

## **Transportation Demand Management (TDM) Plan**

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# HEXAGON TRANSPORTATION CONSULTANTS, INC.

## 1814-1820 Ogden Drive Residential Development in Burlingame

Transportation Demand Management (TDM) Plan

Prepared for:

**Ogden Properties MGMT, LLC**

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## Table of Contents

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1. Introduction .....	1
2. Transportation Facilities and Services.....	5
3. Recommended TDM Measures.....	12
4. The TDM Measurement Tool .....	18

## Appendix

### Appendix A BAAQMD Tool

## List of Figures

Figure 1	Site Location and Surrounding Area .....	2
Figure 2	Site Plan.....	3
Figure 3	Existing Bicycle Facilities.....	7
Figure 4	Existing Transit Services .....	9

## List of Tables

Table 1	Trip Generation Estimates for the 1814-1820 Ogden Drive Residential Project.....	4
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# 1.

## Introduction

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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 promote more efficient utilization of existing transportation facilities, and to ensure that new developments are designed to maximize the potential for sustainable transportation usage. This Plan has been prepared for the proposed residential development at 1814-1820 Ogden Drive in Burlingame, California. According to the City of Burlingame's 2030 Climate Action Plan (CAP), new developments are subject to a target drive-alone mode share reduction of 20 percent. This plan has been prepared with the goal of achieving at least a 20 percent reduction in PM peak hour trips. In order to propose effective and appropriate TDM measures, this Plan has been developed based on the project's size, location, and land use. Given that the project is expected to add fewer than 100 peak hour trips, a San Mateo City/County Association of Governments (C/CAG) trip reduction analysis was not prepared.

## Project Description

The project is located at 1814-1820 Ogden Drive in Burlingame, California (see Figure 1). The project site is located within the North Burlingame Residential (NBMU) Zoning District in Burlingame. The project proposes to develop the site with 90 residential units and a parking garage. The site is currently developed with an adult day care center with 50 patients and a 10,114 square foot dental office. The existing buildings would be demolished as part of the project. Vehicle access to the proposed parking garage would be provided via a new full access driveway on Ogden Drive (see Figure 2).

Based on the City of Burlingame Zoning Code for the NBMU Residential District, the project is required to provide 118 parking spaces. The project proposes to provide 145 parking spaces, including 22 tandem spaces for 44 vehicles, puzzle lifts for 66 spaces, and 35 standard spaces.

The project would include one secured bike storage room in the basement level of the garage and one secured bike storage room on the ground floor. Bike racks would be provided on the ground floor between the entry court and parking spaces for short-term use. Onsite amenities including a public plaza, package room, and community space.



**Figure 1**  
**Site Location and Surrounding Area**

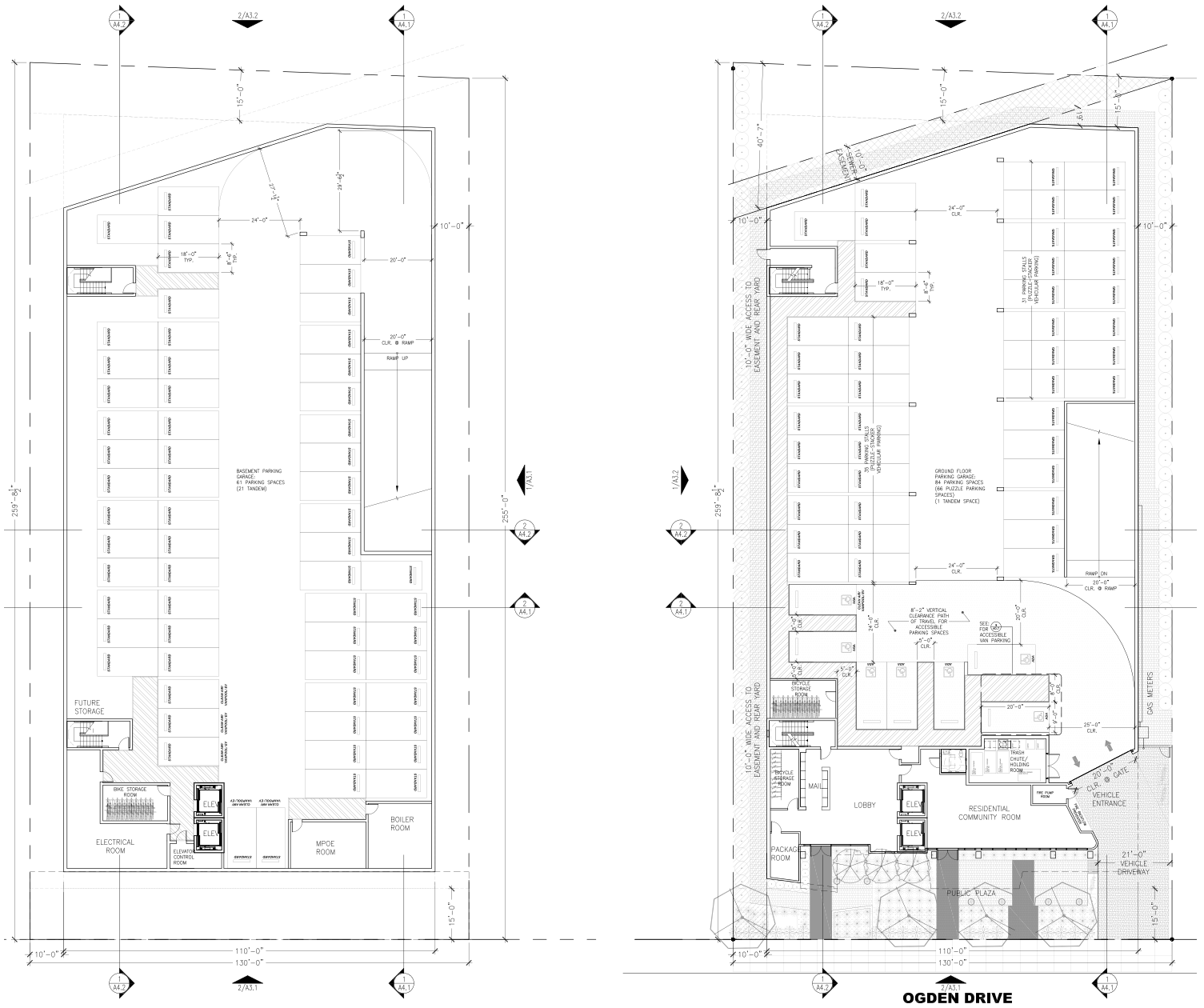


Figure 2  
Site Plan

## TDM Goals

This TDM Plan responds to the City of Burlingame TDM Program requirement and includes a broad range of TDM measures designed to reduce single-occupant vehicle trips through a combination of appropriate measures to promote alternative forms of transportation. The objective of the TDM Program is to encourage residents to walk, bike, or use existing transit services. The program complies with the City's current expectations for TDM measures and incorporates current best practices for reducing single-occupant vehicle trips to achieve the target drive-alone mode share reduction of 20% for residents.

The trip generation rates published in the Institute of Transportation Engineers' (ITE) manual entitled *Trip Generation, 10<sup>th</sup> Edition* (2017) for Multifamily Mid-Rise Housing (Land Use 221) were used for this study. Multifamily Mid-Rise Housing includes housing developments between 3 to 10 floors. Before TDM reductions, the proposed project is estimated to generate a total of 490 daily trips with 32 trips during the AM peak hour and 40 trips during the PM peak hour.

As shown in Table 1, in order to meet the City's 20 percent reduction requirement, at least 8 PM peak hour trips would need to be eliminated through implementation of the various TDM measures. Stated conversely, the project would be required to generate no more than 32 PM peak hour trips.

**Table 1**  
**Trip Generation Estimates for the 1814-1820 Ogden Drive Residential Project**

Land Use	Size	Daily		AM Peak Hour			PM Peak Hour				
		Trip Rate	Trips	Trip Rate	Trips		Trip Rate	Trips			
					In	Out		Total	In	Out	Total
Proposed Land Uses											
Residential <sup>1</sup>	90 du	5.44	490	0.36	8	24	32	0.44	24	16	40
20% Required TDM Reduction			-98		-2	-5	-6		-5	-3	-8
Gross Project Trips (w/ TDM Trip Reductions)			392		6	19	26		19	13	32
Notes:											
du = dwelling units											
All trip rates are from ITE Trip Generation Manual, 10th Edition, 2017.											
1. Mid-Rise Multifamily Housing (ITE Land Use 221): average trip rates in trips per dwelling unit were used.											
2. General Office (ITE Land Use 710): average trip rates in trips per 1,000 s.f. were used.											

## Report Organization

The remainder of this report is divided into three chapters. Chapter 2 describes the transportation facilities and services near the apartment. Chapter 3 presents the recommended TDM measures for the proposed project. Chapter 4 describes the TDM measurement tool used to estimate the total reduction from the recommended TDM measures.

## 2.

# Transportation Facilities and Services

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Transportation facilities and services that support sustainable modes of transportation include commuter rail, buses and shuttle buses, high-occupancy vehicle (HOV) lanes, bicycle facilities, and pedestrian facilities. This chapter describes existing facilities and services near the project site that will support the TDM measures contained in this plan. The existing transit service in the project vicinity is described below and shown on Figure 3. Information on nearby roadways are also included in order to provide a more comprehensive description of the nearby transportation network.

### Roadway Network

Regional access to the project site is provided via US 101. Local access to the site is provided on El Camino Real (SR 82), Millbrae Avenue, Trousdale Drive, Murchison Drive, and Ogden Drive. These roadways are described below. Although all streets in the study area run at a diagonal compared to the ordinal directions, for the purposes of this study, US 101 and all parallel streets are considered to run north-south, and cross streets are considered to run east-west.

**US 101** is a north/south, eight-lane freeway in the vicinity of the site. US 101 extends northward through San Francisco and southward through San Jose. Access to and from the project study area is provided via a full interchange at Millbrae Avenue.

**El Camino Real (SR 82)** is a north/south arterial that extends northward to San Francisco, and southward to San Jose. In the project vicinity, El Camino Real has six lanes north of Dufferin Avenue, with left turn lanes at signalized intersections. South of Dufferin Avenue, El Camino Real is narrowed to four lanes. The posted speed limit in the project area is 35 mph. In the project area, El Camino Real provides frontage roads between Murchison Drive and Dufferin Avenue. A continuous northbound frontage road extends between Murchison Drive and Dufferin Avenue. A southbound frontage road extends between Murchison Drive and Trousdale Drive. Sidewalks are present along the east side of the northbound frontage road, the west side of the southbound frontage road, and at the signalized intersections in the project area. Sidewalks also exist on both sides of El Camino Real, north of Murchison Drive. On-street parking is prohibited on both sides of El Camino Real, but permitted on both sides of the southern frontage road and along the east side of the northern frontage road. El Camino Real provides access to the project via its intersections with Murchison Drive and Trousdale Drive.



**Millbrae Avenue** is an east/west arterial that extends westward from Old Bayshore Highway to Vallejo Drive and I-280, where it terminates. Millbrae Avenue connects the western residential areas of the City of Millbrae to the regional roadways, El Camino Real and US 101. Millbrae has six lanes between El Camino Real and US 101, with a median that provides left-turn pockets at the major intersections. The posted speed limit in the project area is 35 mph. Although there are sidewalks on both sides of Millbrae Avenue, the sidewalk on the north side terminates at the Chevron gas station, located just east of Millbrae Station. Access to the project site from Millbrae Avenue is provided via El Camino Real.

**Trousdale Drive** an east/west arterial that extends westward from California Drive to I-280. Trousdale Drive has four lanes west of El Camino Real and two lanes east of El Camino Real. The posted speed limit on Trousdale Drive west of El Camino Real is 35 mph. There are sidewalks on both sides of the street and on-street parking is permitted on both sides of the street between El Camino Real and California Drive. Trousdale Drive provides access to the project via its intersection with Ogden Drive.

**Murchison Drive** an east/west collector street that extends from California Drive to Vallejo Drive near Mills Estates, where it transitions into Hunt Drive. Murchison Drive has two lanes west of El Camino Real and four lanes east of El Camino Real. There are sidewalks on both sides of the street and on-street parking is permitted on both sides of the street. Murchison Drive provides access to the project via its intersection with Ogden Drive.

**Ogden Drive** is a north/south local road between Murchison Drive and Trousdale Drive. Ogden Drive has two lanes. There are sidewalks along both sides of the street. Parking is permitted along both sides of Ogden Drive. Ogden Drive provides direct access to the site via a new full-access driveway.

## Bicycle Facilities

Bicycle facilities are an important component of the City of Burlingame's transportation network. The City's bikeways are classified as Class I, Class II, or Class III facilities, as follows:

- Class I Bicycle Path – bike paths within exclusive right-of-way, sometimes shared with pedestrians
- Class II Bicycle Lane – bike lanes for bicycle use only that are striped within the paved area of roadways
- Class III Bicycle Route – bike routes are shared with motor vehicles on the street. Class III bikeways may also be defined by a wide curb lane and/or use of a shared use arrow stencil marking on the pavement, known as a “sharrow”



Existing and future bicycle facilities near the project site are shown on Figure 3.

**North-South bicycle connections** consist of a bike lane/bike route along California Drive, from Broadway to Linden Avenue (north of Millbrae Avenue), where bicycle riders can access the Millbrae Station. Closer to the project site, there are bike lanes on both sides of California Drive between Broadway and Murchison Drive, which transitions into bike routes between Murchison Drive and Linden Avenue. A bike route also exists on El Camino Real, north of Millbrae Avenue.



**Figure 3**  
**Existing Bicycle Facilities**

**East-West bicycle connections** in the study area consist of designated bike routes on Trousdale Drive between Magnolia Avenue and Ashton Avenue and Rosedale Avenue/Ray Drive between California Drive and Devereux Drive. The Spur Trail bike path exists between South Ashton Avenue (at Mosta Grove Park) and Magnolia Avenue (behind Mills High School).

## Pedestrian Facilities

The pedestrian facilities within in the study area include sidewalks along the majority of the streets and striped crosswalks at major intersections. In the vicinity of the project site, crosswalks and pedestrian walk signals are provided at many signalized intersections along El Camino Real. The unsignalized intersection of Ogden Drive/Muchison Avenue north of the project site has crosswalks on all legs, and the unsignalized intersection of Ogden Drive/Trousdale Drive south of the project site has crosswalks on the north and east legs. .

Continuous sidewalks and crosswalks are present between the project site, bus stops in the area, and the Millbrae Station



## Millbrae Intermodal Station

The Millbrae Station is located about 0.8 miles north of the project site on California Drive, which is approximately a 15-minute walk. The station has bike racks, bike lockers, and surface parking lots. The Millbrae Station is served by Caltrain, Bay Area Rapid Transit (BART), SamTrans, and shuttles (see Figure 4).

### Caltrain

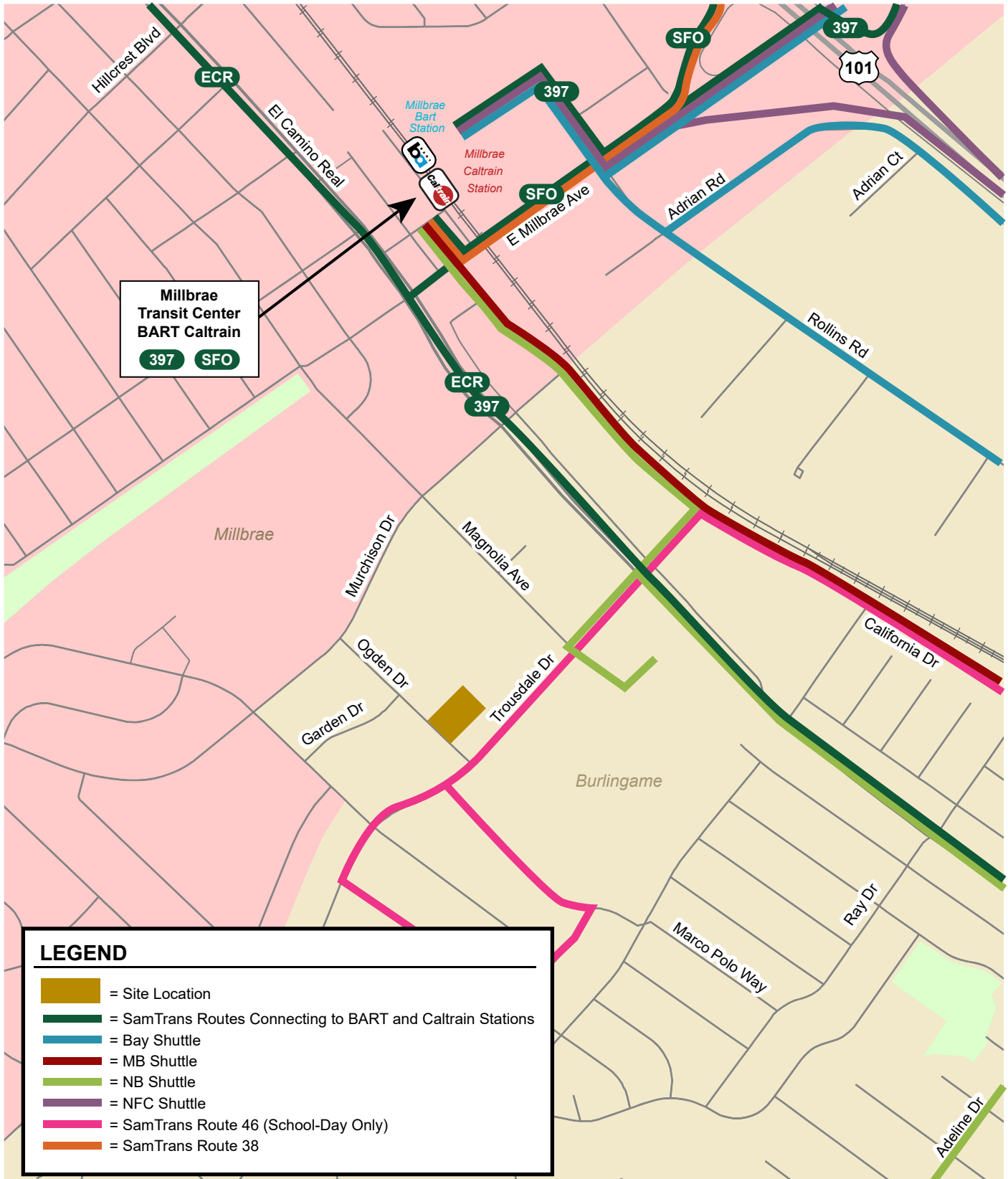
Caltrain provides commuter rail service between San Francisco and San Jose, with limited service to Gilroy during commute hours.

The Millbrae is served by local-stop, limited-stop, and baby bullet trains. During the morning peak period of 6:00 to 9:30 AM, the Millbrae Station is served by eight northbound trains (three local and five limited-stop trains) with headways of 60 minutes. Six southbound trains (three local and three limited-stop trains) serve the Millbrae Station in the AM peak period with headways of 60 minutes.



During the PM peak period between 3:30 and 7:30 PM, the station is served by 19 northbound trains (four local-stop and six limited-stop trains) with headways between 37 and 60 minutes. Eleven southbound trains (four local stop and seven limited-stop trains) with headways between 60 and 80 minutes serve the Millbrae Station during the PM peak period.

As part of the Caltrain Modernization Program, the rail service will be electrified. With the electrification of service, Caltrain will be able to provide faster and more frequent service along the corridor, including at the Millbrae Station.



**Figure 4**  
**Existing Transit Services**

## **BART**

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. BART trains operate on 15-minute headways during peak hours and 20-minute headways during off-peak hours. The Richmond-Millbrae line (Red) and Millbrae-SFO-Antioch line (Purple/Yellow) provide service to the Millbrae Station.

## **Shuttles**

### **Sierra Point Shuttle**

The Sierra Point Shuttle is operated by SamTrans and provides two routes to Balboa Park BART and the Millbrae Transit Center. The shuttle routes operate between 1000 Marina Boulevard and either Balboa Park BART or Millbrae Transit Center. The shuttle operates during the peak weekday hours, from 7:35 AM to 10:00 AM, with 27 to 38-minute headways, and from 4:20 PM to 7:40 PM, with 34 to 55-minute headways.

### **Millbrae/Broadway Shuttle**

The Millbrae/Broadway (MB) Shuttle runs between the Broadway Station and Millbrae Station. There are 10 shuttles provided during the AM peak period, with 15 to 22-minute headways, and 11 shuttles provided during the PM peak period, with 18 to 20-minute headways.

### **North Burlingame BART/Caltrain Shuttle**

The North Burlingame (NB) Shuttle runs between the Millbrae Station, Mills-Peninsula Health Services, Sisters of Mercy, and the residents of the Easton-Burlingame neighborhood during commute hours, Monday through Friday. There are 8 shuttles provided during the AM and PM peak hours with 23-minute headways during the AM peak hour and 25-minute headways during the PM peak hour.

### **Burlingame Bayside BART/Caltrain Shuttle**

The Burlingame-Bayside (BAY) Shuttle runs between the Millbrae Station and the Burlingame Bayside Area during commute hours, Monday through Friday. There are 5 shuttles provided during the AM and PM peak periods with 30 minute headways.

### **Foster City-North BART/Caltrain**

The Foster City-North (NFC) Shuttle runs between the Millbrae Station and businesses in the North Foster City Area during commute hours, Monday through Friday. There are 5 shuttles during the AM peak period, with headways between 43 to 60 minute headways. There for 4 shuttles during the PM peak period with headways between 45 and 60 minutes.

## SamTrans Bus Service

SamTrans Route 46 provided service during school days prior to Covid-19 shelter in place orders. A bus stop is located on Trousdale Drive at Magnolia Avenue, approximately 1,050 feet from the project site.

The next closest bus stops are located on El Camino Real at the Trousdale Drive intersection, approximately 1,560 feet from the project site, which is served by SamTrans Routes ECR and 397. Route ECR travels between the Palo Alto Transit Center and Daly City BART. Route 397 runs between the Palo Alto Transit Center and Drumm Street/Clay Street in San Francisco.

A bus stop for SamTrans Route SFO is located on El Camino Real at the Murchison Drive intersection, approximately 2,115 feet from the project site. Route SFO runs a loop between the Millbrae Station and the SFO Airport. SamTrans Route 38 provides one bus during the AM peak hour and one bus during the PM peak hour that stops at the Millbrae Station. Route 38 travels between the Millbrae Station and Colma BART.





### 3.

## Recommended TDM Measures

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This chapter describes Transportation Demand Management (TDM) measures that are recommended for the proposed project. The recommendations listed in this plan have been developed to meet the 20 percent trip reduction requirement set forth in the City of Burlingame's 2030 Climate Action Plan (CAP).

The TDM measures recommended to be implemented by the project include services, incentives, actions, and planning and design measures related to the attributes of the site design and site amenities. Such design measures encourage walking, biking, use of transit, and internalization of trips. Some of the recommended TDM measures are programs that would be created and implemented by the building manager.

Because the project would generate more trips in the PM peak hour than the AM peak hour, the PM peak-hour estimate of trips is used to determine the number of trip credits required. The project would generate 40 PM peak-hour trips, so in order to meet the City's 20 percent reduction requirement, at least 8 PM peak hour trips would need to be eliminated through implementation of the various TDM measures.

### TDM Administration and Promotion

#### Transportation Coordinator

A Transportation Coordinator should be assigned to provide information regarding alternative modes of transportation to residents of the project. The Transportation Coordinator should be designated by the building developer, the property manager, or any subsequent building owner.

The Transportation Coordinator's responsibilities will include updating information on the online information board/kiosk, providing trip planning assistance and/or ride-matching assistance to residents who are considering an alternative mode for their commute, and managing the annual surveys. The Transportation Coordinator should maintain a supply of up-to-date transit schedules and route maps for SamTrans and Caltrain and be knowledgeable enough to answer residents' TDM program-related questions. The Transportation Coordinator should distribute a carpool/vanpool matching application to all residents as part of the New Resident Information packets. The application will match residents who live at the project site who may be able to carpool or vanpool together.

## Promotional Programs

The Transportation Coordinator should undertake additional marketing activities to encourage residents to try alternative travel modes. Additional promotional activities might include email blasts of flyers, brochures or other materials on commute alternatives, ridesharing incentive programs, and transit benefits. SamTrans.com and 511.org contain information that may be useful for marketing programs.

## Online Transportation Kiosk

This TDM plan recommends establishing an “online kiosk” with transportation information that residents could access from their smart phones, their homes, or anywhere else. This online kiosk can be available on the project website.

By allowing someone to have all the information about transportation alternatives and TDM programs available to them in a single online location, people will be more likely to refer to this information from home. The project developer or property manager should have responsibility for setting up and maintaining this online information center. This website should include the site-specific information about all the measures, services, and facilities discussed in this plan. In addition, this online information center should include:

- A summary of SamTrans, Caltrain, BART, and nearby shuttle services and links to further information about their routes and schedules.
- Information about ride matching services (511.org and on-site ride matching) and the incentive programs available to carpools and vanpools.
- Information about services such as Uber, Lyft, and other on-demand transportation services will also be included.
- A local bikeways map and bicycling resources on 511.org.
- 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.

## Resident Orientation (Welcome) Packet

New residents should be provided transportation information packets. This packet should include information about transit maps/schedules (Caltrain, BART, SamTrans, and shuttle services), location of bus stops, bike maps, ride matching services, transit planning resources, and bicycle parking on site. Also included in the packet should be information regarding how to contact the Transportation Coordinator, who can provide information regarding alternative modes of transportation to residents.

The resident orientation (welcome) packet should provide a quick, easy-to-read announcement of the most important features of the TDM program for residents to know about immediately and a message that the building values alternative modes of transportation and takes their commitment to supporting alternative transportation options seriously. For example, it would include a flyer announcing some highlights of the TDM program and where to find more information online.

## Bicycle and Pedestrian Amenities

### Bicycle Parking

Providing secure bicycle parking encourages bicycle commuting and reduces daily bicycle trips. To meet the City's requirements, the project should provide a total of 45 long term bicycle parking spaces within the two provided bicycle storage rooms. A total of 5 short-term bicycle spaces should be



provided at convenient and well-lit locations near the entrance of the project site and the outdoor plaza.

The Transportation Coordinator should monitor the usage of the bicycle parking facilities and should also tabulate the mode share for bicycles based on survey results. Additional bicycle parking could be provided if and when it is warranted by demand.

### **Bicycle Resources**

The following resources are available to bicycle commuters through 511.org. These resources should be noted on the project's online information center, 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, commute gear, and clothing
- Links to bicycle organizations

### **Pedestrian Design Elements**

The project will provide enhanced pedestrian facilities on Ogden Drive and a public plaza between the project site and the sidewalk.

Onsite, clearly defined walkways will be incorporated to enable residents to walk to the building's amenities. A courtyard will also be provided along the eastern side of the building. The entry court and public plaza will provide safe, well-lit, accessible, and convenient access to sidewalks on Ogden Drive.

### **Passenger Loading for Rideshare Vehicles**

Providing convenient passenger loading zones near the entrance of the building would encourage residents and guests to utilize rideshare services/programs (e.g., Uber, Lyft, Scoop, Waze Carpool, etc.) and reduce parking demand. Therefore, the property owner should request that the City designate a curbside passenger loading zone on Ogden Drive near the building entrance.

### **Onsite Amenities**

#### **On-Site Package Room**

The project will provide a package room to store residents' package deliveries. The storage will be located in the lobby for easy access by the carriers and the residents. Sufficient package storage space enables residents to make on-line purchases conveniently, which could reduce vehicle ownership and vehicle trips by residents.

#### **High-Bandwidth Internet Connection**

The residential units will have the option for 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.

## Clean Air/Vanpool/Electric Vehicle Parking Spaces

The project will include a total of 145 parking spaces, of which 6 spaces will be equipped with electric vehicle charging stations. While EV charging station parking spaces will 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.

## Carpool and Vanpool Programs

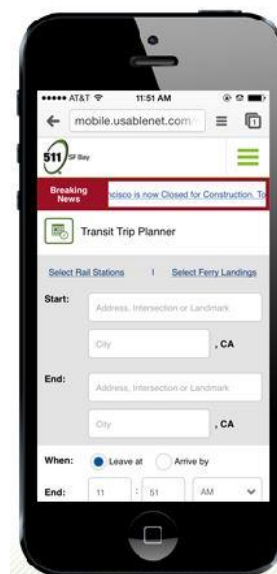
### On-Site Ride Matching Assistance

The Transportation Coordinator should distribute a carpool/vanpool matching application to all residents as part of the welcome packets. The application should 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 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 a neighbor than with an unknown person who lives nearby.

### 511 Ride Matching Assistance

#### 511 RideMatch

The 511 RideMatch service provides an interactive, on-demand system that helps commuters find carpools, vanpools, or bicycle partners. The Transportation Coordinator in conjunction with the future building manager contacts, will promote the on-line 511 service to residents. 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.



#### Scoop

Scoop offers a fee-based ride matching service through an easy-to-use app. Scoop allows commuters to separate their AM and PM trips, to help accommodate unpredictable work schedules. Scoop also lets users schedule a trip as a driver or passenger, depending on their daily needs. Scoop identifies carpoolers who are heading the same direction and finds the most efficient carpool trip based on fastest route, nearby carpoolers, carpool lanes, and other factors. Payment for each trip is made through the app.

Ride matching assistance is also available through a number of peer-to-peer matching programs, such as Zimride, which utilize social networks to match commuters.

## **Carpool/Vanpool Incentives**

### **Scoop Discounts for San Mateo County Carpools**

San Mateo City/County Association of Governments (C/CAG) has developed the “Carpool in San Mateo County!” program, which provides a \$2 incentive per person for each trip that begins or ends in San Mateo County. Drivers and riders can earn up to \$4 per day when using the Scoop app to carpool. Drivers and riders using Scoop will automatically receive the \$2 incentive per person during commute periods (5:30 a.m. – 10:00 a.m. and 3:30 p.m. – 8:00 p.m.), with a maximum of \$4 per rider and driver each day.

### **The Star Store**

The Peninsula Traffic Congestion Relief Alliance has established a program called the Star Store. Residents and commuters who travel to, from, or through San Mateo County can earn points by logging their commutes in the STAR platform. Every day that someone commutes by an alternative to driving alone, they earn a point. Users collect points and then redeem them for rewards.

### **First Five Rides Free on 511**

Currently, the 511 Carpool Program is offering new riders on carpool apps Scoop or Waze Carpool five free rides. Users can download the apps, set up an account, enter their schedule and get their first five rides free.

### **Vanpool Formation Incentive**

The 511 Regional Rideshare Program provides up to \$500 in gas cards to new vanpools that meet certain eligibility requirements and complete three to six consecutive months of operation.



### **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 \$100 per month, with a limit of 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.

### **Vanpool Participant Rebates**

The Peninsula Traffic Congestion Relief Alliance also offers an incentive to commuters to try vanpooling. The Alliance will pay half of the cost of a new vanpool participant's seat, up to \$100 per month, for the first three months in the van. New vanpools that operate for at least six months can receive a one-time rebate of \$500, paid to the vanpool driver (rotating drivers may share the bonus).

## **Transit Elements**

### **Proximity to Transit Center**

The project is located about 0.8 miles from the Millbrae Station, which provides direct access to Caltrain and BART services as well as to multiple shuttle routes and SamTrans bus routes. At a normal walking pace, it would take approximately 15 minutes to walk from the project site to the transit center. This encourages the use of Caltrain, BART, and SamTrans for residents of the proposed project.

## Transit Subsidies

Transit subsidies promote sustainable modes of transportation. These programs should be implemented by the building developer. Hexagon recommends the following programs and services that promote sustainable modes of transportation:

- **Free Transit Tickets.** The Commute.org (formerly the Peninsula Traffic Congestion Relief Alliance) Try Transit Program provides free transit tickets to people who are interested in trying public transit to get to work. The Try Transit program provides either one \$9 BART ticket, three round-trip Caltrain tickets, six one-way SamTrans tickets or three round-trip VTA tickets per household. Commuters requesting tickets must work, live, or drive through San Mateo County.
- **One Time Transit Subsidy.** The project should provide new residents with a one-time initial transit subsidy in the form of a Clipper Card loaded with a one-month pass for SamTrans and BART or Caltrain. This measure would incentivize new residents who are unfamiliar to the area to explore alternative commuting options.

## 4. The TDM Measurement Tool

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The Bay Area Air Quality Management District (BAAQMD) has prepared a software tool that is designed to quantify by how much a TDM Plan for a specific project in a specific location is likely to reduce Vehicle Miles Traveled (VMT). For this report, a reduction in trips is considered equivalent to a reduction in VMT. This TDM Tool is based on the steps and calculations documented in the California Air Pollution Control Officers Association (CAPCOA) report, *Quantifying Greenhouse Gas Mitigation Measures*, published in August 2010.

The TDM Tool provides an estimate of the amount by which a project's location and land use characteristics, its site enhancements, and the measures taken to reduce commute trips will reduce VMT. Hexagon has applied the BAAQMD tool to the TDM Plan for the residential development at 1814-1820 Ogden Drive in Burlingame, California. Based on the TDM Tool, the project will meet the goal of a 20% reduction in trips through the implementation of this TDM Plan.

The following discussion summarizes how the tool calculated the VMT reduction for this project and this TDM Plan. It should be noted that there are some characteristics of the project (such as its accessibility) for which the TDM Tool gives a significant amount of credit in calculating the VMT reduction, but which are not listed as specific TDM measures in the preceding chapter. Conversely, there are some specific TDM measures (such as efforts to promote bicycling among residents) that are given very little or no credit by the TDM tool. As such, the VMT reduction calculated by the tool should be regarded as a preliminary estimate for the TDM Plan but should not be used as a monitoring tool after the building is occupied. The best way to monitor the success of any TDM Plan is with driveway counts that provide actual data on the trip-making patterns of the residents who live in the building. However, the TDM Tool does provide a useful indicator prior to implementation of a Plan as to whether it is likely to achieve a certain reduction target.

The VMT reduction calculated by the BAAQMD Tool is based on the following factors:

**Destination Accessibility.** The project is within 2.7 miles of downtown Burlingame and major workplace developments near the project site. These destinations can be easily accessible by transit, bicycle, or walking. Because of this, a VMT reduction is estimated based on the urban setting and desirable location of the project.

**Transit Accessibility.** The TDM tool compares the transit mode share for this site to that of a typical ITE development. There are numerous transit options within walking distance of the project site. The Millbrae Station is approximately 0.8-mile away from the project site and provides access to BART, Caltrain, and SamTrans bus routes.

**Below Market Rate (BMR) Housing.** The project proposes to offer approximately 5% of units to be BMR housing. By providing BMR housing, it gives the opportunity for lower income families to live closer to employment centers and to work at jobs near transit. By providing BMR units, the project would build to a higher density, which allows a greater number of families that can be accommodated within transit-oriented development.

**Pedestrian Network.** The immediate area surrounding the project site is adequately served by pedestrian facilities. The project would bring upgrades to the pedestrian network both on the project site and along the project frontage on Ogden Drive. The project earns VMT reductions based on planned improvements to the pedestrian network and facilities and the high density of the area.

**TDM Program with Monitoring and Reporting Requirements.** The TDM Tool provides more credit to TDM programs that include a performance standard (such as a trip reduction goal or VMT reduction goal) and that include requirements for monitoring and reporting than those that do not. The rationale for this is that if residential development managers/owners are required to monitor their results and report those results to a City or other authority, and if there is a specific target to be achieved, they will take their responsibilities to implement the TDM Program more seriously.

**Transit Fare Subsidy.** The TDM tool provides a significant VMT credit for the implementation of transit fare subsidies when available to all residents of the property. This reduction is credited based on the use of the Try Transit Program/Clipper Cards that would be provided to residents of the project site. The proximity to transit stations and connections available from light rail would encourage the use of these Smart Pass/Clipper Cards for all trips. The project's proximity to destinations that are served by light rail and its connections would generate transit trips that are not solely work related.

**Telecommute Program.** Telecommuting receives VMT reductions as some residents no longer would be required to travel to their work location. With the installation of high-speed internet, a small portion of residents would choose not to drive to their place of work every day. The TDM program assumes that tenants would spend at least 1.5 days per week working from home. As a part of the plan, it is estimated that 5% of residents would telecommute.

**Marketing Program for the TDM Plan.** This TDM Plan includes creation of an "online kiosk" which would serve to provide information about all resources and programs included in the plan to all residents, wherever and whenever they want to access it. In addition, New Resident Information packets would be distributed to residents when they move into the development. The Transportation Coordinator would be available to answer questions and provide additional information to residents as needed. The TDM Tool provides credit for this level of marketing activity.

**Ridesharing Program.** The TDM tool also gives credit for ridesharing programs that provide ride-matching assistance and/or a link to websites for coordinating rides. This TDM Plan includes the ride-matching assistance and website.

As noted above, the TDM Tool estimates that the above measures would exceed the goal of a 20% overall reduction in trips, with 20% coming from TDM measures. The results of the TDM Tool are shown in Appendix A.

## **Appendix A**

### **BAAQMD Tool**



Global Max Reduction (all VMT):  
25.4%  
or  
10

Cross-Category Max Reduction (all VMT):  
21.9%  
or  
9

Max Reduction (all VMT):  
4.4%  
or  
2

<b>Land Use/ Location</b>	<b>Neighborhood/ Site Enhancements</b>	<b>Parking Policy/ Pricing</b>	<b>Transit System Improvements</b>	<b>Commute Trip Reduction (CTR) Programs</b> (assuming mixed-use development)
Category Reduction (all VMT): 20.3%	Category Reduction (all VMT): 2.0%	Category Reduction (all VMT): 0.0%	Category Reduction (all VMT): 0.0%	Category Reduction (work VMT): 20%
<b>Density</b>	<b>Pedestrian Network</b>	<b>Parking Supply Limits</b>	<b>Network Expansion</b>	<b>CTR Program - Required (work VMT)</b>
0.0%	2.0%	0.0%	0.0%	21.0%
<b>Design</b>	<b>Traffic Calming</b>	<b>Unbundled Parking Costs</b>	<b>Service Frequency/Speed</b>	<b>CTR Program - Voluntary (work VMT)</b>
0.0%	0.0%	0.0%	0.0%	0.0%
<b>Diversity</b>	<b>NEV Network</b>	<b>On-Street Market Pricing</b>	<b>Bus Rapid Transit</b>	<b>Transit Fare Subsidy (work VMT)</b>
0.0%	0.0%	0.0%	0.0%	12.9%
<b>Destination Accessibility</b>	<b>Car Share Program</b>			<b>Employee Parking Cash-Out (work VMT)</b>
15.5%	0.0%			0.0%
<b>Transit Accessibility</b>				<b>Workplace Parking Pricing (work VMT)</b>
5.5%				0.0%
<b>BMR Housing</b>				<b>Alternative Work Schedules and Telecommute Program (work VMT)</b>
0.2%				1.1%
				<b>CTR Marketing (work VMT)</b>
				4.0%
				<b>Employer-Sponsored Vanpool/Shuttle (work VMT)</b>
				0.0%
				<b>Ride Share Program (work VMT)</b>
				15.0%
				<b>School Pool (school VMT)</b>
				0.0%
				<b>School Bus (school VMT)</b>
				0.0%