HEXAGON TRANSPORTATION CONSULTANTS, INC.

1215 Bordeaux Drive Residential Development

Draft Transportation Demand Management Plan

Prepared for:

The City of Sunnyvale on Behalf of Beam Reach

November 7, 2025

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1. Introduction

This transportation demand management (TDM) plan has been prepared for the proposed multi-family residential development at 1215 Bordeaux Drive in Sunnyvale, 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 purpose of a TDM plan is to promote more efficient utilization of existing transportation facilities and ensure that the development is designed to maximize the potential for alternative transportation usage.

The project is located within the Moffett Park Specific Plan (MPSP) area. Developments in the MPSP area are required to prepare and implement a TDM plan that would achieve a peak-hour trip reduction of at least 15 percent initially and at least 30 percent in the long term. Additionally, according to the City's Multi-Family Residential TDM Program, residential developments with 100 or more units are required to implement TDM measures that achieve 10 TDM points from the menu of TDM strategies. Therefore, the TDM plan is developed to satisfy the MPSP trip reduction goal and comply with the City of Sunnyvale's Multi-Family Residential TDM Program. It is presumed that the TDM plan that satisfies the City requirements for TDM points is expected to achieve the trip reduction goal of 15 percent in the short term and 30 percent in the long term.

Project Description

The project is located at 1215 Bordeaux Drive at the northwest corner of the Bordeaux Drive and 5th Avenue intersection (see Figure 1). The site currently has one office building. The project proposes to construct an 8-story, 264-unit multi-family residential building. The project will include a neighborhood park to the north side of the residential building. Vehicle access to the two-story parking garage will be provided via a full-access driveway on 5th Avenue (see Figure 2). The project will provide a bicycle storage room on each level of the parking garage, near the lobby and stairs.

Project Trip Generation and Trip Reduction Target

Trip generation resulting from the proposed development is estimated using the trip rates published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 12th Edition (2025)*. Trips that would be generated by the proposed residential units were estimated using the ITE trip rates for "Multifamily Housing (Mid-Rise)" (Land Use 221). The "Multifamily Housing (Mid-Rise)" ITE land use category includes apartment, townhouse and condominium developments with between four (4) and ten (10) floors of living space. The project would construct an eight-story residential building with residential units on six levels. The rates used are for the general urban/suburban setting.

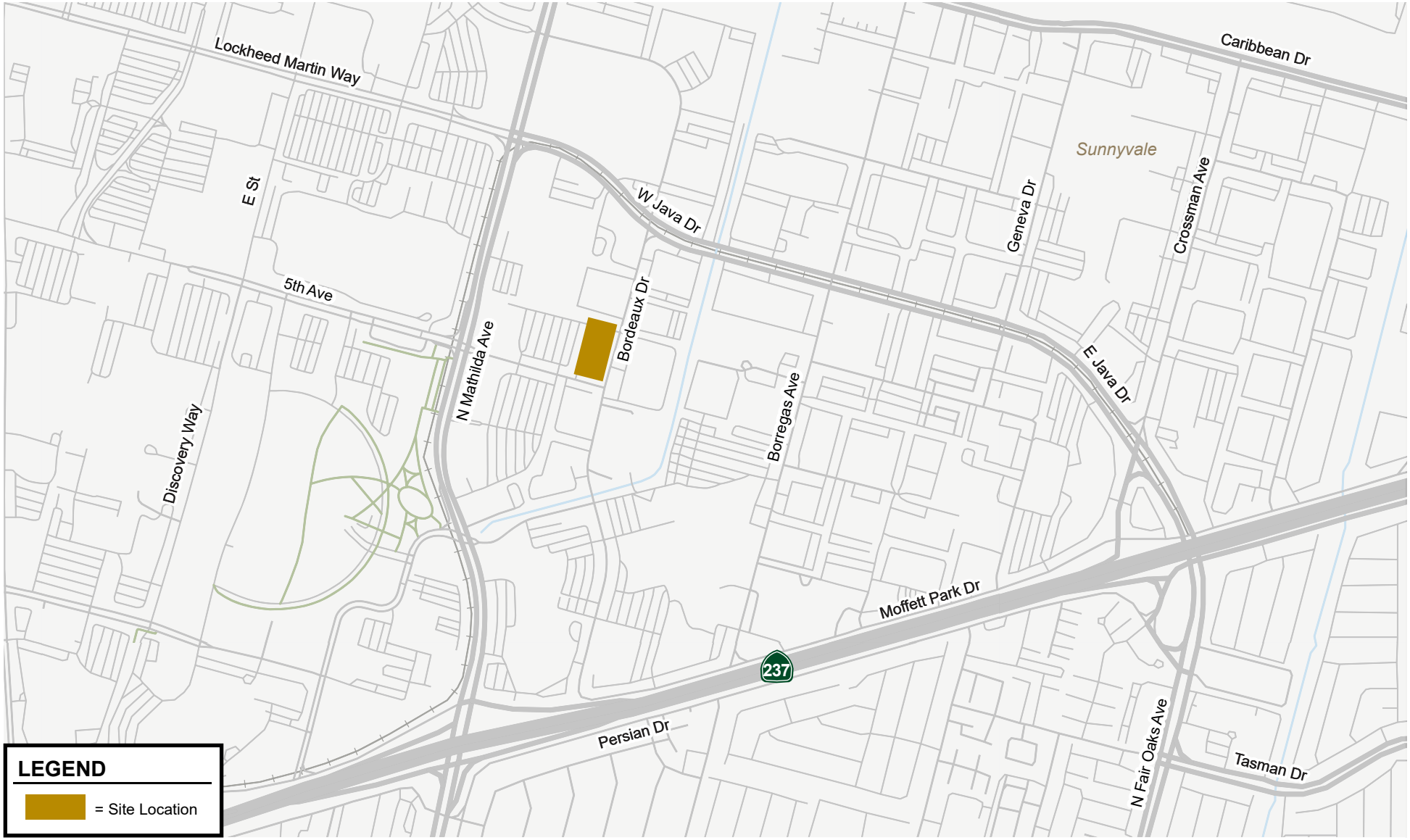

Figure 1
Site Location

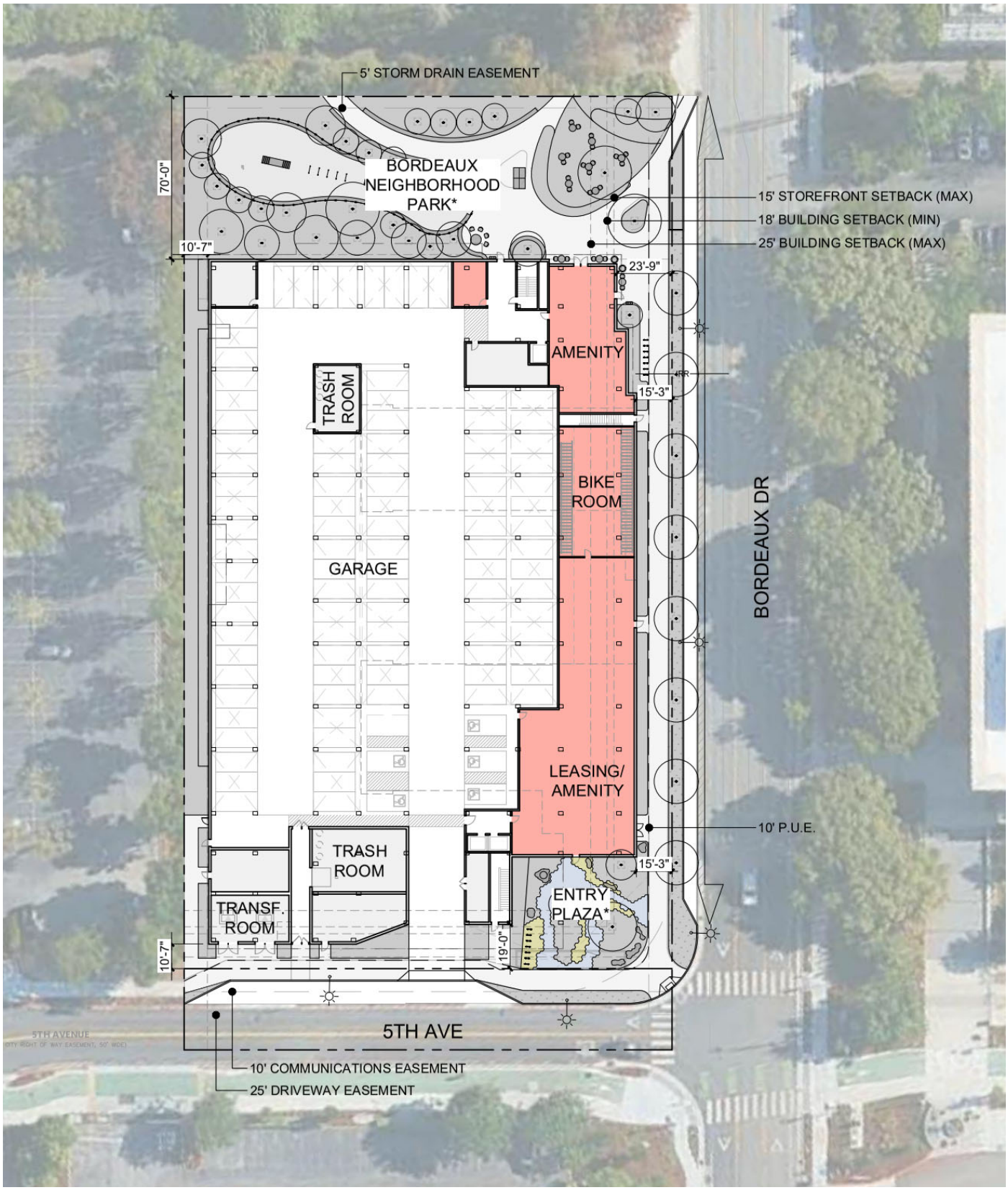

Figure 2
Site Plan

Based on the published trip rates, the project is expected to generate 100 trips (23 inbound and 77 outbound) during the AM peak hour and 100 trips (64 inbound and 36 outbound) during the PM peak hour (see Table 1). With the required 15 percent initial trip reduction, the vehicle trips generated by the project should not exceed 85 trips during the AM peak hour and 85 trips during the PM peak hour. With the required 30 percent long-term trip reduction, the vehicle trips generated by the project should not exceed 70 trips during the AM peak hour and 70 trips during the PM peak hour.

Table 1
Project Trip Estimates

		AM Peak Hour				PM Peak Hour			
Land Use	Size	Pk-Hr Rate	In	Out	Total	Pk-Hr Rate	In	Out	Total
Proposed Use									
Multifamily Housing[1]	264 du	0.38	23	77	100	0.38	64	36	100
- 15% TDM Reduction			*-3*	*-12*	*-15*		*-10*	*-5*	*-15*
- 30% TDM Reduction			*-7*	*-23*	*-30*		*-19*	*-11*	*-30*
Project Trips with 15% Reduction			**20**	**65**	**85**		**54**	**31**	**85**
Project Trips with 30% Reduction			**16**	**54**	**70**		**45**	**25**	**70**

Notes:
[1] Trip generation based on average rates contained in the *ITE Trip Generation Manual, 12th Edition (2025)*, for Multifamily Housing (Mid-Rise) (Land Use 221) located in a General Urban/Suburban setting. Rates expressed in trips per dwelling unit (du).

2. Transportation Facilities and Services

This chapter describes the existing transportation facilities and services near the project site that can be utilized to reduce single-occupant vehicle trips.

Transit Services

Existing transit services in the project vicinity are provided by the Santa Clara Valley Transportation Authority (VTA). VTA operates bus and light-rail transit services in Santa Clara County.

Bus Service

There are four VTA bus routes serving the project vicinity with bus stops located within ½-mile of the site: Local Route 56, Express Route 121, Rapid Route 523, and ACE Red Shuttle. The bus stop closest to the project site (Routes 56, 121, and ACE Red) is on Java Drive east of Bordeaux Drive, approximately 1,130 feet from the site. The VTA bus routes in the project vicinity and the bus stops near the project site are summarized in Table 2 and shown on Figure 3.

Light Rail Service

Commuter Light Rail service between San Jose, Sunnyvale, and Mountain View is provided by VTA. The VTA Orange Line provides service in the MPSP study area.

VTA Orange Line

The VTA Orange Line provides Light Rail service from Mountain View to Alum Rock with four stops in the study area along Moffett Park Drive, Mathilda Avenue, and Java Drive. Light Rail service in the study area is provided with approximately 15-minute headways during weekdays from 5:00 AM to 12:18 AM the next day. Weekend service is provided with approximately 20-minute headways from 5:46 AM to 12:18 AM. The Orange Line and all VTA bus routes in the study area stop at the Lockheed Martin Transit Center, which is located at Mathilda Avenue and 5th Avenue, approximately 1,500 feet from the site.

There are continuous pedestrian and bicycle facilities between the project site and the bus stops and light rail station near the project site. Bicycle facilities are present on Mathilda Avenue, Bordeaux Drive, 5th Avenue, and Java Drive.

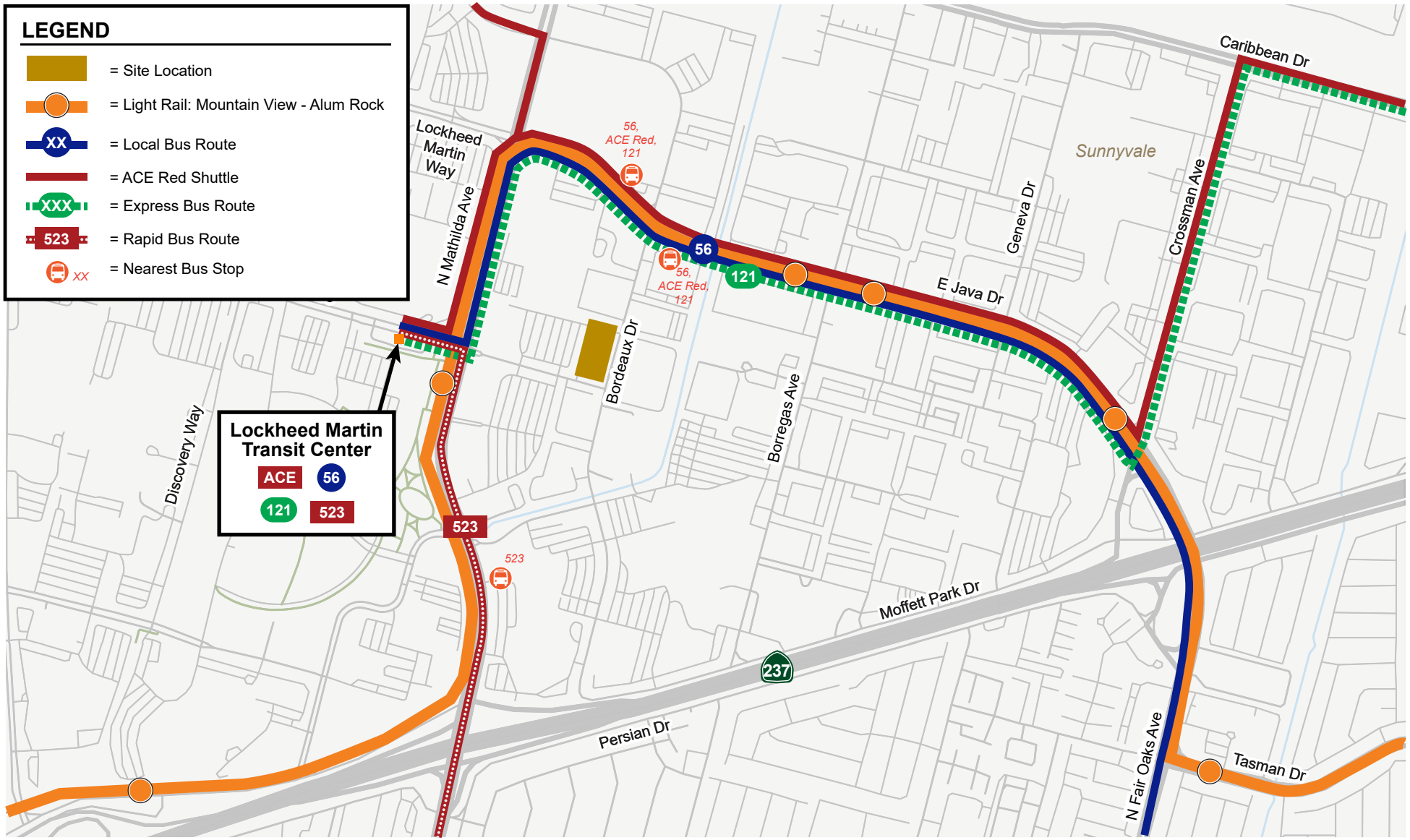

Figure 3
Existing Transit Services

Table 2
Existing Transit Services

Route	Route Description	Nearest Bus Stops	Weekday Hours of Operation	Headways[1] (minutes)	Walking Distance from Nearest Stop to Project Site (feet)
Local Bus 56	Lockheed Martin - Monterey & Old Tully	Java Drive at Bordeaux Drive	5:17 AM - 11:01 PM	30	1,130
Express Route 121	Gilroy/Morgan Hill - Lockheed Martin	Java Drive at Bordeaux Drive	4:26 AM - 9:01 AM 2:52 PM - 6:57 PM	58 - 72	1,130
Rapid Bus 523	San Jose State - Lockheed Martin via De Anza	Lockheed Martin Transit Center	5:25 AM - 11:27 PM	20 - 30	1,500
ACE Red Shuttle	North Sunnyvale	Java Drive at Bordeaux Drive	6:06 AM - 9:52 AM 1:49 PM - 5:39 PM	50 - 65	1,130

Notes:
1. Headways during weekday peak periods as of November 2025.

Bicycle Facilities

Bicycle facilities in the project vicinity include shared-use paths, bicycle lanes, buffered bicycle lanes, and bicycle routes. Shared-use paths are shared between pedestrians and bicyclists and separated from motor vehicle traffic. Bicycle lanes are lanes on roadways designated for bicycle travel adjacent to vehicle traffic. Buffered bicycle lanes are dedicated lanes for bicycle travel separated from vehicle traffic by a painted buffer. Bicycle routes are streets that accommodate bicycles with pavement markings and signage but are not separate from the travel lanes.

The existing bicycle facilities in the study area are shown on Figure 4. Information about bicycle facilities in the study area is available in the *Sunnyvale Active Transportation Plan* (August 2020) and the *Sunnyvale Bike Map & Guide to Safe Cycling* (2022).

Class I bike paths exist along Moffett Park Drive between Innovation Way and Borregas Avenue, on the bridge crossing SR 237 at Borregas Avenue, on 5th Avenue west of the Sunnyvale West Channel, along the Sunnyvale West Channel northeast of Innovation Way, across the Sunnyvale West Channel at Caspian Court between Bordeaux Drive and Borregas Avenue, and on Gibraltar Drive between Borregas Avenue and Innsbruck Drive.

The following on-street bicycle facilities exist within the immediate vicinity of the project site:

- 5th Avenue between Enterprise Way and C Street
- 11th Avenue between Enterprise Way and Innovation Way
- Discovery Way between 11th Avenue and 5th Avenue
- D Street between 11th Avenue and 5th Avenue
- E Street between 5th Avenue and Lockheed Martin Way

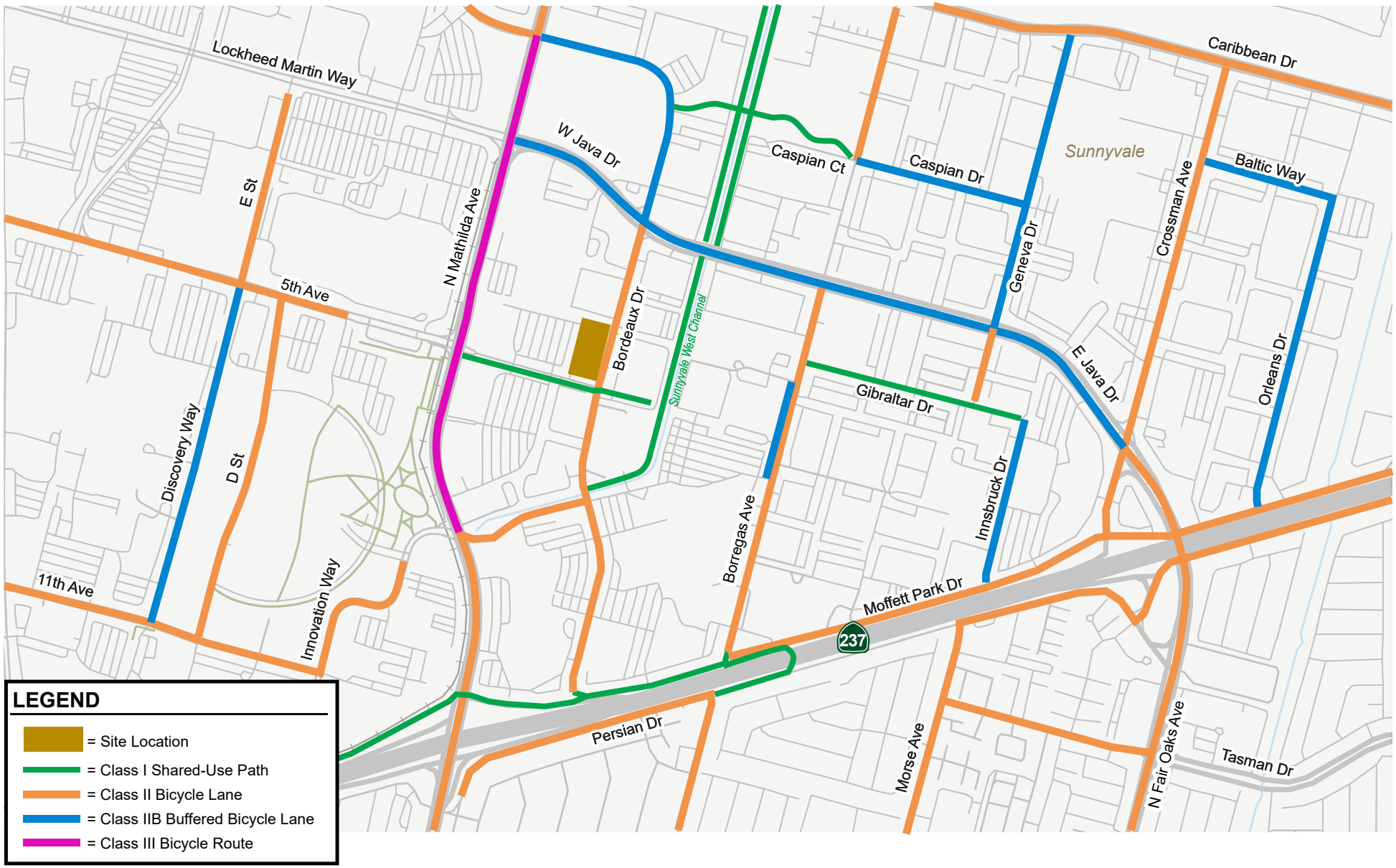

Figure 4
Existing Bicycle Facilities

- Innovation Way between 11th Avenue and Juniper Networks driveway (east side) and between Mathilda Avenue and Bordeaux Drive
- Mathilda Avenue south of Innovation Way
- Bordeaux Drive between Moffett Park Drive and Mathilda Avenue
- Borregas Avenue between Moffett Park Drive and Java Drive and between Caspian Drive and Caribbean Drive
- Geneva Drive between Gibraltar Drive and Caribbean Drive
- Innsbruck Drive between Gibraltar Drive and Moffett Park Drive
- Crossman Avenue between Moffett Park Drive and Caribbean Drive
- Orleans Drive between Baltic Way and Moffett Park Drive
- Caribbean Drive between 1st Avenue/Bordeaux Drive and Moffett Park Drive/Baylands Park
- Caspian Drive between Borregas Avenue and Geneva Drive
- Baltic Way between Crossman Avenue and Orleans Drive
- Java Drive east of Mathilda Avenue
- Moffett Park Drive between Borregas Avenue and Caribbean Drive
- Mathilda Avenue between Innovation Way and 1st Avenue/Bordeaux Drive (Class III Bike Route)

Overall, the existing bicycle facilities in the project area provide adequate connections for bicycles.

Pedestrian Facilities

Within the project vicinity, sidewalks and crosswalks are present along most sections of roadways. Pedestrian signal heads and push buttons are present at the nearby signalized intersections and high-visibility crosswalks are present at the nearby unsignalized intersections, as well as at some midblock locations on 5th Avenue and Bordeaux Drive. Continuous pedestrian facilities are present between the site and the surrounding land uses, including restaurants and transit stops in the area.

3. TDM Strategies

This chapter describes TDM strategies for the proposed project, which include physical design measures, programs, and services to promote the use of transit, bicycling, and walking during peak commute hours. As described in Chapter 1, this project is required to implement TDM strategies to achieve 10 TDM points based on the City of Sunnyvale's Multi-Family Residential TDM Program (see Appendix A), and a 15 percent initial reduction in peak-hour trips and a 30 percent long-term reduction in peak-hour trips based on the MPSP TDM requirements.

The project is required to provide the following baseline TDM measures listed in the MPSP.

- **Participation in the TMA.** The project will join the Transportation Management Association (TMA) within Moffett Park and record a deed restriction agreeing to require all residential property managers to become members of the TMA in perpetuity from the date of final inspection or certificate of occupancy. The project will remit a one-time and/or annual payment to the TMA for implementation of vehicle trip reduction measures. Required TMA membership will be included as a separate line item in all applicable leases.
- **TDM Coordination.** The project applicant and/or property owner will designate an on-site TDM coordinator to serve as the point of contact for the City and/or TMA and provide the City and/or TMA with materials and data showing compliance with approved TDM Plan and monitoring requirements. The TDM coordinator will provide information to residents regarding multi-modal commuting, assist residents in navigating to nearby destinations or transit stops, and provide rideshare matching services for residents. The TDM coordination is worth 0.5 points.
- **TDM Communication.** The TDM coordinator will distribute informational materials regarding commercial uses within walking distance, nearby transit services, bike maps, and other TDM programs annually to all residents. In addition, the TDM coordinator will distribute TDM informational materials to new residents as they move in. The TDM communication is worth 0.5 points.
- **Unbundled Parking.** To further encourage non-auto transportation methods and to reduce costs for residents, on-site residential parking will be unbundled from each living unit. This will allow residents without cars to rent a unit without having to pay for a parking spot. Parking spaces will be added to leases only for residents who desire parking. Unbundling of parking encourages residents to forego a second car or to have no car at all.
- **Bicycle Facilities.** The project will provide a secured bicycle storage room on both levels of the parking garage. The project will also provide bicycle racks along the project frontages on 5th

Avenue and Bordeaux Drive for use by visitors. The proposed bicycle facilities will encourage residents and visitors to travel via bicycle rather than automobile to nearby destinations.

- **Annual Travel Survey and Reporting.** The monitoring and reporting requirements of the TDM plan are described in Chapter 4.

The project would also provide the following TDM strategies listed in the Multi-Family Residential TDM Program.

- **Proximity to Transit.** The project is located approximately 0.2 mile, or approximately a 6-minute walk, from the Lockheed Martin Light Rail Station. The proximity to transit is worth 8 points.
- **Proximity to Commercial Uses.** The project is located approximately 0.4 mile, or approximately a 9-minute walk, from three restaurants to the south on Bordeaux Drive and approximately 0.3 mile, or approximately an 8-minute walk, from a restaurant to the north on Bordeaux Drive. These nearby commercial uses can be accessed by walking, which would reduce the number of vehicle trips. The proximity to commercial uses is worth 1 point.

The proposed TDM Plan will obtain 10 TDM points, which meets the required minimum of 10 points for multi-family developments with 100 or more residential units (see Table 3).

Table 3
TDM Strategy Checklist

Transportation Demand Management Strategies		Points Obtained
Proximity to Transit	Less than 0.5 mile to Light Rail Station	8
Proximity to Commercial Uses	Less than 0.5 mile from restaurants on Bordeaux Drive	1
Participation in the TMA[1]	Join the Transportation Management Association (TMA) within Moffett Park	N/A[2]
TDM Coordination[1]	TDM coordinator offering multi-modal and wayfinding information and rideshare matching for residents and a point of contact for the City and/or TMA	0.5
TDM Communication	Distribution of informational materials regarding nearby commercial uses, transit services, bicycle maps, and other TDM programs to new residents as they move in and annually to all residents	0.5
Unbundled Parking[1]	Parking spaces are leased separately for an additional cost, separate from the cost of renting a dwelling unit	N/A[2]
Bicycle Facilities[1]	Provide secured bicycle parking	N/A[2]
Annual Travel Survey and Reporting[1]	Annual TDM monitoring to assess whether the vehicle trip reduction requirement has been met	N/A[2]
	Total Points Obtained:	**10**

Notes:

1. Required TDM strategies by MPSP. As part of the MPSP, the project must meet an initial 15% trip reduction and a long-term 30% trip reduction.

2. TDM strategy is part of the MPSP TDM measures. No points are designated by the Multi-Family Residential TDM Program.

4. TDM Plan Monitoring and Reporting

As required by the MPSP, the project will implement a TDM plan that will achieve an initial peak-hour trip reduction of at least 15 percent and a long-term peak-hour trip reduction of at least 30 percent. Routine monitoring and reporting will ensure that the TDM plan is effective at achieving the vehicle trip reduction requirement.

Monitoring

The property owner will implement the TDM programs at building occupancy. Once the site has reached 75% occupancy, the owner will inform the City and TMA, and monitoring requirements will begin. The TDM plan will be evaluated annually to assess the actual AM and PM peak-hour vehicle trips generated by the residential building and to identify any adjustments to the programs necessary to ensure the TDM measures are successful in achieving the vehicle trip reduction requirement. The annual TDM plan monitoring will be administered by the TDM coordinator. The TDM plan will be monitored according to the monitoring procedures determined by the City, which will include vehicle trip generation counts at the project driveway and a resident mode-share survey. The project will be expected to meet the initial TDM reduction goal of 15 percent until notified by the City to meet the long-term TDM reduction goal of 30 percent.

In order to evaluate whether or not the project has met the peak-hour trip reduction requirement, annual driveway counts will be conducted. A count of the number of vehicles entering and exiting the project's driveway on a typical weekday during the AM and PM peak periods will be conducted annually by an independent third party to determine the number of vehicle trips being generated by the project. The counts will be conducted at the site's driveway on a typical weekday that is not disclosed in advance. The driveway counts will be used to determine the actual peak-hour trip generation of the project. The TDM coordinator will provide the results of the driveway counts to the City of Sunnyvale, along with a statement as to whether the peak-hour trip reduction goal was met.

The TDM coordinator will also conduct an annual resident survey for all tenants to determine the mode-shares among residents, whether the existing TDM measures are effective, and whether residents prefer different TDM measures. The survey will be constructed as a general survey with questions such as residential environment satisfaction to promote survey responses.

Reporting

The results of the trip generation counts and mode-share surveys will be reported to the City of Sunnyvale annually, along with an assessment of whether the TDM measures implemented during the preceding year are effective at achieving the vehicle trip reduction requirement. The annual report to the City will also include a brief summary of the TDM measures that were in place during the preceding year, with an explanation of any changes or new programs.

Appendix A

City of Sunnyvale

Multi-Family Residential TDM Program

City of Sunnyvale
Multi-Family Residential Transportation Demand Management (TDM) Program

Multi-family Residential TDM Program

All multi-family development projects consisting of 10 or more residential units shall participate in the Multi-family Residential TDM Program.

TDM Points Required

Number of Residential Units	Minimum Number of Points Required
100 or more residential units	10 points from the menu of TDM strategies
Between 10 and 99 residential units	Proportionate Percentage of 10 points (rounded to the nearest half or whole number) from the menu of TDM strategies Ex: 94 units/10 points = 9.4 rounded to 9.5 points 62 units/10 points = 6.2 rounded to 6 points

Menu of TDM Strategies

Transportation Demand Management Strategies		Points Obtained*
Proximity to Transit	Less than .5 miles to a major transit route (15-min headway)	1
	Less than .5 miles to a major transit stop (2 routes @ 15-min headway)	5
	Less than .5 miles to Caltrain/Light Rail Station	8
Affordable Housing	20% Affordable Housing Project	1
	40% Affordable Housing Project	2
	60% Affordable Housing Project	3
	80% Affordable Housing Project	4
	100% Affordable Housing Project	5

Proximity to Commercial Uses	Less than .5 miles from: 1. A shopping center consisting of at least three tenant spaces, or 2. Three separate retail/restaurant/service/recreational uses	1
	Less than .25 miles from: 1. A shopping center consisting of at least three tenant spaces, or 2. Three separate retail/restaurant/service/recreational uses	3
Access Improvements	Close Gaps: Bicycle, Pedestrian, and/or transit access improvements (e.g. bike lanes)	3
Bicycle Facilities	Provide an on-site bicycle repair station and secured bicycle parking	0.5
Wayfinding Station	On-site kiosk or information center with multi-modal wayfinding information and transit information	0.5
TDM Coordination	On-site TDM Coordinator (can be property manager) offering: multi-modal and wayfinding information, rideshare matching, walking/biking group coordination	0.5
TDM Communication	Distribution of transit, wayfinding and other TDM informational materials to new residents as they move in and annually to all residents	0.5
Transit Pass Programs	Provide VTA EcoPass (or a comparable program) membership to all residents for the first ten years following project completion	5
	Provide Caltrain Go Pass (or a comparable program) membership to all residents for the first ten years following project completion	10
	Offer discounted transit passes (VTA or Caltrain) to residents for the first ten years following project completion	2
Bicycle Share Program	Providing private or public bicycle share memberships to on-site residents	0.5
Proximity to Bicycle Share	Site is less than .5 miles from a bicycle share hub with bicycles available to on-site residents	0.5
Car Share Program	Providing private or public car share memberships to on-site residents	0.5
Proximity to Car Share	Less than .5 miles from a car share hub with cars available to on-site residents	0.5

* If a TDM category has multiple options, only one option/point value can be used.

Definitions of TDM Terms Used in the TDM Menu

Affordable Housing Project – a development project consisting of below market rate housing units.

Multi-Family Residential – for the purpose of this program, multi-family residential includes all medium, high and very high density residential developments, including the residential component of a mixed-use project.

Multi-modal Information – may consist of information on transit schedules, transit and bike maps, important service change information, real time transit information, biking or walking group organization, rideshare matching, etc.

Shopping Center – a group of retail, restaurant, commercial service or recreational uses that are planned, constructed and managed as a total entity.

Secured Bicycle Parking - means lockable facilities such as individual lockers or enclosed, locked, limited-access areas for parking of bicycles. Secured bicycle parking may also be known as Class 1 bicycle parking. For residential uses, an enclosed garage assigned to one residential unit meeting the minimum area requirements for a two-car garage is considered one secured bicycle parking space.

Wayfinding Information - provide signage for clear directions and walk/bike time to key destinations such as major transit stops, downtown, shops, and major employers.

Note: Additional information and explanation on the TDM strategies described in this program can be found in the *Sunnyvale Multi-Family Residential TDM Toolkit*.