HEXAGON TRANSPORTATION CONSULTANTS, INC.

Residential Development at 494 S. Bernardo Avenue

Draft Transportation Demand Management Plan

Prepared for:
The City of Sunnyvale on Behalf of California Communities

May 22, 2025

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1. Introduction

This transportation demand management (TDM) plan has been prepared for the proposed multi-family residential development at 494 S. Bernardo Avenue 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.

Residential developments are required to comply with the City's Multi-Family Residential TDM Program, which requires all multi-family development projects consisting of 10 to 99 residential units to achieve a proportional percentage of 10 points from the menu of TDM strategies in the TDM Program. Thus, the project would be required to achieve 3 points (28 units/10 points=2.8, rounded up to 3). This TDM plan includes strategies to satisfy the City of Sunnyvale requirement for TDM points.

Project Description

The project is located at 494 S. Bernardo Avenue (see Figure 1) at the northeast corner of the S. Bernardo Avenue and W. Olive Avenue intersection. The project will construct 28 for-sale townhome units. Vehicle parking spaces for future residents will be provided within private garages for the townhomes. The site will be accessed via two driveways on W. Olive Avenue (see Figure 2).

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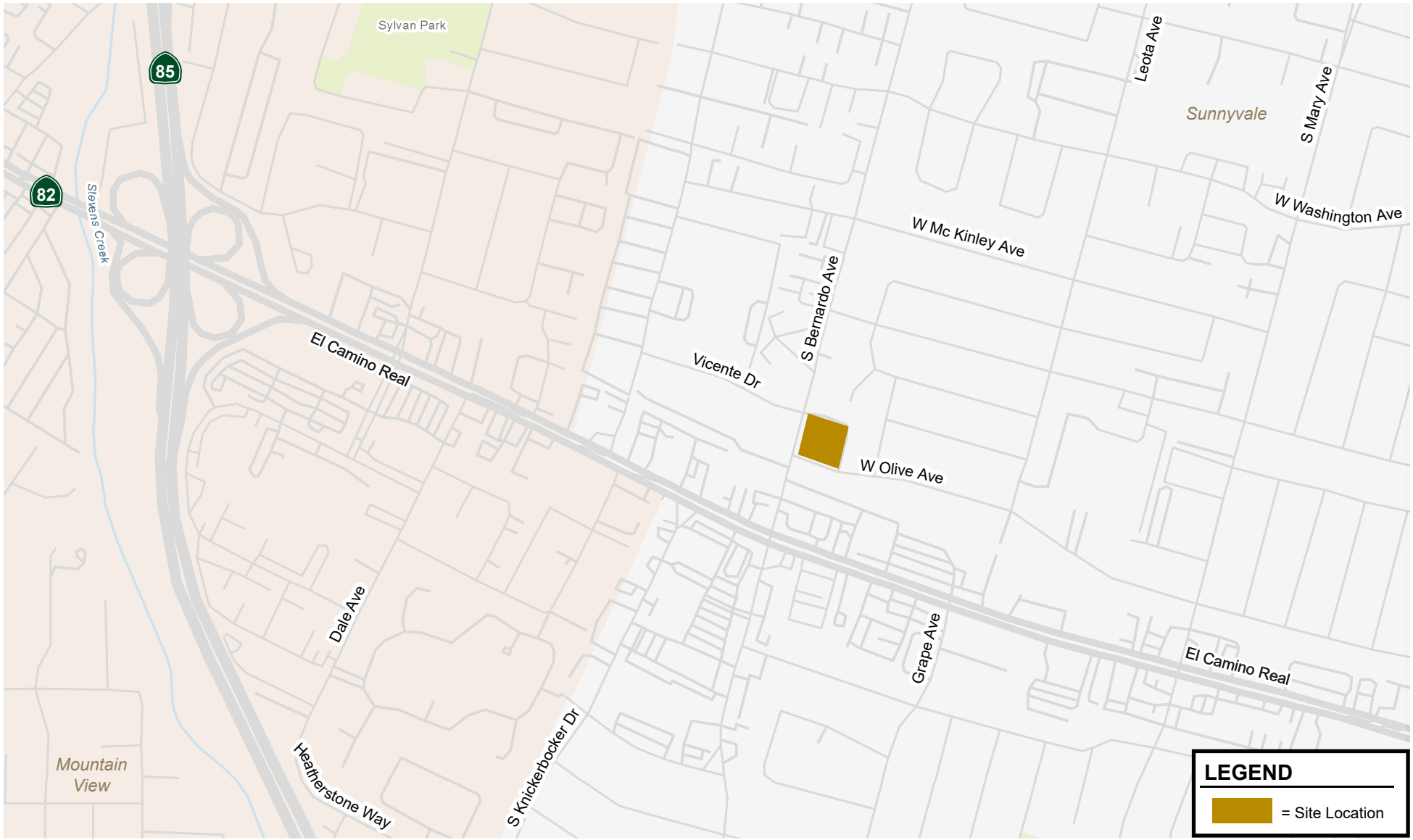

Figure 1
Site Location

Figure 2
Site Plan

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.

There are three VTA bus routes serving the project vicinity with bus stops located within 700 feet of the site: Routes 22, 53, and 522. The bus stop closest to the project site (Route 53) is on Bernardo Avenue south of Olive Avenue, approximately 230 feet from the site. The VTA bus routes in the project vicinity and the bus stops near the project site are summarized in Table 1 and shown on Figure 3.

Route 53 also stops at the Sunnyvale Transit Center (1.8 miles northeast of the project site), which serves Caltrain commuter rail and other VTA bus routes.

Table 1
Existing Transit Services

Route	Route Description	Weekday Hours of Operation	Headways[1] (minutes)	Nearby Bus Stops	Walking Distance from Nearest Stop to Project Site (feet)
VTA Bus Route					
Local Route 22	Palo Alto Transit Center - Eastridge	4:10 AM - 3:05 AM (next day)	15	on El Camino Real at Bernardo Ave	665
Local Route 53	Sunnyvale Transit Center - Santa Clara Transit Center	6:20 AM - 7:50 PM	35	on Bernardo Ave at Olive Ave	230
Rapid Route 522	Palo Alto Transit Center - Eastridge	4:30 AM - 11:45 PM	15	on El Camino Real at Bernardo Ave	665

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

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Figure 3
Existing Transit Services

Bicycle Facilities

Bicycles are allowed on all streets in the City of Sunnyvale except on freeways. The City-designated bicycle facilities on streets in the project vicinity include bike paths (Class I bikeway), striped bike lanes (Class II bikeway), and bike routes (Class III bikeway) (see Figure 4). Bike paths are shared between pedestrians and bicyclists and separated from motor vehicle traffic. Bike lanes are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Bike routes are signed bike routes where bicyclists share a travel lane with motorists. Bike routes are typically designated only with signs and/or Sharrows (shared-lane markings).

Bike lanes exist on the following streets:

- Benardo Avenue south of El Camino Real
- Knickerbocker Drive south of El Camino Real
- Mary Avenue for the entire street
- Sylvan Avenue for the entire street

Bike routes are typically designated with sharrows (shared-lane pavement markings), and bikes may take the travel lane. Bike routes are appropriate for low-volume streets with slow travel speeds, especially those on which motorist volumes are low enough that passing maneuvers can use the full street width; on roadways with bicycle demand but without adequate space for bike lanes; and as “gap fillers” where there are short breaks in bike lanes due to right-of-way constraints. Bike routes are designated on the following streets:

- Benardo Avenue between El Camino Real and Olive Avenue
- Olive Avenue for the entire street
- Dale Avenue south of Continental Circle
- Heatherstone Way west of Bernardo Avenue
- Continental Circle between The Americana and Dale Avenue
- Rainbow Drive for the entire street

The Stevens Creek Trail is located west of SR 85, approximately 0.9 mile from the project site. Although there are no bike facilities along El Camino Real to connect to the trail, bicyclists can use Bernardo Avenue and Heatherstone Way to access another trail entrance at Dale Avenue/Heatherstone Way. Between Knickerbocker Drive and Bernardo Drive, Heatherstone Way does not provide signs or markings for a bicycle route. However, the City recognizes this segment as a bike route on the 2022 Sunnyvale Bike Map & Guide to Safe Cycling. The El Camino Real Streetscape Plan is currently underway within the City of Mountain View, which will install Class IV protected bikeways west of Knickerbocker Drive and will provide another access to the trail from the project site.

Pedestrian Facilities

Pedestrian facilities consist of sidewalks and crosswalks, which are present along all roadways and at signalized intersections in the project vicinity. Pedestrian signal heads and push buttons are present at all signalized intersections in the project vicinity. Continuous pedestrian facilities are present between the site and the surrounding land uses, including restaurants, grocery stores, retail stores, and bus stops in the area.

Within the project site, walkways will be provided along the project frontages and internal roads that connect the townhomes to the adjacent streets.

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Figure 4
Existing Bicycle Facilities

3. TDM Strategies

As described in Chapter 1, this project is required to implement TDM strategies to achieve 3 TDM points based on the City of Sunnyvale's Multi-Family Residential TDM Program (see Appendix A). This chapter describes TDM strategies for the proposed project, which include programs and services to promote the use of transit, bicycling, and walking during peak commute hours.

- **Proximity to Transit.** The project is located 665 feet, or approximately a 3-minute walk from major transit routes on El Camino Real. The bus stops on El Camino Real west of Bernardo Avenue serve VTA routes 22 and 522. A major transit route is defined as a route with 15-minute or less headways. Both routes 22 and 522 have 15-minute headways. The proximity to transit is worth 1 point.
- **Proximity to Commercial Uses.** The project is less than 0.25 miles, or roughly a 5-minute walk, from restaurants, retail stores, gyms, grocery stores, and other commercial uses on El Camino Real. These nearby commercial uses are conveniently located for residents of the project to access via walking, which will reduce the number of vehicle trips. This is worth 3 points.
- **TDM Coordination.** The project will have a TDM coordinator to provide information regarding multi-modal commuting and assist residents in navigating to nearby destinations or transit stops. In addition, the TDM coordinator will provide rideshare matching services. The HOA manager will serve as the TDM coordinator. This 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. This is worth 0.5 points.

The proposed TDM Plan will obtain 5.5 TDM points, which exceeds the required minimum of 3 points for multi-family developments with 10 to 99 residential units (see Table 2).

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Table 2
TDM Strategy Checklist

Transportation Demand Management Strategies		Points Obtained
Proximity to Transit	Less than .5 miles to a major transit route (15-min headway)	1
Proximity to Commercial Uses	Less than 0.25 miles from restaurants, grocery stores, fast food restaurants, convenient stores, retail stores, salons, and auto repair shops on El Camino Real	3
TDM Coordination	TDM coordinator (HOA manager) offering multi-modal and wayfinding information and rideshare matching.	0.5
TDM Communication	Distribution of nearby transit services, bicycle maps, and other TDM informational materials to new residents as they move in and annually to all residents.	0.5
	Total Points Obtained:	**5.5**
	Total Points Required:	**3**

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Appendix A

City of Sunnyvale
Multi-Family Residential TDM Program

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Sunnyvale

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*.