residential developments.

Project Description

The proposed development is located on three parcels: 421 Cypress Avenue, 209, and 213 Lux Avenue in the City of South San Francisco, California. The proposed project consists of one building with 99 dwelling units and 1,500 square feet (s.f.) of restaurant space on the ground floor.

The project site is bordered by Lux Avenue to the north, Cypress Avenue to the east, and Tamarack Lane to the south (see Figure 1). Access to the project would be provided via two right-in and right-out driveways from Tamarack Lane, which is designated as a one-way street. Figure 2 and 3 includes the site plan for level 1 and 1.5 respectively.

Downtown Location and Proximity to Transit

The location of a project within or adjacent to a central business district promotes pedestrian and bicycle travel in a high-density area of complementary land uses. The project is located in the Downtown Transit Core (DTC) and will provide development and density within a ½-mile radius of the Caltrain Station, which will promote ridership and reduce emissions. The project will provide high-quality residential opportunities for younger employees and older retirees who desire a convenient downtown location and increase the population close to Grand Avenue to support nearby business, consistent with the Downtown Station Area Specific Plan's (DSASP) goals. Also, the project site is located within one quarter mile of four SamTrans bus routes. Chapter 2 describes the existing transportation setting in the study area.

Report Organization

The remainder of this report is divided into four chapters. Chapter 2 describes the transportation facilities and services in the vicinity of the project site. Chapter 3 describes parking proposed by the project. Chapter 4 presents the TDM plan that will be implemented for the proposed project. Chapter 5 presents the program for implementing and monitoring the TDM plan.

Figure 1
Site Location

NORTH
Not to Scale

Figure 2
Site Plan (Level 1)

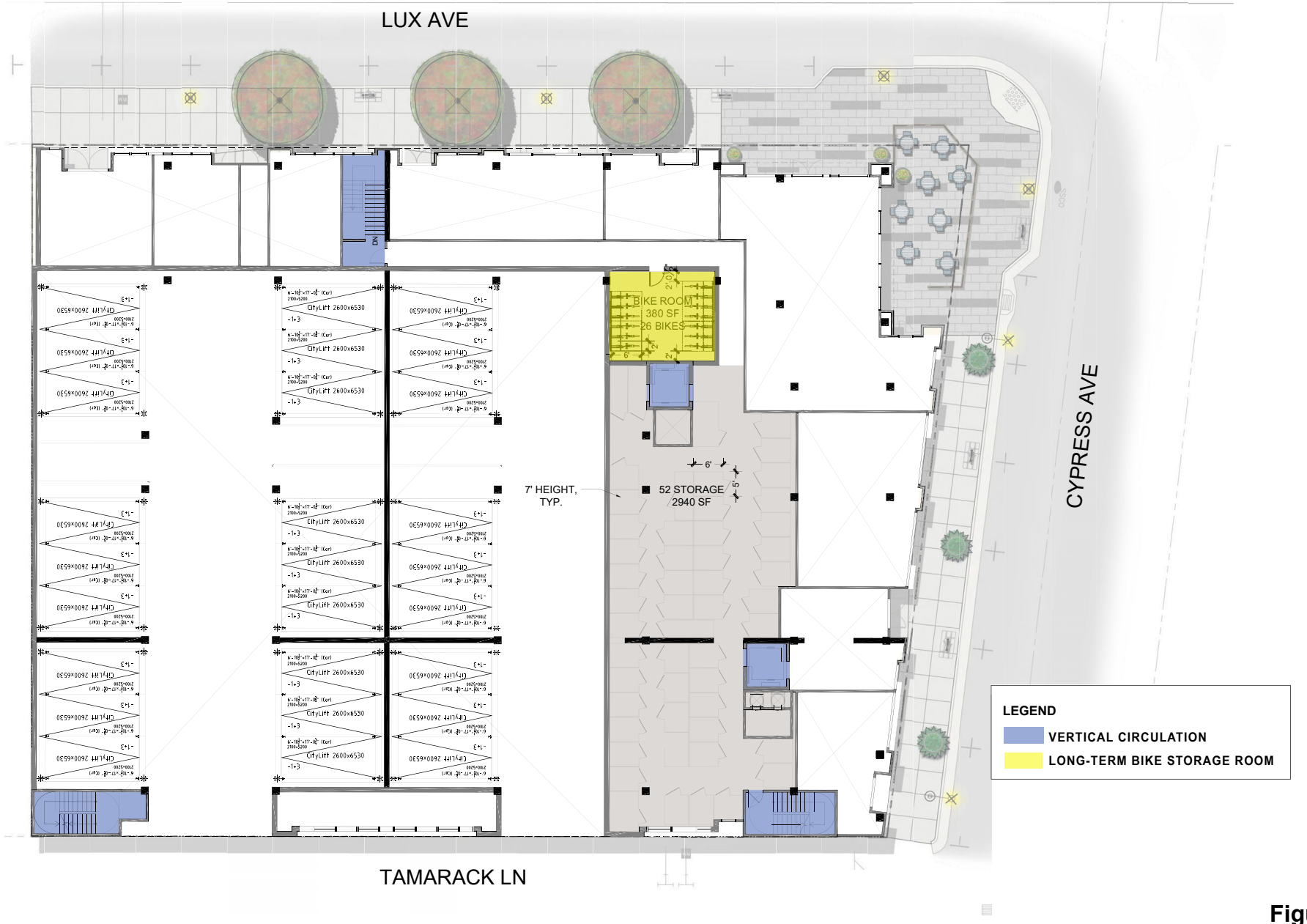

Figure 3
Site Plan (Level 1.5)

2. Transportation Setting

Transportation facilities and services that support sustainable modes of transportation include SamTrans bus routes, BART, Caltrain, shuttles, pedestrian facilities, and bicycle facilities. This chapter describes the existing facilities and services near the 421 Cypress Avenue project site. Information on the nearby roadway network is also included in order to provide a more comprehensive description of the nearby transportation network.

Roadway Network

Regional access to the project study area is provided by US 101.

US 101 is a north-south major freeway through eastern San Mateo County between San Francisco and San Jose. It is the primary north/south route connection to I-280 and I-80 north of South San Francisco. US-101 consist of eight lanes in the study area and is typically congested in both directions during both peak periods as people commute to and from San Francisco and the Silicon Valley. Access to the freeway from the project site is provided via interchanges at Airport Boulevard/Produce Avenue, Grand Avenue and Miller Avenue.

The following roadways provide local access to the site:

Airport Boulevard is a major north/south four- to six-lane arterial route through South San Francisco parallel to US-101 that transitions into Bayshore Boulevard in the north and to Produce Avenue in the south. The posted speed limit on Airport Boulevard is 35 MPH near the project vicinity. Airport Boulevard provides access to the site via Grand Avenue, Miller Avenue, Cypress Avenue and Tamarack Lane. On-street metered parking is provided on the westside of Airport Boulevard to the north of Grand Avenue. Sidewalks are generally present on both sides of the road, south of Grand Avenue. North of Grand Avenue, a sidewalk is provided only on the west side of the road. Dedicated bicycle lanes are provided in both directions, north of Miller Avenue.

Grand Avenue is a two- to six-lane roadway that extends from Mission Road to the west to its termination point at Point San Bruno Park in the Genentech campus. West of Airport Boulevard, Grand Avenue has one travel lane in each direction with sidewalks and on-street

angled parking on both sides of the street. The posted speed limit on Grand Avenue is 25 MPH near the project vicinity. Grand Avenue provides access to the site via Cypress Avenue and Tamarack Lane.

Miller Avenue is a local roadway that extends west from Airport Boulevard and terminates at Chestnut Avenue. There are traffic signals at its intersections with Airport Boulevard, Spruce Avenue, and Linden Avenue, but the other intersections are controlled by stop signs. Miller Avenue has one travel lane in each direction with shared bike lanes and on-street parking and sidewalk on both sides of the street. The posted speed limit on Miller Avenue is 25 MPH near the project vicinity. Miller Avenue provides access to the site via Cypress Avenue and Tamarack Lane.

Linden Avenue is a two-lane local roadway that extends north from San Mateo Avenue at the city limits and terminates at Airport Boulevard. There are traffic signals at most major intersections with the remainder of its intersections controlled by stop signs. Linden Avenue has shared bike lanes, sidewalks and on-street parking on both sides of the street in the project vicinity. The posted speed limit on Linden Avenue is 25 MPH near the project vicinity. Linden Avenue provides access to the site via Tamarack Lane.

Cypress Avenue is a one way northbound road that extends from Armour Avenue to Baden Avenue. Cypress Avenue is immediately adjacent to the eastern project boundary. Sidewalks and on-street parking are present on both sides of the street. The speed limit on Cypress Avenue is 25 MPH. Cypress Avenue provides access to the site via Tamarack Lane.

Tamarack Lane is a one way westbound roadway that extends from Cypress Avenue and to Orange Avenue. On-street parking are present on one side of the street. The speed limit is 25 MPH. Tamarack Lane is immediately adjacent to the southern project boundary and provides direct access to the project via two right-in and right-out driveways.

Existing Bicycle Facilities

Bicycle facilities include bike paths, bike lanes, and bike routes. Bike paths (Class I facilities) are pathways, separate from roadways, that are designated for use by bicycles. Often, these pathways also allow pedestrian access. Bike lanes (Class II facilities) are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Bike routes (Class III) are existing rights-of-way that accommodate bicycles but are not separate from the existing travel lanes. Routes are typically designated only with signs.

The city has 48.3 miles of existing bikeways, though most of them are not signed (see Figure 4). Transit stations, schools, parks and retail centers are all accessible by these bikeways. The existing and planned bicycle facilities (based on the South San Francisco Bicycle Master Plan, 2011 and DSASP) in the project study area are discussed below.

Class I Bikeway (Multi-Use Path)

- **East Grand Avenue** has a bike path that extends from Industrial Way, crosses over Grand Avenue and ends at Harbor Way. This path connects to Class II bike lanes on East Grand Avenue to the east of Gateway Boulevard and Class II bike lanes on Gateway Boulevard, south of East Grand Avenue.

Class II Bikeway (Bike Lane)

- **Airport Boulevard** has Class II bike lanes in both directions that begin north of Miller Avenue and connect to Class III bicycle routes on Miller Avenue and Linden Avenue.
- **Gateway Boulevard** has Class II bike lanes in both directions that begin south of Grand Avenue and extend to South Airport Boulevard.
- **Grand Avenue** has Class II bike lanes in both directions that begin west of Spruce Avenue and connect to the Class III bicycle route on Spruce Avenue.
- **Railroad Avenue** has a Class II bike lane in the eastbound direction that extends east from Spruce Avenue to Maple Avenue, after which it becomes a Class III bicycle route with sharrows. This lane connects to the Class III bicycle route on Spruce Avenue.

Class II Bike Lane on Airport Boulevard

Class III Bikeway (Bike Route)

- **San Mateo Avenue** is a Class III bicycle route without sharrow markings. The route extends from Airport Boulevard past South Linden Avenue, connecting to the Class III bicycle route on Linden Avenue.
- **Linden Avenue** is a Class III bicycle route without sharrow markings. The route extends south from Airport Boulevard to San Mateo Avenue.
- **Spruce Avenue** is a Class III bicycle route with sharrow markings between Grand Avenue and Victory Way. The route connects to Class II bicycle lanes on Grand Avenue.

The City of South San Francisco adopted its citywide Bicycle Master Plan in 2011, the goal of which is to expand the bicycle network to make it easier and safer for people to bicycle through the city. Also, the Downtown Station Area Specific Plan (DSASP) would enhance bicycle operations through new and improved bicycle access at the Grand Avenue/Airport Boulevard intersection. In the project vicinity, bike lanes are planned in both directions on Airport Boulevard between Miller Avenue and San Mateo Avenue. Bike lanes are also planned in both directions on Grand Avenue between Spruce Avenue and Airport Boulevard. As part of the proposed Caltrain Station reconstruction, a new ped/bike rail crossing tunnel is proposed at the Grand Avenue/Airport Boulevard intersection that would directly connect to the South San Francisco Caltrain station. The new ped/bike tunnel will also provide a good bicycle connection between the downtown and the employment zone to the east of US 101.

Existing Pedestrian Facilities

Sidewalks are provided on most streets in the immediate vicinity of the project. Sidewalks exist in both directions on Cypress Avenue, Lux Avenue, Miller Avenue, Grand Avenue and west side of Airport Boulevard. In the immediate vicinity of the project, crosswalks exist at all four legs of Miller Avenue/Cypress Avenue, Grand Avenue/Cypress Avenue and Cypress Avenue/Lux Avenue intersections. Crosswalks exist across the west leg of Airport Boulevard/Miller Avenue intersection and across the west and south legs of Airport Boulevard/Grand Avenue intersection for pedestrians to access downtown destinations, transit stops, and the Caltrain Station.

As part of the South San Francisco Caltrain Reconstruction Project that is currently in progress, an underpass is being constructed that will provide a direct connection for pedestrians and bicyclists between areas to the west and east of the Caltrain tracks. This underpass will also provide a connection to the new Caltrain station platform. As the project is located close to the Caltrain station, the new underpass will provide an alternative pedestrian connection between the project and employement areas to the east of the US 101.

Planned US 101/Caltrain Underpass

Overall, the existing network of sidewalks and crosswalks has good connectivity and provides pedestrians with safe routes to transit services and other points of interest in the downtown area.

Transit Services

Existing transit services in the study area include local buses, express buses, shuttles, BART, Caltrain, and ferry service. A majority of the public transit trips through the area are commuters who use the Caltrain station or connect from BART to Downtown and East of US-101 employers via employer shuttles. Employer sponsored shuttles connect to employment destinations east of the Caltrain station and other commuter connections in the area. See Figure 5 for the existing transit services.

Caltrain

Caltrain provides commuter rail service between San Francisco and Gilroy. The project is located within 0.25 miles of the South San Francisco Caltrain station. The South San Francisco Caltrain Station serves local trains, with 23 northbound and 23 southbound weekday trains. The South San Francisco Caltrain Station provides weekday service from 5:10 AM to 12:35 AM, with 60-minute headways.

Rendering of the New Widened Central Platform at the South San Francisco Caltrain Station

Currently, the only access to the South San Francisco Downtown is from the west side of the train tracks, via the Grand Avenue overpass. This overpass requires a long and circuitous detour for people walking and bicycling, who have to cross Grand Avenue and descend either a tall metal staircase or use Dubuque Avenue. The city in partnership with Caltrain is currently working on the South San Francisco Caltrain Station Reconstruction project to improve safety and connectivity to nearby businesses, which is expected to be completed by 2021. The station reconstruction will include widening the center platform and building a pedestrian tunnel to connect the station directly to the west end of Poletti Way. Passengers will be able to get to the east of Caltrain Station from the station's center platform via ramps connecting to a tunnel underneath the tracks. The tunnel will connect to a pedestrian plaza at Grand Avenue and Airport Boulevard on the west side of the tracks and a transit plaza at the intersection of Grand Avenue and Poletti Way on the east side of the tracks. Buses and shuttles will pick up and drop off Caltrain passengers from the new east-side plaza instead of the parking lot on the west side of the station, which would make it easier for residents commuting to the City's biotech job center on the east side of the tracks.

SamTrans

Existing bus service to the study area is provided by San Mateo County Transit District (SamTrans). Bus services to the study area are described in Table 1.

SamTrans provides bus service on the west side of US 101. The closest bus stops to the project site are approximately 425 feet to the west at the intersection of Linden Avenue and Miller Avenue and are served by Routes 37, 130 and 141. The bus stops at the intersection of Airport Boulevard and Grand Avenue are located approximately 850 ft to the south of the project and are served by Routes 292 and 397.

Table 1
SamTrans Services

Route[1]	Route Description	Weekday Hours of Operation[2]	Headways[2] (minutes)
Express, SFO and Multi-City Route 397	San Francisco – Palo Alto Transit Center (Limited Overnight Service) - Serves SF Airport	12:45 AM - 6:30 AM	60
Express, SFO and Multi-City Route 292	San Francisco – Hillsdale Mall - Serves SF Airport	3:55 AM - 2:45 AM	10 to 30
North County Route 38	Safe Harbour[3]	6:00 AM - 8:05 AM 4:15 PM - 7:00 PM	
North County Route 37	Alta Loma School - Hillside/Grove (School-day only)	8:10 AM - 8:30 AM 2:30 PM - 4:00 PM	
North County Route 130	Daly City BART - Airport/Linden	5:00 AM - 12:00 AM	15
North County Route 141	Airport/Linden – Shelter Creek	6:10 AM - 8:00 PM	30

Notes:
Source: SamTrans Service Schedule and Map, September 2021
1. Closest bus stop to bus routes 397 and 292 is located at Airport Boulevard and Grand Avenue (850 feet from the project location) and all others are at Miller Avenue and Linden Avenue (425 feet from the project location).
2. Approximate weekday operation hours and headways during peak periods in the project area, as of August 2020.
3. Route 38 continues as route 130 and route 141 between 6:00 AM to 7:00 AM and 5:30 PM to 6:45 PM.

BART

Bay Area Rapid Transit (BART) operates regional rail service in the Bay Area, connecting between San Francisco International Airport and the Millbrae Intermodal Station to the south, San Francisco to the north, and cities in the East Bay. The BART stations closest to the project area are the San Bruno Station, located near Huntington Avenue east of El Camino Real, and the South San Francisco Station, located on Mission Road and McLellan Drive. Both stations are located within 2.5 miles of the project site. BART trains operate on 15-minute headways during peak hours. SamTrans Route 130 provides connection between the project site and the South San Francisco BART station and SamTrans Route 141 provides connection between the project sie and the San Bruno BART station.

Commuter Shuttles

Commuter shuttle service is provided in the East of 101 Area by the Peninsula Traffic Congestion Relief Alliance (Commute.org). The shuttles provide weekday commute period first/last mile connections between BART and the Caltrain stations, the WETA ferry terminal, and local employers in the East of 101 Area.

These shuttles are free for all passengers and are open to the general public. All shuttles are wheelchair-accessible and equipped with a bicycle rack on the front of the vehicle. Service is provided from Monday through Friday during morning and afternoon commute hours. The following shuttle services can be accessed within walking distance of the South San Francisco Caltrain station and the project site (approximately 2,000 feet). As part of the South San Francisco Caltrain Station Reconstruction project, shuttle stops will be relocated from the Caltrain station parking lot to a new pedestrian plaza that will be located near the intersection of east Grand Avenue and Poletti Way on the east side of the tracks. Residents of the project will access the new shuttle stops via the new bicycle/pedestrian underpass at the Airport Boulevard/Grand Avenue intersection.

- **The Genesis One Tower Place (OTP) Shuttle** connects the South San Francisco Caltrain and South San Francisco BART stations and provides service to the Genesis Towers (a bio tech hub located on the west side of Airport Boulevard approximately 1,000 feet north of Sister Cities Boulevard) and the Dubuque Innovation Center in South San Francisco. This line provides service during peak commute hours, between 6:50 AM and 10:10 AM, and between 4:00 PM and 6:35 PM with 60-minute headways during the AM peak hour and 30-to-60-minute headways during the PM peak hour.

- **The Oyster Point Caltrain shuttle (OPC)** operates from the South San Francisco Caltrain Station and provides service to offices and businesses along Oyster Point Boulevard. This line provides service during peak commute hours, between 6:30 AM and 9:45 AM, and between 2:50 PM and 6:15 PM with 20 to 40-minute headways during the AM peak and the PM peak hour.

- **The Utah-Grand Caltrain shuttle (UGC)** operates from the South San Francisco Caltrain Station and provides service to businesses along E. Grand Avenue on the east side of Highway 101 in South San Francisco. This line provides service during peak commute hours, between 6:30 AM and 9:45 AM, and between 2:45 PM and 6:10 PM with 20-to-40-minute headways.

- **The Oyster Point Ferry shuttle (OPF)** connects riders from the South San Francisco Ferry Terminal to the South San Francisco Caltrain station and provides service to Oyster Point Boulevard, Genesis Towers, and the Dubuque Innovation Center. This line provides service during peak commute hours, between 6:50 AM and 9:30 AM, and between 2:45 PM and 5:20 PM with 60-minute headways.

Figure 4
Existing and Proposed Pedestrian and Bicycle Facilities

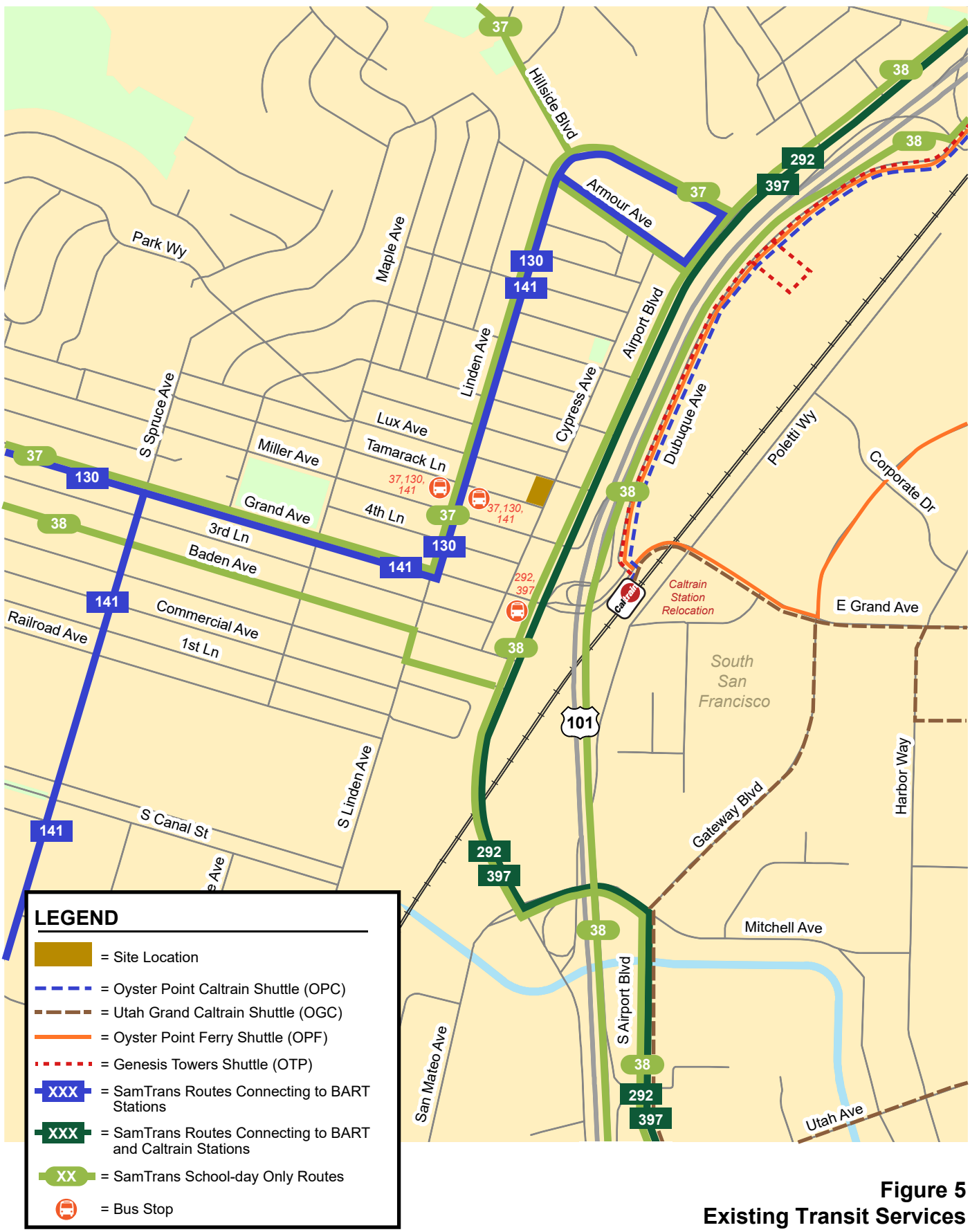

Figure 5
Existing Transit Services

NORTH
Not to Scale

3. Parking

The project will construct one mixed-use building comprising a total of 99 units (6 studio units, 12 one-bedroom units, 56 one-bedroom plus den units, 9 two-bedroom units, and 16 two-bedroom plus den units) and a 1,500 square-foot restaurant. The South San Francisco Municipal Code provides parking requirements for residential, and restaurant uses within the Downtown Plan Area (Section 20.330.007) as described below.

Multi-family Residential

- Studio and less than 500 sq ft – 1 space per unit maximum.
- One-bedroom or 500 to 800 sq ft - 1 space minimum, 1.5 spaces maximum per unit.
- Two-bedroom or 801 to 1,100 sq ft - 1.5 spaces minimum, 1.8 spaces maximum per unit.
- Three or more bedrooms and 1,101 sq ft or larger – 1.5 spaces minimum, 2 spaces maximum per unit.

Restaurants

- No parking required for the first 1,500 s.f.of customer seating area or floor area and 1 space per 100 s.f. of customer seating area in excess of 1,500 s.f.

Based on these requirements, the project would be required to provide 112 parking spaces for the residential use and zero parking spaces for the restaurant use (see Table 2).

According to the site plan, the project would provide a total of 99 parking spaces for residential use, which is 13 spaces (approximately 12%) fewer than the number of vehicular spaces required by the code. However, given the project's location and its proximity to the Caltrain station, it is expected that many residents will use public transportation and will not need a car. Also, the project will implement a comprehensive TDM plan, as described in Chapter 4 to reduce the project's parking demand.

Table 2
Vehicular Parking Spaces Requirement

Land Use	Parking Rate [1]		Project Size	Required Spaces
Minimum Parking Requirement				
Resident Parking	per studio unit	1	6 units	6
	per 1 bedroom unit	1	68 units	68
	per 2 bedroom unit	1.5	25 units	38
Total Parking Requirement				**112**

Notes:

Based on the South San Francisco Municpal Code for Downtown Parking, no parking required for the first 1,500 sq. ft. of restaurant customer seating area, or floor area.

[1] Vehicular parking requirements per Table 20.330.007 of the South San Francisco Municpal Code

Bicycle Parking

According to the City's Bicycle Parking Standards, for multi-unit residential developments with eight or more units, short-term bicycle parking should be provided at a rate of 10% of the number of required automobile parking spaces. The code also requires that long-term bicycle parking be provided at a minimum of one bicycle parking space for every four units for multi-unit residential projects. This calculates to 11 short-term bicycle parking spaces and 25 long-term bicycle parking spaces.

The site plan shows that short-term bicycle parking will be provided along the project frontage on Cypress Avenue and Lux Avenue; three bicycle racks that can accommodate 6 bicycles will be provided along Cypress Avenue, and two bicycle racks that can accommodate 4 bicycles will be located along Lux Avenue. The site plan also shows a bicycle storage room in the parking garage that can accommodate 26 bicycles. Thus, adequate short-term and long-term bicycle parking wll be provided on site.

4. TDM Measures

The TDM measures to be implemented for the 421 Cypress Avenue project include design features, programs, and services that promote sustainable modes of transportation and reduce the roadway and parking demand that will be generated by the project. The City's Municipal Code requires all nonresidential development expected to generate 100 or more average daily trips to implement a transportation demand management (TDM) program to reduce the number of vehicle trips by increasing access to and use of alternative modes of transportation, including transit, bicycling, and walking. Although the City's TDM guidelines do not apply to residential projects, the proposed project will implement a TDM program to encourage residents and employees of the restaurant to use alternative modes of transportation and thereby reduce the demand for vehicular parking and off-set the reduced on-site parking.

Table 3 presents a summary of the measures proposed in this plan, along with an indication of who will have primary responsibility for implementing each measure. All measures will be implemented upon occupancy of the building. The project site is well suited to have a successful TDM Plan based on its proximity to the Caltrain station, retail and commercial development, and its access to bicycle, pedestrian, and transit facilities.

Table 3
TDM Program Measure

TDM Measure	Applies to Residents, Employees, or both	Implementation Responsibility
Program Administration		
Designating a Transportation Coordinator	Both	Building developer
Online Kiosk/TDM Information Board [1]	Both	Transportation Coordinator
Transportation Information Packets	Both	Transportation Coordinator
Trip Planning Assistance	Both	Transportation Coordinator
Program Monitoring and Reporting		
Annual Resident/Employee Surveys	Both	Transportation Coordinator
Target Drive-alone Mode Share Monitoring	Both	City
Transit Elements		
Proximity to Transit Center	Both	Building developer
Transit Subsidy	Residents	Trans.Coordinator
Resources (schedules, route maps & other info)	Both	Trans.Coordinator
Bicycle Facilities		
Bicycle Parking	Both	Building developer
Private Bikeshare Program	Employees	Restaurant Operator
Resources (maps & info)	Both	Trans.Coordinator
Pedestrian Facilities		
Pedestrian Scale Lighting	Both	Building developer
New Sidewalks / Crosswalks / Bulb Outs	Both	Building developer
Carpool and Vanpool Programs		
On-Site Ridematching	Both	Transportation Coordinator
511 Ridematching Assistance	Both	Available to public
Incentives for New Carpools/Vanpools	Both	Available to public
Discounted Tolls on Bay Area Bridges	Both	Available to public
Zip Car or other Carshare membership	Both	Transportation Coordinator
Other On-Site Amenities		
Electric Vehicle Parking	Residents	Building developer
Business Center	Residents	Building developer
High-Bandwidth Internet Connection	Residents	Building developer

Notes:
(1) The building developer will have Initial responsibility for creating an online kiosk . After the building is occupied, the Transportation Coordinator will have ongoing responsibility for the online kiosk and various program elements.

TDM Project Design Features

The TDM measures to be implemented for the proposed residential development include design measures related to the physical attributes of the site and the proposed building. Such design measures encourage walking, biking, and use of transit.

The project site is located within walking distance of the current South San Francisco Caltrain station (approximately 0.25 miles). With the South San Francisco Caltrain station reconstruction, the proposed Caltrain plaza will be located to the south of the project on the

southeast quadrant of Airport Boulevard/Grand Avenue intersection and the Caltrain station will be less than a 5-minute walk from the project via the new Grand Avenue bicycle/pedestrian underpass.

The site will be designed with pedestrain entries that will be oriented toward the adjacent roadways with pedestrian facilities to minimize the walking distance to nearby transit stops. The project will provide entrances along Lux Avenue, Cypress Avenue and Tamarack Lane with a direct path from the sidewalk to the front door. The site is also located within one quarter mile of several SamTrans bus routes. The proximity to bus and transit stops encourages the use of Caltrain and SamTrans/Shuttle buses for residents of the proposed project.

Pedestrian Facilities

Pedestrian Scale Lighting

The project will include pedestrian scale lighting along the project frontages. This measure will encourage residents and employees to walk to nearby destinations and ensure well-lit paths to nearby transit stops.

New Sidewalks/Bulb Outs

As part of the project, new sidewalks, curbs and gutters will be installed along the project frontages on Lux Avenue and Cypress Avenue, and Tamarack Lane will be repaved along the project frontage. The project will provide a wider sidewalk (12 to 13 feet wide) aong the project frontages. The project will also construct a new bulb-out at the corner of Lux and Cypress Avenue on Lux Avenue and Cypress Avenue. The bulb out will enhance pedestrian safety by reducing the pedestrian crossing distance. Bulb outs also discourage speeding by making the street appear narrower to motorists. The project will remove two existing driveways (curb-cuts) along Lux Avenue and provide continuous sidewalks and on-street parking spaces.

On-Site Amenities

Electric Vehicle (EV) Parking

The project will provide 10 EV parking spaces in the garage. While EV parking spaces do not directly reduce any peak-hour trips, the designated Clean Air Vehicle spaces provide a prominent visual message that the project values a reduction in air pollution.

Co-Work Center

An on-site 750 s.f. room will be provided to serve the residents of the project. Through the development of a flexible room in the residential building, residents will be able to work from home in an area complete with typical office amenities. Having these available within the residential development permits employees to work away from their employer's primary location, decreasing the need for parking and office space at the work site, and saving time and resources spent on commuting. These "telework" programs have been found to increase productivity, reduce illness, improve retention, and raise morale.

High-Bandwidth Internet Connections

The residential units will include high-bandwidth internet connections to facilitate telecommunicating. Access to high-bandwidth internet connection will allow residents to work from home and therefore reduce the number of commute trips to and from project site.

Package Room

The project will provide a package room on site. The package room will allow a safe space for residents' packages to be picked up at their convenience.

On-site Storage

The project will provide 52 on-site storage units that could be used to store personal items such as car seats, strollers, cargo bicycles, or other large bicycles.

Marketing Program for Alternative Travel Modes

Transportation Coordinator

The project will appoint a Transportation Coordinator who will be the primary contact with the City and will be responsible for implementing and managing the TDM plan. The Transportation Coordinator will be a point of contact for residents and restaurant employees when TDM-related questions arise and will be responsible for ensuring that residents/employees are aware of all transportation options and how to fully utilize the TDM plan. The Transportation Coordinator will provide the following services and functions to ensure the TDM plan runs smoothly:

- Provide transportation information packets to new residents/employees.
- Maintain the on-line kiosk
- Provide trip planning assistance and/or ride-matching assistance to residents and employees who are considering an alternative transportation mode.
- Manage annual resident and employees travel surveys. The results will be used to determine whether the implemented TDM measures are effective and whether new TDM measures should be implemented.

"Online Kiosk": An Online Information Center

A key element of this TDM plan is to set up an attractive, up to date "online kiosk" with all of the site-specific information about the transportation resources available to residents. The website will include information about all the measures, services, and facilities discussed in this plan, including:

- A summary of SamTrans buses, BART and Caltrain services and links to further information about their routes and schedules.
- A summary of the transit passes offered to all residents.
- A local bikeways map, information about the bike repair station, bike lockers/secure bike storage areas on site and those nearby, and information about the Bikeshare program.
- Information about ridematching services (e.g., 511.org, Zimride, Scoop and TwoGo) and the incentive programs available to carpools and vanpools.
- Information related to a carshare program, including benefits and nearby locations.
- A link to the many other resources available in the Bay Area, such as Dadnab, the 511 Carpool Calculator, the 511 Transit Trip Planner, real-time traffic conditions, etc.

The building developer will have responsibility for contracting with someone to initially create the website so that it is up and running as soon as residents move in. More specific information can be added later to reflect any programs specific to certain groups of residents and employees. The Transportation Coordinator will be responsible for adding new information to the website (or providing it to the website designer) and including the web address for the online kiosk so that the "online kiosk" remains current and informative.

Information Packet for Residents and Employees

In addition to the online information center, the Transportation Coordinator will provide "hard copy" information packets to all residents and employees when they first move into the building. Because all information will be available online, this packet need not be a comprehensive stack of paper about all services available, which residents and employees tend to disregard anyway. Instead, the New Resident/Employee Packet will provide a quick easy-to-read announcement of the most important features of the TDM program for residents/employees to know about immediately.

In addition, the packets will include a message to residents/employees that their building manager and/or owner values alternative modes of transportation and takes their commitment to supporting alternative transportation options seriously.

Carpool and Vanpool Programs

Rideshare Matching Assistance

One of the greatest impediments to carpool and vanpool formation can be finding suitable riders with similar work schedules, origins, and destinations. Facilitated rideshare matching can overcome this obstacle by enabling commuters who are interested in ridesharing to enter their travel preferences into a database and receive a list of potential rideshare partners. The success of these programs is largely determined by the number of participants and, in turn, the number of potential matches that can be made.

The Transportation Coordinator will distribute a carpool matching application to all residents and employees as part of the transportation information packets. The application will match residents who work in the same area who may be able to carpool or vanpool together. Some residents who may be reluctant to reach out to find carpool partners via the 511 RideMatch service or Waze Carpool may be more likely to fill out a form that will be administered by their Transportation Coordinator. Furthermore, residents may be more likely to try ridesharing with another resident who lives in the same building than with an unknown person who lives nearby.

511 Ride Matching Services

The 511 RideMatch service provides an interactive, on-demand system that helps commuters find carpools, vanpools, or bicycle partners. This free car and vanpool ride-matching service helps commuters find others with similar routes and travel patterns with whom they may share a ride. Registered users are provided with a list of other commuters near their employment or residential ZIP code, along with the closest cross street, email, phone number, and hours they are available to commute to and from work. Participants are then able to select and contact others with whom they wish to commute. The service also provides a list of existing car and vanpools in their residential area that may have vacancies.

Ride-matching assistance is also available through a number of peer-to-peer matching programs, such as Scoop and Waze Carpool, which utilize mobile apps to match commuters. These publicly available ride matching services benefit from a large database of commuters and may enable residents/employeees to locate people who may not live or work nearby but nevertheless share similar commute patterns.

Carpool and Vanpool Incentive Programs

The 511 Regional Rideshare Program and the Peninsula Traffic Congestion Relief Alliance (511.org and commute.org) offer a number of incentive programs to encourage people to try carpooling and vanpooling. Most of these programs are designed to reward someone for forming or trying a carpool or vanpool and provide an award or subsidy after the first three or six months of use.

The Peninsula Traffic Congestion Relief Alliance offers a carpool incentive program called “The Carpool Rewards Program”. The Carpool Rewards Program rewards commuters who use Scoop and Waze Carpool to log their carpool trips to and from work. This program provides $25 e-gift card reward after every ten days of users logging their carpool trips in their account up to four times for a total of $100. Similarly, the Bicycle to Work Rewards program provides $25 e-gift card reward after every ten days of users logging their bicycle trips in their account up to four times for a total of $100. Similar rewards program is available for commuters who use bicycle to work and vanpool to the work.

The Peninsula Traffic Congestion Relief Alliance offers free transit tickets to commuters who live or work in San Mateo County to try SamTrans, Caltrain or San Francisco Bay Ferry. Also, residents and commuters who travel to, from or through San Mateo County can earn their reward points by logging their commutes in the STAR Platform. Every day the commuter earns a point for using alternative to driving alone. The user can either redeem the points for great rewards or a donate to nonprofits.

Vanpool Seat Subsidy. The 511 Regional Rideshare Program also offers a vanpool seat subsidy in the form of gas cards. The seat subsidy will provide seat subsidy for three months per van during the program year, to help cover the fare of a lost participant. The gas cards will be offered to eligible vans on a first come, first-served basis until the funds are exhausted.

Discounted Tolls. The 511 Regional Rideshare Program offers free toll passage on seven of the Bay Area’s bridges for vanpools with 11-15 people who register with 511. Additionally, the program also offers toll discounts to carpools with three or more people (two people in a two-seat vehicle) on eight of the Bay Area’s bridges during peak commute hours. The discounts vary per bridge, but typically are half of the standard toll price.

Enterprise Vanpool Subsidy. The 511 Regional Rideshare Program provides $350 monthly subsidy to the vanpools rented from Enterprise. The subsidy is awarded on a first come, first-served basis, until funds are exhausted.

Carpool Promotions: 511 also has occasional promotions such as winning gift cards by taking carpools using app-based programs such as Scoop or Waze Carpool. Carpoolers would track their carpool usage and upload verification by screenshots of completed trips to be entered into a raffle to win small prizes every season(fall).

Free Carpool Rides. The Bay Area Carpool Program provides first five rides free for all new Scoop and Waze Carpool app users in the nine-county Bay Area.

Zip Car or other Carsharing Membership

The project will provide zipcar or other car sharing membership for tenants to use on an as-needed basis to run errands to places like Costco or Ikea. Carsharing is kind of like rental cars but gives you the flexibility to book cars on demand by the hour or day to where you want and when you want.

Transit Elements

Subsidized Transit Passes

The developer will provide a total of 99 transit passes, one pass per dwelling unit for the first one year following building occupancy. This will encourage residents to explore transit options in the project vicinity and motivate residents to use transit for commuting to work. The Transportation Coordinator will be responsible for administering the program. Each resident will be given a clipper card that can be used on various transit systems like BART, Caltrain, and SamTrans. Clipper is the all-in-one transit card for the Bay Area and can be used on all Bay Area transit systems, including Muni.

Bicycle Facilities

The site has quality access to bicycle and pedestrian routes through South San Francisco, connecting the project to major destinations and transit stations. The presence of other commercial uses in the vicinity of the project site will encourage residents and employees to walk to the retail, entertainment, and commercial areas nearby. It is expected that bicycle and pedestrian facilities that are included as part of the project will be successful in reducing vehicle trips.

Bicycle Parking

Providing secure bicycle parking encourages bicycle commuting and reduces daily vehicle trips. The zoning ordinance requires short-term bicycle parking spaces at a rate of 10 percent of the number of required automobile parking spaces. For multi-unit residential with eight or more units, the code requires a minimum of one long term bicycle parking space for every four units. The proposed project requires 10 short-term bicycle parking spaces and 25 long-term bicycle parking spaces. The site plan shows that short-term bicycle parking will be provided along the project frontage on Cypress Avenue and Lux Avenue; three bicycle racks that can accommodate 6 bicycles will be provided along Cypress Avenue, and two bicycle racks that can accommodate 4 bicycles will be located along Lux Avenue. The site plan also shows a bicycle storage room that can accommodate 26 bicycles. Adequate short-term and long-term bicycle parking will be provided on site.

Bicycle Resources

The following resources are available to bicycle commuters through 511.org. These resources will be noted in the transportation information packet, in order to make residents aware of them.

- Free Bike Buddy matching
- Bicycle maps
- Bicycle safety tips
- Information about taking bikes on public transit
- Location and use of bike parking at transit stations
- Information on Bike to Work day
- Tips on selecting a bike, commuter gear, and clothing
- Links to bicycle organizations

Bicycle Repair

The project is proposing to provide bike repair stands/kiosks in the bicycle storage room. The bicycle repair stands will include all the tools necessary to perform basic bike repairs and maintenance, from changing a flat tire to adjusting brakes and derailleurs. Repair stations also provide a singular point where bicyclists can share information on routes, commuting, and maintenance practices to help generate a stronger community that is more engaged in bicycling as a mode of transportation.

Private Bikeshare Program

To further encourage bicycling, restaurant operator may set up a bikeshare program with three bicycles that employees can rent for free. The idea behind bike sharing is to make bikes available to users for short journeys, such as between the project and the nearby commercial and shopping areas. Bikes will be checked out and returned following procedures established by the restaurant operator. We recommend that one of the bikes be a cargo bike so that users could use it to run errands that require transporting objects. We further recommend that two of the bikes be electric bikes to encourage usage by bicyclists who do not wish to pedal. In addition to bikes, the program should include helmets and locks.

CMP Compliance

C/CAG requires that all new developments that would generate over 100 average daily trips (ADT) limit their impact on regional roadway facilities.

C/CAG categorizes new developments as small projects and large projects. Multi-family residential projects larger than 50 units are considered to be large projects. The recommended vehicle trip reduction target for the transit oriented residential development is 25% below estimated project ADT.

To accomplish the reduction goal, C/CAG provides a list of potential TDM measures, some of which are required and some of which are optional. Each measure has an associated point value and reduction percentage. Based on the C/CAG TDM policy, the project must first fulfill all required measures for individual land uses prior to selecting a sufficient number of additional recommended measures to achieve the minimum 25 percent trip reduction.

As shown in Table 4, with the TDM measures included in this plan, vehicular trips that would be generated by the project are expected to be reduced by at least 30% and therefore achieve the C/CAG trip reduction goal of 25 percent for the residential land use.

C/CAG requires the following for large multi-family residential projects:

- Complete a TDM self-certification status form biennially for the first six (6) years after occupancy.

Since the 1,500 s.f. of restaurant will employ fewer than 30 people, the trip reduction goal is not applicable for the restaurant.

Table 4
Estimated C/CAG Trip Credits for Large Residential Project

Category	Measure	Provided by Project (Y/N)	Point Value	Estimated Trip Reduction Percentage
TDM Measures (Transit Oriented Development)				
Employee & Residential Amenities	Orientation, Eduacation, Promotional Programs and /or Materials	Y	1	1.0%
TDM Management and Admin	TDM Coordinator/Contact Person	Y	1	0.5%
Shuttles, Transit, and Ridesharing	Transit or Ridesharing Passes/Subsidies	Y	8	10.0%
Active Transportation	Secure Bicycle Storage	Y	1	1.0%
Site Design Initiatives	Design Streets to Encourage Bike/Pedestrian Access	Y	1	1.0%
TDM Measures Total			**12**	**13.5%**
Additional Measures (Transit Oriented Development)				
Employee & Resident Amenities	Delivery Amenities (includes area for reciept of deliveires in mail package room)	Y	1	1.0%
	Family Supportive Amenities (52 on-site storage is included in the project)	Y	3	3.0%
Parking Management	Reduced Parking (provides off-street private parking at least 10% below local zoning code required minimums)	Y	8	10.0%
Site Design Initiatives	Pedestrian Oriented Uses & Amenities on Ground Floor (ground floor restaurant)	Y	4	3.0%
Additional Measures Total (Transit Oriented Development)			**16**	**17.0%**
Required & Additional Measures Total			**28**	**30.5%**

5. TDM Coordinator and TDM Monitoring

The primary purpose of the TDM plan is to reduce the project parking demand. As per City of South San requirements, monitoring will be necessary to ensure that the TDM measures are effective and continue to be successfully implemented. The project applicant will be responsible for ensuring that the TDM trip reduction measures are implemented.

It is anticipated that, after the project is constructed, an individual from the owner or property management team will be designated as the Transportation Coordinator and assume responsibility for the ongoing TDM measures. When any ownership, management, or contact information changes, the City will be notified of the name, phone number, and email address of the designated Transportation Coordinator.

The TDM coordinator will prepare an annual monitoring report for the first six (6) years post occupancy. The TDM monitoring report will include a resident and retail tenant survey that solicits travel pattern information and use of TDM measures provided by the site to determine adjustments to this TDM Plan. The report will be provided to the City of South San Francisco Planning Department. The project will also complete a TDM self-certification status form biennially for the first six (6) years after occupancy as required by C/CAG. The site TDM coordinator will document the results in a TDM monitoring report and the annual monitoring report will be submitted to the City by the TDM coordinator.

In addition, it is recommended that parking occupancy counts be conducted periodically for the life of the project. If it is determined that parking reduction is not being achieved (i.e., the on-site parking garage reaches full capacity), additional TDM measures would need to be introduced to ensure that the parking is being addressed by the project without the burden being placed on outside entities

Conclusions

The TDM measures to be implemented by the project complement the attributes of the site location, the site design, and on-site amenities. Such measures encourage walking, biking, and use of transit. The TDM plan includes the following measures:

- Free Caltrain pass for the first year's lease for each unit
- Shared bicycles for employees of the restaurant
- On-site bicycle storage room
- On-site storage units
- zipcar or other car sharing membership for tenants
- On-site TDM coordinator and services (including carpool/ride matching assistance and trip planning resources)

With the implementation of the TDM Plan, the project is expected to be able to meet the parking demand generated by the tenants/residents.