



HEXAGON TRANSPORTATION CONSULTANTS, INC.

# 756 California Street Commercial Development

## Transportation Demand Management (TDM) Plan

Prepared for:

**City of Mountain View on Behalf of 756 California Street LLC**

September 17, 2021



### Hexagon Transportation Consultants, Inc.

Hexagon Office: 4 N. Second Street, Suite 400,  
San Jose, CA 95113

Hexagon Job Number: 19RR03

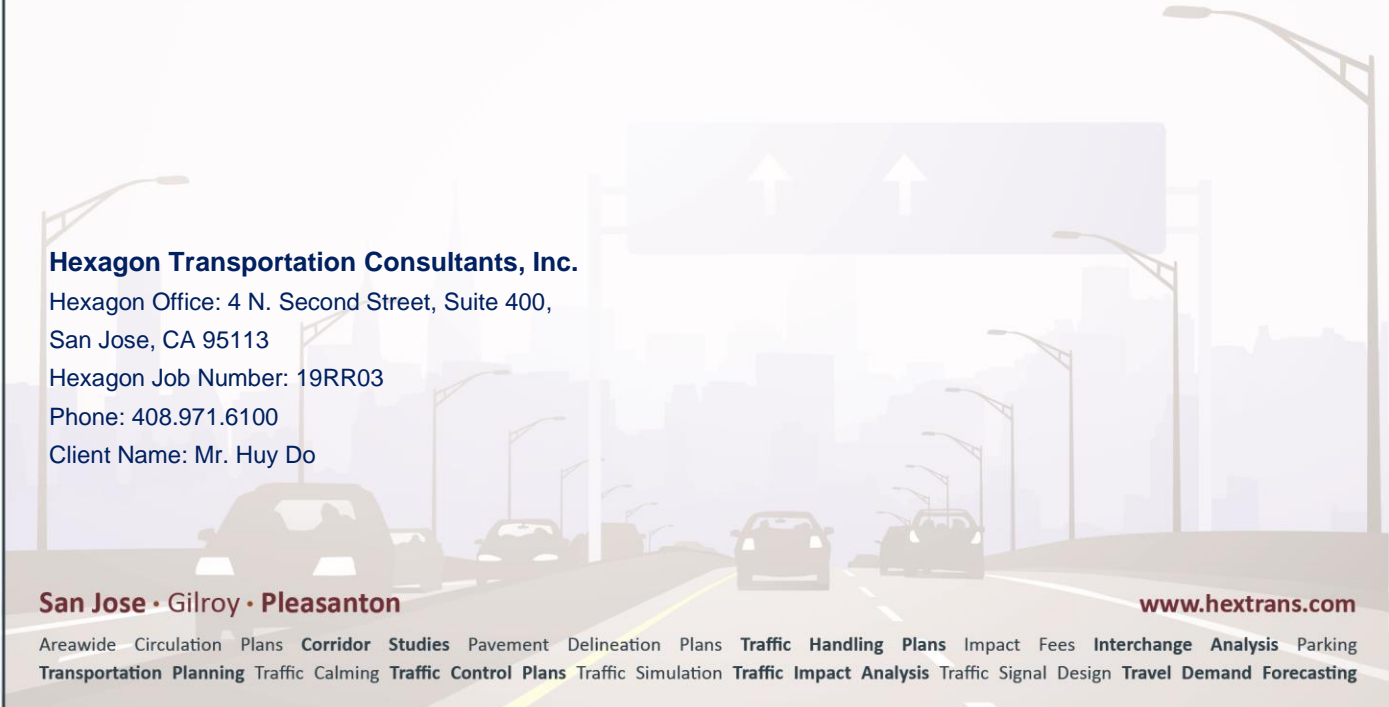
Phone: 408.971.6100

Client Name: Mr. Huy Do

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## Table of Contents

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1.	Introduction.....	1
2.	Existing Transportation Facilities .....	5
3.	TDM Programs .....	11
4.	TDM Implementation, Monitoring, Reporting, and Noncompliance.....	15

## List of Tables

Table 1	Existing Bus, Shuttle and LRT Service.....	8
Table 2	Estimated TDM Reduction .....	14
Table 3	Trip Reduction Goal .....	16

## List of Figures

Figure 1	Project Site Location .....	3
Figure 2	Site Plan .....	4
Figure 3	Existing Bicycle Facilities .....	9
Figure 4	Existing Transit Services.....	10

# 1. Introduction

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This transportation demand management (TDM) plan has been prepared for the commercial development at 756 California Street in downtown Mountain View, California. 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 purposes of TDM are to (1) reduce the amount of traffic generated by new developments; (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 developments 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 project is required by the City of Mountain View to prepare and implement a TDM plan. The purpose of the proposed TDM plan is to reduce employees' peak-hour SOV commute trips and parking demand. The goal of the proposed TDM plan is to achieve a twenty percent (20%) peak-hour vehicle trip reduction target.

## Project Description

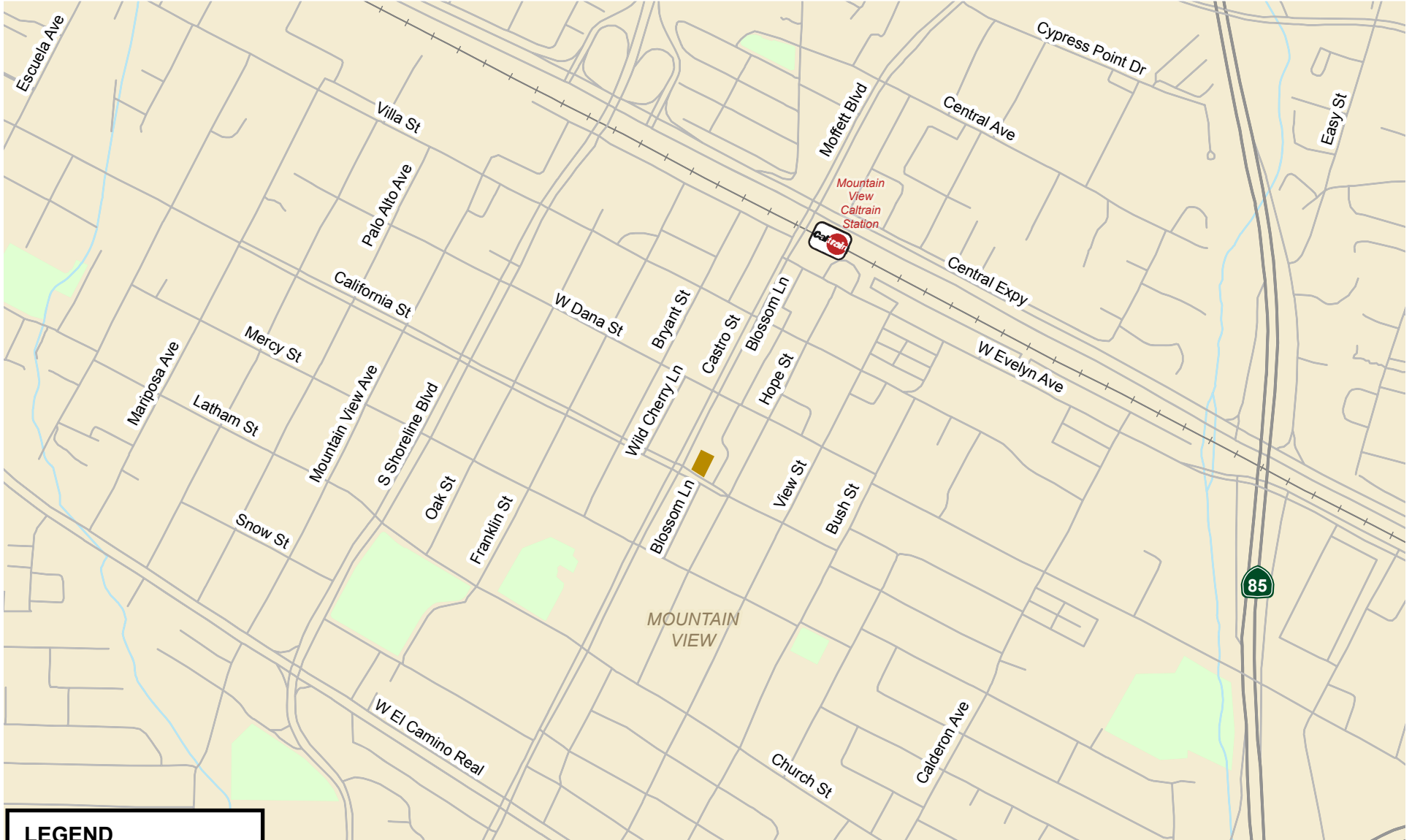
The commercial development is located on the north side California Street, west of Hope Street in downtown Mountain View. The project comprises a 3-story commercial building. The building includes 2,072 square feet of retail space on the ground floor, 2,563 square feet of general office space on the second floor, and 2,362 square feet of dental office space on the third floor. The project would replace the existing one-story building that is currently occupied by a tech company and a dental office. The dental office will remain and occupy the third floor of the project. Figure 1 shows the location of the project and Figure 2 shows the site plan.

The project is located in downtown Mountain View, close to El Camino Real and to the Mountain View Transit Center. The Transit Center provides Caltrain and Santa Clara Valley Transportation Authority (VTA) transit services, as well as local shuttle services. Existing transportation facilities in the project vicinity are described in Chapter 2. The project location by itself provides the following advantages in promoting transit, bicycling, and walking and reducing SOV trips generated by the project.


- **Downtown Location.** The location of a project within or adjacent to a central business district promotes pedestrian and bicycle travel in a relatively high-density area of complementary land

uses. The project is located within the downtown district, and it is a short walk or bicycle ride from the retail, office, and residential land uses in the downtown and the surrounding area. The project location effectively renders it part of a large-scale mixed-use development in a pedestrian-friendly environment with a significant share of internal trips.

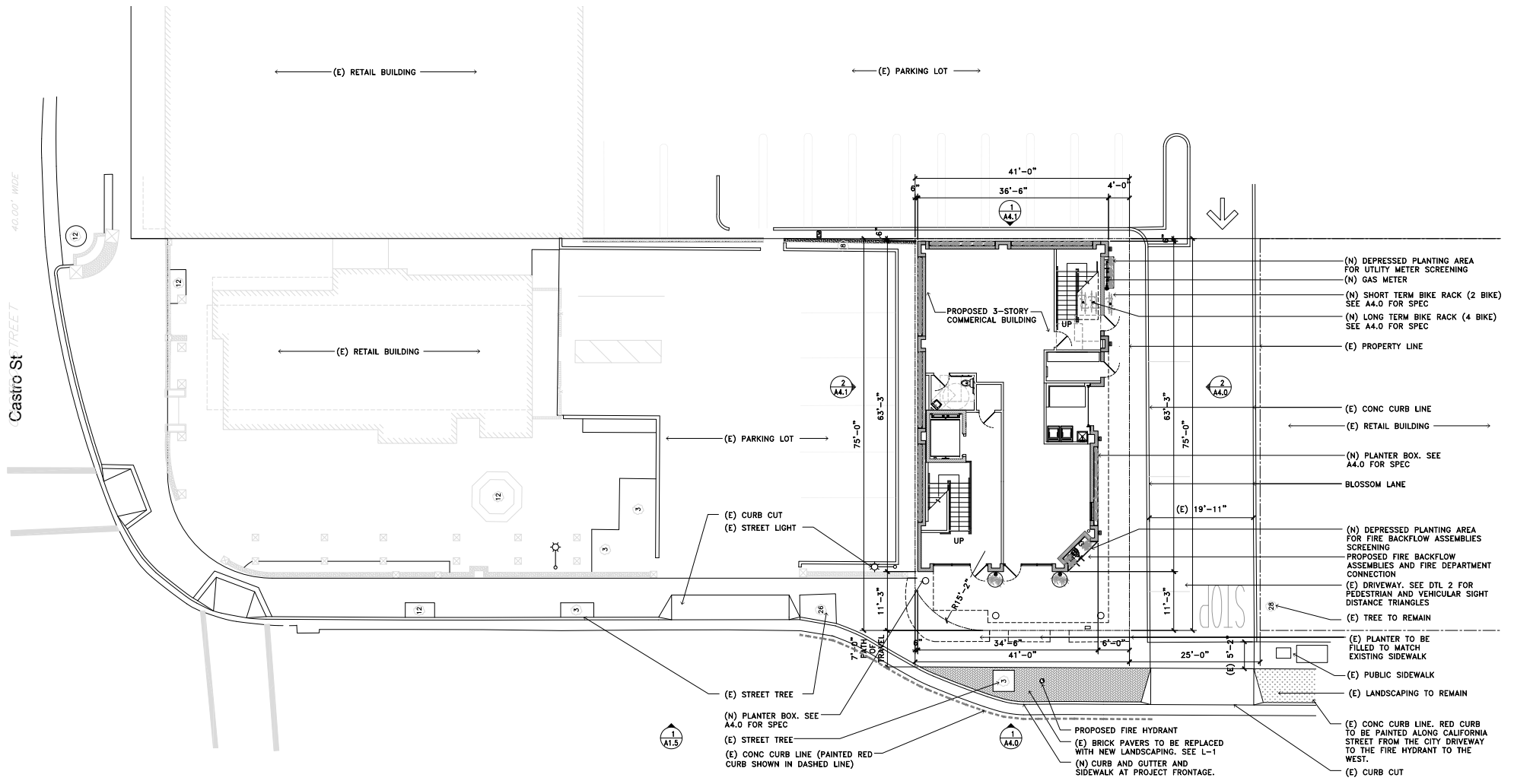
- **Proximity to Transit.** The project is located at about 0.5 mile, or 11-minute walk, from El Camino Real and 0.3 mile, or about a 7-minute walk, from the Mountain View Transit Center. There is frequent bus service, including express bus service on El Camino Real. The Transit Center provides Caltrain commuter rail and VTA light rail transit (LRT) services. Caltrain and VTA provide frequent and reliable transit service to a high percentage of regional destinations. This project clearly benefits from the nearby rail and bus services.



**LEGEND**

 = Site Location

**Figure 1**  
**Project Site Location**



California St

Figure 2  
Site Plan

## 2. Existing Transportation Facilities

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Transportation facilities and services that support sustainable modes of transportation include buses and shuttle buses, LRT, commuter rail, and bicycle and pedestrian facilities. This chapter describes existing facilities and services near the project site. Figure 3 shows the existing bicycle facilities, and Figure 4 shows the existing bus and rail services. Note that the transit services discussed in this chapter are based on the transit options and timetables available before the COVID-19 pandemic began and before the various shelter-in-place orders were implemented.

### Pedestrian Facilities

A complete network of sidewalks is present along the streets in the vicinity of the project site, including California Street, Castro Street, and Hope Street. Crosswalks with pedestrian signal heads are located at the signalized intersections in the downtown area. Crosswalks also are provided at several mid-block locations on Castro Street and at some of the unsignalized intersections in the project vicinity. Overall, the existing network of sidewalks and crosswalks provides pedestrians with safe routes to transit services and other points of interest within the downtown area.

### Bicycle Facilities

The bicycle facilities that exist within one mile of the project site include the Stevens Creek trail (Class I bikeway), striped bike lanes (Class II bikeway), shared bike routes/boulevards (Class III bikeway), and protected bikeways (Class IV bikeway). The existing bicycle facilities are shown graphically on Figure 3.

The Stevens Creek trail runs from the North Bayshore Area north of US 101 to Dale Avenue/Heatherstone Way in the south. The trail is shared between pedestrians and bicyclists and separated from motor vehicle traffic. The trail can be accessed from Dana Street, El Camino Real, Evelyn Avenue, and Mercy Street, less than one-mile walking/biking distance from the project site. A short Class I bikeway runs along the east side of Shoreline Blvd between Wright Ave in the north and Villa St in the south. There is a Class IV bikeway on Castro Avenue, south of El Camino Real.

Striped bike lanes are present along the following street segments:

- Shoreline Boulevard between El Camino Real and Charleston Road,
- California Street between Castro Street and Del Medio Ave,
- Evelyn Avenue east of View Street,
- Dana Street between Calderon Avenue and Moorpark Way,
- Calderon Avenue between Mercy Street and Evelyn Avenue,
- Phyllis Avenue between El Camino Real and Grant Road, and
- Grant Road between Phyllis Avenue and Foothill Expressway.

Bike routes are typically designed with signs and/or sharrows (shared-lane markings). Bike routes may also be identified on a local residential or collector streets when the travel lane is wide enough and the traffic volume is low enough to allow both bicyclists and motor vehicles. Bike routes are present along the following street segments:

- Church Street between Shoreline Boulevard and Calderon Avenue,
- California Street between Castro Street and Bush Street,
- View Street between California Street and Evelyn Avenue,
- Dana Street between Bush Street and Calderon Avenue,
- Evelyn Avenue between Castro Street and View Street, and,
- Miramonte Avenue between El Camino Real and Harpster Drive.

Bike boulevards are modified bike routes offering especially convenient and efficient through-routes for bicyclists of all skill levels. Central Avenue, Stierlin Road, Montecito Avenue, and Evelyn Avenue are designated as bike boulevards.

There are no bicycle facilities on Hope Street or Castro Street in the immediate vicinity of the site. However, because of low traffic volumes on Hope Street, it is conducive to bicyclists.

## Transit Services

Existing transit services in the project vicinity are provided by VTA, Caltrain, Mountain View Transportation Management Association (MTMA), and the Mountain View Community Shuttle. These transit services described below and are shown on Figure 4.

### VTA Service

The VTA operates local bus routes, one frequent bus route, one rapid bus route, and one LRT line within the project vicinity. The VTA bus routes with bus stops near the project site and the LRT lines are described in Table 1, including their terminus points, closest scheduled stop, and commute hour headways.

The closest bus stop (400 feet from the project site) is located at the Castro Street/California Street intersection with service provided by local routes 21, 51, and 52. Frequent bus routes 22 and rapid bus route 522 stop at the Castro Street/El Camino Real intersection about 0.5 miles south of the project site.

The VTA operates the 42.2-mile LRT system extending from south San Jose through downtown to the northern areas of San Jose, Santa Clara, Milpitas, Mountain View and Sunnyvale. The service operates from approximately 4:30 AM to 1:15 AM with 15-minute headways during much of the day on weekdays. The Mountain View-Winchester LRT line (Orange Line) operates along Central Expressway within the project vicinity and stops at the Mountain View Transit Center, which is about a 0.3 mile walk north of the project site.



### **Caltrain Service**

Caltrain is a regional, intercity commuter rail service between San Francisco and Gilroy. Caltrain provides service with approximately 20- to 30-minute headways during the weekday AM and PM commute hours. Trains stop frequently at the Mountain View Station between 4:30 AM and 11:00 PM in the northbound direction, and between 6:00 AM and 1:30AM in the southbound direction. On weekdays, there are 40 northbound and 40 southbound trains stopped at the Mountain View Station, with 3 Baby Bullet trains in the morning and 5 trains in the afternoon commute hours in the northbound direction and 5 Baby Bullet trains in the morning and 3 trains in the afternoon commute hours in the southbound direction.

### **Mountain View Transportation Management Association Shuttles**

The MTMA operates the MVgo shuttle system. This shuttle system is provided through the collection of MTMA member dues. MVgo operates three shuttle routes that provide service to employment areas from the Mountain View Transit Center. Two routes serve the North Bayshore area, and one route serves the N. Whisman area. The shuttles are timed to meet Caltrain arrivals during the AM and departures during PM commute periods. The shuttles are free and open to the public.

### **Mountain View Community Shuttle**

The Mountain View Community Shuttle is operated by the City of Mountain View and Google. The Community Shuttle route forms a loop around the city. The Community Shuttle route includes stops at the Mountain View Transit Center, along Middlefield Road, at the El Camino Hospital, Civic Center, and along Rengstorff Avenue. The Community Shuttle operates seven days a week from 10:00 AM to 6:00 PM with 30-minute headways on weekdays and 1-hour headways on weekends. The nearest Community Shuttle stop is located approximately 0.2 miles south of the project site at the Castro Street/Mercy Street intersection.

**Table 1**  
**Existing Bus, Shuttle and LRT Service**

Bus Route	Route Description	Closest Stop & Distance to Project Site	Weekday Hours of Operation <sup>1</sup>	Headway <sup>1</sup>
<b><u>VTA Transit Service</u></b>				
Local Bus 21	Stanford Shopping Center to Santa Clara Transit Center	Castro/California, 400 feet	6:00 AM-9:30 PM	30 min
Local Bus 40	Foothill College to Mountain View Transit Center	Castro/Villa 0.2 mi	6:00 AM-10:30 PM	30 min
Local Bus 51	Moffett Field/Ames Center to West Valley College	Castro/California, 400 feet	6:00 AM-7:30 PM	30 min
Local Bus 52	Foothill College to Downtown Mountain View	Castro/California, 400 feet	7:00 AM-9:00 PM	30 min
Frequent Bus 22	Palo Alto Transit Center to Eastridge Transit Center via El Camino	El Camino Real/Castro, 0.5 mi	24 hours	15 min
Rapid Bus 522	Palo Alto Transit Center to Eastridge Transit Center	El Camino Real/Castro, 0.5 mi	5:00 AM-12:00 AM	10-15 min
Orange Line	Mountain View Station to Alum Rock Station	Mountain View Transit Center, 0.3 mi	5:00 AM-1:00 AM	15 min
<b><u>MVgo Transit Service</u></b>				
MVgo E. Whisman	MV Transit Center to N. Whisman area	Mountain View Transit Center, 0.3 mi	AM & PM Peak Hours meeting each train	20-25 min
MVgo E. Bayshore	MV Transit Center to E. Bayshore area	Mountain View Transit Center, 0.3 mi	AM & PM Peak Hours meeting each train	20-25 min
MVgo W. Bayshore	MV Transit Center to W. Bayshore area	Mountain View Transit Center, 0.3 mi	AM & PM Peak Hours meeting each train	20-25 min
<b><u>Mountain View Community Shuttle</u></b>				
Community Shuttle	Loops around the City via Middlefield Road, Whisman Road, Villa Street, and Rengstroff Avenue	Castro/Mercy 0.2 mi	10:00 AM-6:00 PM	30 min
<b>Notes:</b>				
1. Approximate weekday operation hours and headways during peak commute periods in the project area, as of March 2020.				



**Figure 3**  
Existing Bicycle Facilities



Figure 4  
Existing Transit Services

### 3.

## TDM Programs

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The TDM measures recommended for the 756 California Street commercial project include design features, programs, and services that promote sustainable modes of transportation and reduce the vehicular demand that would be generated by the project. The goal of this TDM plan is to achieve a twenty percent (20%) peak-hour vehicle trip reduction target.

### TDM Coordinator

The project shall appoint a TDM coordinator who would be the primary contact with the City and would be responsible for implementing and managing the TDM plan. This TDM coordinator shall be a point of contact for employees/tenants should TDM-related questions arise and would be responsible for ensuring that employees/tenants are aware of all transportation options and how to fully utilize the TDM programs. The TDM coordinator shall provide the following services and functions to ensure the TDM plan runs smoothly:

- Provide information about monthly transit passes (including discounts or subsidies offered to employees/tenants)
- Provide transportation information packets to new employees/tenants
- Audit and review building transportation needs
- Manage travel surveys to track trends and develop new commute programs
- Organize encouragement events and programs such as walk/bike/transit to work days
- Coordinate transportation services that include access to bike repair facilities as well as bike share or a loaner bike program

### Alternative Transportation Information and TDM Marketing

The project shall provide transportation information packets to all new employees/tenants and ensure that employees/tenants are aware of the programs available to them. This packet shall include information about transit maps/schedules (Caltrain, VTA, MVgo, Community Shuttle), locations of bus stops and Caltrain/LRT stations, transit fare subsidies or transit passes to be provided by employers, guaranteed ride home service to be provided by employers, ride matching programs (511.org's RideMatching service, peer-to-peer matching apps, such as Scoop and Waze), 511.org's carpool/vanpool subsidy program, bike maps, and bicycle parking on-site. Also included in the packet shall be information regarding how to contact the TDM coordinator.

## Rideshare Matching Services

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 TDM Coordinator shall provide employees/tenants with information on 511.org's ridematching service and other ridematching services. For example, ridematching assistance is available through a number of peer-to-peer matching programs, such as Scoop and Waze Carpool, which utilize mobile apps to match commuters.

## Vanpool/Carpool Incentives

The TDM Coordinator shall provide employees/tenants with information on 511.org's carpool/vanpool subsidy program. The 511.org's Carpool/Vanpool Program offers 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 to six months of use.

## Telecommute/Flexible Work Schedule Program

Offering employees the opportunity to work from home or travel outside the peak travel periods can help reduce the number of commute trips to and from the project site.

The project shall include the following infrastructure to support its future tenants to implement an alternative work schedule:

- Heating, cooling, and ventilation systems shall be available for extended schedules
- High-bandwidth internet connections shall be included to facilitate telecommuting
- Security services shall be provided to support extended schedules

This telecommute/flexible work schedule program will be most beneficial to the employees of the office use.

## Guaranteed Ride Home Program

Guaranteed Ride Home (GRH) is a program that provides a "back-up" ride to employees who use transit, carpool, biking/walking, or another alternative as their commute mode. It is an important supportive measure to encourage employees to not drive alone to work.

The project shall require future tenants to provide a GRH program to employees. The GRH program can be implemented through a taxi company or a ridesharing services such as Uber and Lyft. For employees that commute to work using a mode other than driving alone that need to use a taxi company or ridesharing service to get home in an emergency, they would submit a receipt for the cost of their trip and be reimbursed.

## Transit Passes

Subsidized transit passes are an extremely effective means of encouraging employees to use transit rather than drive to work. Transit passes allow employees to save money and avoid the

stress of driving during the commute periods. One element of this recommended TDM plan is to provide employees with financial incentives to utilize public transit when commuting to and from the project site.

The project shall require future office tenants, as part of the lease agreement, to provide free transit passes (Caltrain or VTA) for their employees. There are a number of ways to structure a financial incentive for transit. Employers can cover the total monthly cost of transit for those employees who take transit through a pre-tax benefit, or purchase transit passes themselves and distribute them to employees, or offer a universal transit pass program.

Employers may consider universal transit pass programs, which are different from financial incentives in that an employer purchases a pass for all employees, regardless of whether they currently ride transit or not. These passes typically provide unlimited transit rides on local or regional transit providers for a low monthly fee; a fee that is lower than the individual cost to purchase a pass, since a bulk discount is given. Such programs can be more cost-effective option for employers to reducing vehicle trips as compared to purchasing individual passes.

It is likely that the majority of the employees taking public transit will take Caltrain to work; therefore, future tenants should consider the Caltrain universal transit pass program (Go Pass program). The Caltrain Go Pass is an annual pass purchased by a company for its employees. All eligible employees receive the Go Pass, whether they use it or not. The passes are purchased from Caltrain at a significant discount and provide all employees with free Caltrain travel between all zones, seven days a week. The passes are non-transferable stickers applied directly to the Employee ID card to prevent cheating, which can otherwise be a problem with transit subsidies. The project should offer Caltrain passes to all employees, and if a significant number of employees elect to use Caltrain then the project should consider enrolling in the Caltrain Go Pass program.

## **Bicycle Storage and Facilities**

The project site plan shows 4 secured bike parking spaces in the northeast corner of the building on the first floor and 2 short-term bike parking spaces in racks near the northeast building entrance.

The project shall also include on-site bike pump and repair facilities and a bike share or loaner bike program.

## **Estimated Trip Reduction**

The URBEMIS model uses data supplied by the California Air Resource Board to calculate vehicle emissions. The model also includes methods to calculate trip reduction based on various trip reduction measures such as the TDM measures recommended for the project. Based on the project's location, proximity to transit, surrounding lane uses, and the project's TDM plan, the URBEMIS model estimates that the project can achieve a 20% trip reduction (see Table 2).

**Table 2**  
**Estimated TDM Reduction**

Mitigation Step :	% Reduction	Total % Reduced
0. Baseline		0%
1. Mix of Uses <sup>1</sup>	2.45%	2%
2. Locally Serving Retail (includes step 1) <sup>1</sup>	2.00%	4%
3. Transit Service (includes step 1-2) <sup>1</sup>	15.00%	19%
4. Transportation Demand Management (includes step 1-3) <sup>2</sup>	0.63%	<b>20%</b>

Notes:

<sup>1</sup> Trip reduction based on project location near : complementary uses near project and pedestrian friendly environment. Source: URBEMIS model

<sup>2</sup> Trip reduction based on amenities included: free transit passes, bike parking, telecommuting/flexible work schedule, guaranteed ride home program, and carpool matching program. Source: URBEMIS model.



## 4. TDM Implementation, Monitoring, Reporting, and Noncompliance

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The purpose of this TDM plan is to reduce the overall trips generated by the proposed development. The goal of this TDM plan is to achieve a twenty percent (20%) peak-hour vehicle trip reduction target. The property owner will be required to submit to the City an annual TDM performance report that identifies the TDM plan's effectiveness at achieving the vehicle trip reduction requirement.

### Implementation

The project applicant shall submit this TDM plan to the City. The project applicant along with the property manager/TDM Coordinator would be responsible for ensuring the TDM plan is implemented.

In addition, all lease agreements shall require tenants to participate in the TDM plan immediately upon occupancy. Lease agreements shall describe the elements of this plan for which tenants have immediate or potential future responsibility.

### Monitoring, Reporting, and Noncompliance

The purpose of monitoring and reporting the TDM plan is to ensure that the program is successfully achieving the trip reduction goal.

The property owner/tenant, or their representative, shall prepare an annual TDM report and submit it to the City to document the effectiveness of the TDM program in achieving the goal of twenty percent (20%) peak-hour vehicle trip reduction by employees within the project, which equates to a limit of 13 AM peak-hour vehicle trips and 15 PM peak-hour vehicle trips (see Table 3). The TDM report shall be prepared by an independent consultant and paid for by the property owner or their representative; the consultant shall work with the property's TDM coordinator. The TDM report will include a determination of historical employee/resident commute methods, which shall be informed by surveying all employees on the project site. All nonresponses to the employee commute survey will be counted as a drive-alone trip.

The initial TDM report for the project will be submitted on December 1, or the following business day thereafter if City Hall is closed, one year after the granting of the Certificate of Occupancy for the project. Subsequent reports will be collected annually on December 1.

The TDM report shall either: (1) state that the project is compliant with the trip cap identified above; or (2) state that the project is not compliant with the trip cap, providing an explanation of how and why the goal has not been reached and a description of additional measures that will be adopted in order to meet the trip. The property owner and the consultant preparing the report shall coordinate with City staff for any additional reporting requirements.

If, after an initial TDM report shows noncompliance, the second annual report indicates that, in spite of the changes in the TDM program, the vehicle trip cap is still not being met, or if the applicant fails to submit such a TDM report at the times described above, the City may assess a penalty in the maximum amount of One Hundred Thousand Dollars (\$100,000) for the first percentage point above 15 AM peak hour trips and 18 PM peak hour trips and an additional Fifty Thousand Dollars (\$50,000) for each additional percentage point. In determining whether the TDM Penalty is appropriate, the City may consider whether the property owner has made a good-faith effort to meet the TDM goals and allow a six (6) month "grace period" to implement additional TDM measures to meet the vehicle trip cap. If the project does not achieve the necessary reductions to meet the trip cap after the six (6) month grace period, the City may require the property owner to pay a TDM Penalty. Any expenses that are put towards achieving the trip cap can be offset against the TDM Penalty. The TDM Penalty shall be paid to the Mountain View Transportation Management Authority (MTMA) and used to promote alternatives to single-occupancy vehicle use in the City.

**Table 3**  
**Trip Reduction Goal**

	Size	AM Peak-Hour Trips			PM Peak-Hour Trips		
		In	Out	Total	In	Out	Total
<b>Proposed Use</b>							
First Floor Retail <sup>1</sup>	2.40 ksf	3	1	4	1	4	5
Second Floor Office <sup>1</sup>	2.57 ksf	4	1	5	1	5	6
Third Floor Dental <sup>1</sup>	2.40 ksf	5	2	7	2	6	8
<b>Gross Trips</b>		<b>12</b>	<b>4</b>	<b>16</b>	<b>4</b>	<b>15</b>	<b>19</b>
<i>20% TDM Reduction</i>		<i>(2)</i>	<i>(1)</i>	<i>(3)</i>	<i>(1)</i>	<i>(3)</i>	<i>(4)</i>
<b>Project's Vehicle Trip Cap</b>		<b>10</b>	<b>3</b>	<b>13</b>	<b>3</b>	<b>12</b>	<b>15</b>
<b>Notes:</b>							
<sup>1</sup> Trip generation estimates based on information from the <i>756 California Street Development Traffic and Parking Study</i> prepared by Kimley-Horn in September 2019.							