Hexagon Transportation Consultants, Inc.

Memorandum

Date: August 25, 2023

To: Ms. Margaret Lin, Circlepoint

From: Michelle Hunt

Subject: Transportation Analysis for the Proposed Redevelopment of an Existing Office Building at 5201 Patrick Henry Drive in Santa Clara, California

Hexagon Transportation Consultants, Inc. has completed a transportation analysis for the proposed redevelopment of an existing office building at 5201 Patrick Henry Drive in Santa Clara, California. The project site is located on the north side of Bunker Hill Lane between Patrick Henry Drive and Betsy Ross Drive and contains an office building with 144,390 square feet (s.f.). The project would include partial demolition and renovation of the existing office building and the addition of new fabrication space resulting in a total floor area of 113,272 s.f. including 67,492 s.f. of office space and 45,780 s.f. of light industrial space. Access to the site is provided by three full-access driveways on Patrick Henry Drive, one full-access driveway on Bunker Hill Lane, and two full-access driveways on Betsy Ross Drive. The project would not change the location or number of site driveways.

This memorandum presents an estimate of the project's trip generation and an analysis of potential impacts on vehicle miles traveled (VMT).

Project Trip Generation

Through empirical research, data have been collected that show trip generation rates for many types of land uses. The research is compiled in the ITE *Trip Generation Manual, 11th Edition*. The magnitude of traffic added to the roadway system by a particular development is estimated by multiplying the applicable trip generation rates by the size of the development. In accordance with the Santa Clara Valley Transportation Authority *Transportation Impact Analysis Guidelines* (2014), a six percent reduction in vehicle trips was applied to account for transit use because the project is within a 2,000 foot walk of the Old Ironsides Light Rail Station. Trip credits also were applied for the existing office building to be replaced by the project. Because the project is expected to have fewer than 500 employees on site, it would not be subject to the Travel Demand Management (TDM) trip reduction requirements set forth in the City of Santa Clara's *Climate Action Plan 2022*. Thus, no trip reductions for TDM were shown.

Based on the ITE trip generation rates and the transit reduction, the proposed uses are estimated to generate 898 daily vehicle trips including 129 AM peak-hour trips and 119 PM peak-hour trips. Compared to the existing office building, the proposed project is estimated to 573 fewer daily vehicle trips, with 77 fewer trips occurring during each of the AM and PM peak hours (see Table 1).

Because the proposed project would generate fewer trips than the existing office building, the project is not required to prepare a Local Transportation Analysis to evaluate the project's effects on nearby intersection operations.

Table 1
Project Trip Generation Estimates

Land Use	Size	Unit	Total Daily Rate	Total Daily Trips	AM Peak Hour Peak Rate	AM Peak Hour Trips In	AM Peak Hour Trips Out	AM Peak Hour Total Trips	PM Peak Hour Peak Rate	PM Peak Hour Trips In	PM Peak Hour Trips Out	PM Peak Hour Total Trips
Proposed Project												
Office [1]	67.492	ksf	10.84	732	1.52	91	12	103	1.44	16	81	97
Light Industrial [2]	45.780	ksf	4.87	223	0.74	30	4	34	0.65	4	26	30
	113.272	ksf										
Transit Reduction (6%)				(57)		(7)	(1)	(8)		(2)	(6)	(8)
Gross Project Trips				**898**		**114**	**15**	**129**		**18**	**101**	**119**
Existing Use												
Office [1]	144.390	ksf	10.84	(1565)	1.52	(193)	(26)	(219)	1.44	(35)	(173)	(208)
Transit Reduction (6%)				94		12	1	13		2	10	12
Net Project Total				**(573)**		**(67)**	**(10)**	**(77)**		**(15)**	**(62)**	**(77)**

Notes:
All rates are from: Institute of Transportation Engineers, *Trip Generation, 11th Edition* (September 2021)
1. Land Use Code 710: General Office Building (average rates, expressed in trips per 1,000 s.f. gross floor area).
2. Land Use Code 110: General Light Industrial (average rates, expressed in trips per 1,000 s.f. gross floor area).
3. Standard auto trip reduction for employment near LRT based on Santa Clara Valley Transportation Authority *Transportation Impact Analysis Guidelines* , Oct. 2014.

Vehicle Miles Traveled (VMT) Analysis

In 2013, Governor Brown signed Senate Bill 743. SB 743 directed the State Office of Planning and Research (OPR) to develop new California Environmental Quality Act (CEQA) guidelines and to replace Level of Service (LOS) as the evaluation measure for transportation impacts under CEQA with another measure such as Vehicle Miles Traveled (VMT). VMT measures the amount of vehicle trip making and trip length and is a direct measurement of greenhouse gas emissions. A reduction in VMT would promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses that reduces the reliance on individual vehicles.

The City of Santa Clara recently adopted a VMT Transportation Analysis Policy for Environmental Review[1]. The Policy sets forth screening criteria that allow certain types of infill developments, small projects, and/or transit supportive projects near major transit corridors to be presumed to have a less than significant impact on VMT. While the project is located within ½ mile of the Reamwood and Old Ironsides Light Rail Stations, the proposed 0.37 floor area ratio (FAR) is less than the 0.75 minimum FAR required for office/R&D projects to be considered a transit supportive project. Furthermore, the estimated 898 daily vehicle trips generated by the proposed uses exceeds the 110 daily trip threshold used to define small projects. Thus, the project does not meet any of the VMT screening criteria and must be evaluated against the CEQA thresholds of significance for VMT impacts set forth in the City's Transportation Analysis Policy.

The VMT analysis was conducted with a beta release of Version 2.1 of the Santa Clara Countywide VMT Evaluation Tool, which the VTA made available as a courtesy in advance of the public

[1] City of Santa Clara, Resolution No. 20-8861, "A Resolution of the City of Santa Clara, California to Amend Resolution 5713 to Adopt a Transportation Analysis Policy to Comply with the California Environmental Quality Act Pursuant to State Senate Bill 743 (2013) and CEQA Guidelines Section 15064.3," adopted June 23, 2020.

release. Version 2.1 incorporates minor changes to back-end data and parameters specified by the City of Santa Clara and the City of Morgan Hill. No changes to the back-end data/parameters or the tool results are expected between this beta release and the public release of Version 2.1 which is anticipated later in 2023.

The City of Santa Clara defines a project VMT impact for employment uses if the average VMT per employee would exceed 15% below the existing Countywide VMT per employee. Based on the Santa Clara County VMT Evaluation Tool, the County average for employment uses is 16.64 daily VMT per employee. Therefore, the project would potentially have a significant impact on VMT if the project generated home-based work VMT per employee would exceed 14.14. It should be noted that the VMT analysis only includes the work trip element of the project (employee commute only) and does not include truck trips that may be generated by industrial uses.

VMT Assessment Results

The results of the project generated VMT analysis are presented in Table 2 and Appendix A. Based on the Santa Clara County VMT Evaluation Tool, the project site would generate home-based work daily VMT per employee of 18.66, which is greater than the threshold of 14.14 for employment uses. Therefore, the project would potentially have a significant impact based on the VMT impact criteria.

Table 2
Project Generated VMT Assessment

Project Type	Significance Criteria	Threshold[1]	Project Parcel VMT[2]
Employment	Project exceeds existing countywide home-based work VMT per employee by 15%	14.14	18.66

Notes:
[1] The threshold for project generated VMT per employee is 15% below the Santa Clara County average.
[2] VMT for Project Site without TDM per the Santa Clara County VMT Evaluation Tool.

Mitigation

The project generated VMT can be reduced by physical design measures (land use or transportation) and Transportation Demand Management (TDM) measures. The Santa Clara County VMT Evaluation Tool was used to determine which TDM measures could reduce the project VMT to below the threshold. The following TDM measures were considered:

- **Provide Bike Facilities.** Provide and maintain secure bicycle parking to encourage bicycle commuting and reduce daily vehicle trips. Additional end-of-trip bike facilities, including showers and lockers, should also be provided.
- **Bike Share Programs.** Construct a bike sharing station on site. Bike share substitutes for some driving trips and provides a first/last-mile connection for transit users, reducing auto trips and thereby reducing VMT.
- **Commute Trip Reduction Marketing and Education.** Provide information and encourage all project employees to use transit, shared rides, and active modes via new employee orientation, event promotions, and publications to reduce drive-alone trips.
- **Telecommuting and Alternative Work Schedules.** Allow and encourage employees to telecommute from home when possible, or to shift work schedules such that employees work slightly longer days resulting in fewer days in the office. This strategy reduces

commute trips thereby reducing VMT. This measure assumes that 75 percent of all employees would telecommute 1.5 days per week.

- **Ride-Sharing Programs.** Organize a program to match individuals interested in carpooling who have similar commute patterns to reduce drive-alone trips. This measure assumes six percent of employees would be ride-sharing participants.

Based on the Santa Clara County VMT Evaluation Tool, the above TDM measures would reduce the home-based work VMT per employee from 18.66 to 14.06, which is below the impact threshold of 14.14 (see Appendix A). Therefore, assuming successful implementation of the recommended TDM measures, the project's impact on VMT would be less than significant.

Conclusions

Per the State's guidance and City of Santa Clara's VMT Policy, the proposed project would have a less than significant impact on VMT with the implementation of the proposed TDM measures. Based on the ITE trip generation rates and trip reductions for transit use, the proposed project is estimated to generate 573 fewer daily vehicle trips than the existing office building, with 77 fewer trips occurring during each of the AM and PM peak hours.

5201 Patrick Henry Drive Transportation Analysis

Technical Appendices

August 25, 2023

Appendix A
Santa Clara County
VMT Evaluation Tool Report

Santa Clara Countywide VMT Evaluation Tool - Version 2.1 - Report

Project Details

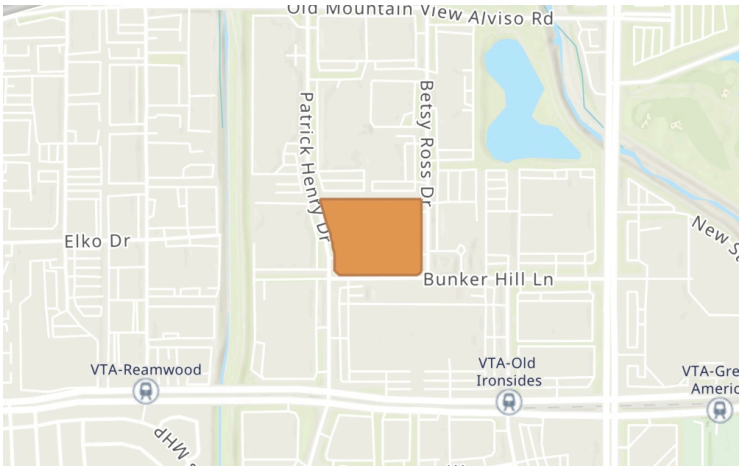
Timestamp of Analysis	August 24, 2023, 11:40:46 AM
Project Name	5201 Patrick Henry Dr.
Project Description	67,492 s.f. Office & 45,780 s.f. Light Industrial

Project Location Map

Jurisdiction:

Santa Clara

APN	TAZ
10450004	1325



Analysis Details

Data Version	VTA Countywide Model December 2019
Analysis Methodology	Parcel Buffer Method
Baseline Year	2015

Project Land Use

Residential:

Single Family DU:	
Multifamily DU:	
Total DUs:	0

Non-Residential:

Office KSF:	67
Local Serving Retail KSF:	
Industrial KSF:	45

Residential Affordability (percent of all units):

Extremely Low Income:	0 %
Very Low Income:	0 %
Low Income:	0 %

Parking:

Motor Vehicle Parking:	248
Bicycle Parking:	30

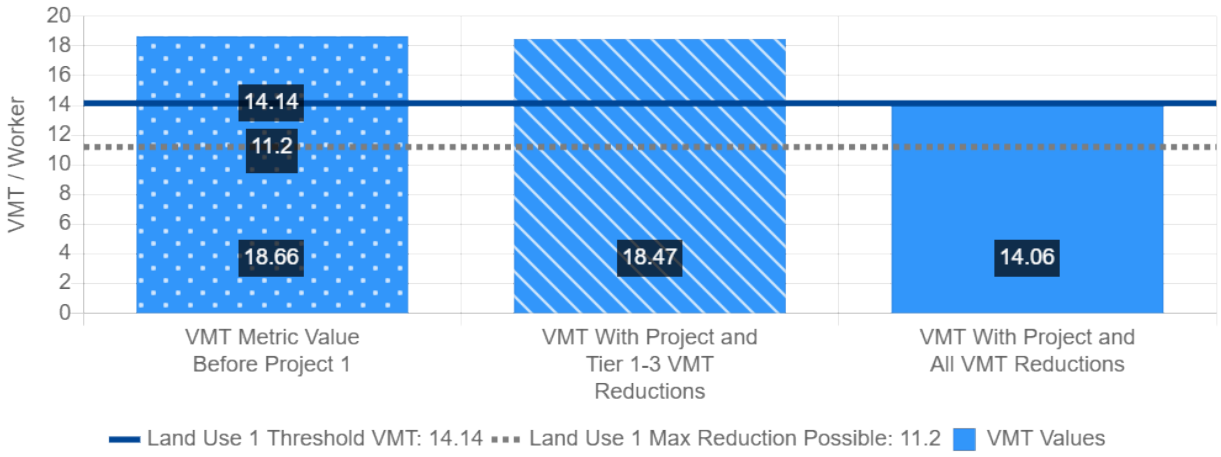
Proximity to Transit Screening

Inside a transit priority area? Yes (Pass)

Office Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 1:	Office
VMT Metric 1:	Home-based Work VMT per Worker
VMT Baseline Description 1:	County Average
VMT Baseline Value 1:	16.64
VMT Threshold Description 1 / Threshold Value 1:	-15% / 14.14
Land Use 1 has been Pre-Screened by the Local Jurisdiction:	N/A

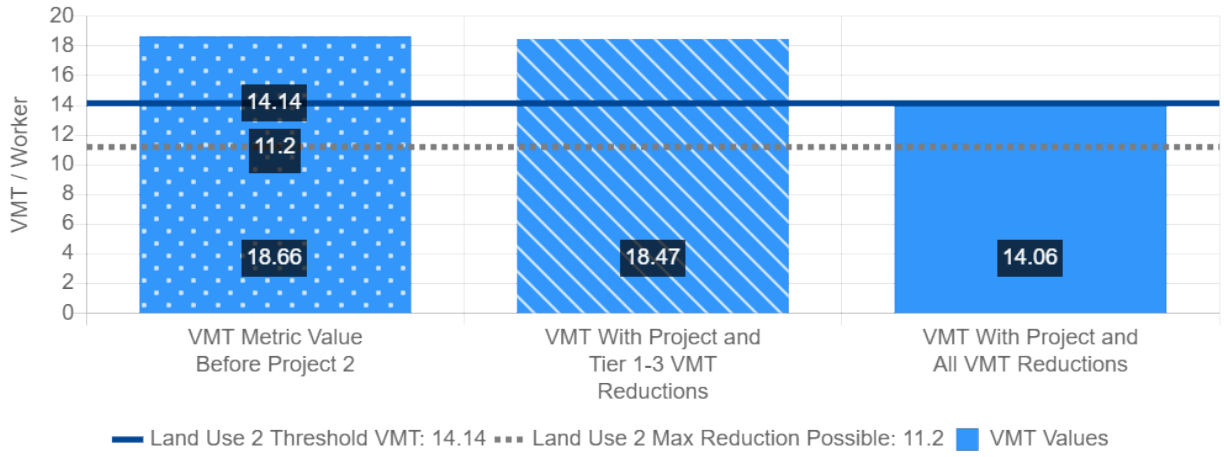
	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	18.66	18.47	14.06
Low VMT Screening Analysis	No (Fail)	No (Fail)	Yes (Pass)



Industrial Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 2:	Industrial
VMT Metric 2:	Home-based Work VMT per Worker
VMT Baseline Description 2:	County Average
VMT Baseline Value 2:	16.64
VMT Threshold Description 2 / Threshold Value 2:	-15% / 14.14
Land Use 2 has been Pre-Screened by the Local Jurisdiction:	N/A

	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	18.66	18.47	14.06
Low VMT Screening Analysis	No (Fail)	No (Fail)	Yes (Pass)



Tier 1 Project Characteristics

PC01 Increase Residential Density

Existing Residential Density:	11.23
With Project Residential Density:	11.23

PC02 Increase Residential Diversity

Existing Residential Diversity Index:	0.74
With Project Residential Diversity Index:	0.74

PC03 Affordable Housing

PC04 Increase Employment Density

Existing Employment Density:	48.93
With Project Employment Density:	49.85

Tier 3 Parking

PK02 Provide Bike Facilities

Bicycle Parking:	30
Project End-of-trip Bike Facilities:	Yes

Tier 4 TDM Programs

TP02 Bike Share Programs

Percent Change in Bike Trips:	6%

TP04 CTR Marketing and Education

CTR Marketing/Education Percent Expected Participants:	100 %

TP08 Telecommuting and Alternative Work Schedules

Telecommuting and Alternative Work Schedule Type:	Telecommute 1.5 days/ week
Alternative Work Schedule Percent Participants:	75 %

TP13 Ride-Sharing Programs

Expected Percent of Ride-Sharing Participants:	6 %

Appendix B
5201 Patrick Henry Drive Transportation Demand Management Plan

HEXAGON TRANSPORTATION CONSULTANTS, INC.

5201 Patrick Henry Drive

Transportation Demand Management (TDM) Plan

Prepared for:

Circlepoint

September 13, 2023

Hexagon Transportation Consultants, Inc.
Hexagon Office: 100 Century Center Court, Suite 501
San Jose, CA 95112
Hexagon Job Number: 23MH01
Phone: 408.971.6100
Client Name: Circlepoint

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1. Introduction

Transportation Demand Management (TDM) combines services, incentives, facilities, and actions that reduce single-occupant vehicle (SOV) trips to help relieve traffic congestion, parking demand, greenhouse gas emissions, and air pollution problems. TDM aims to promote more efficient utilization of existing transportation facilities and ensure that new developments maximize the potential for sustainable transportation usage. This TDM Plan has been prepared for the proposed redevelopment of an existing office building at 5201 Patrick Henry Drive in Santa Clara, California.

Because the project is expected to have fewer than 500 employees on site, it would not be subject to the vehicle miles traveled (VMT) reduction requirements through active TDM set forth in the City of Santa Clara's *Climate Action Plan 2022*. However, a TDM Plan is required to mitigate the project's significant impact on VMT. This TDM Plan includes monitoring and reporting programs that will detail employees' awareness and use of the TDM programs to determine the VMT reduction for the project.

This TDM Plan includes a range of measures designed to reduce the VMT generated by the project. The VMT reduction achieved by the proposed TDM measures has been quantified using a beta release of Version 2.1 of the Santa Clara Countywide VMT Evaluation Tool, which the VTA made available as a courtesy in advance of the public release. Version 2.1 incorporates minor changes to back-end data and parameters specified by the City of Santa Clara and the City of Morgan Hill. No changes to the back-end data/parameters or the tool results are expected between this beta release and the public release of Version 2.1 which is anticipated later in 2023. Based on the VMT Tool projections, the TDM program will reduce VMT by more than the 24.2 percent VMT reduction (from 18.66 to 14.14) required to satisfactorily mitigate the project's significant impact on VMT. The VMT Evaluation Tool report is attached as Appendix A.

Project Description

The proposed development would be at 5201 Patrick Henry Drive in Santa Clara, California (see Figure 1). The project site is located on the north side of Bunker Hill lane between Patrick Henry Drive and Betsy Ross Drive and contains an office building with 144,390 square feet (s.f.). The project would include partial demolition and renovation of the existing office building and the addition of new fabrication space resulting in a total floor area of 113,272 s.f. including 67,492 s.f. of office space and 45,780 s.f. of light industrial space. Parking will be provided on a surface parking lot surrounding the building. Access to the site is provided by three full-access driveways on Patrick Henry Drive, one full-access driveway on Bunker Hill Lane, and two full-access driveways on Betsy Ross Drive (see Figure 2). The project would not change the location or number of site driveways.

The project proposes to provide 248 vehicle parking spaces. The project will provide a bike storage room on the ground floor with approximately 14 long-term bicycle parking spaces with showers and lockers. The project will also provide 16 short-term bicycle parking spaces, which are provided on the west side of the building near the Patrick Henry Drive driveway and near the northeast corner of the building. On-site amenities include outdoor workspaces, a fitness room, cafe, and game room.

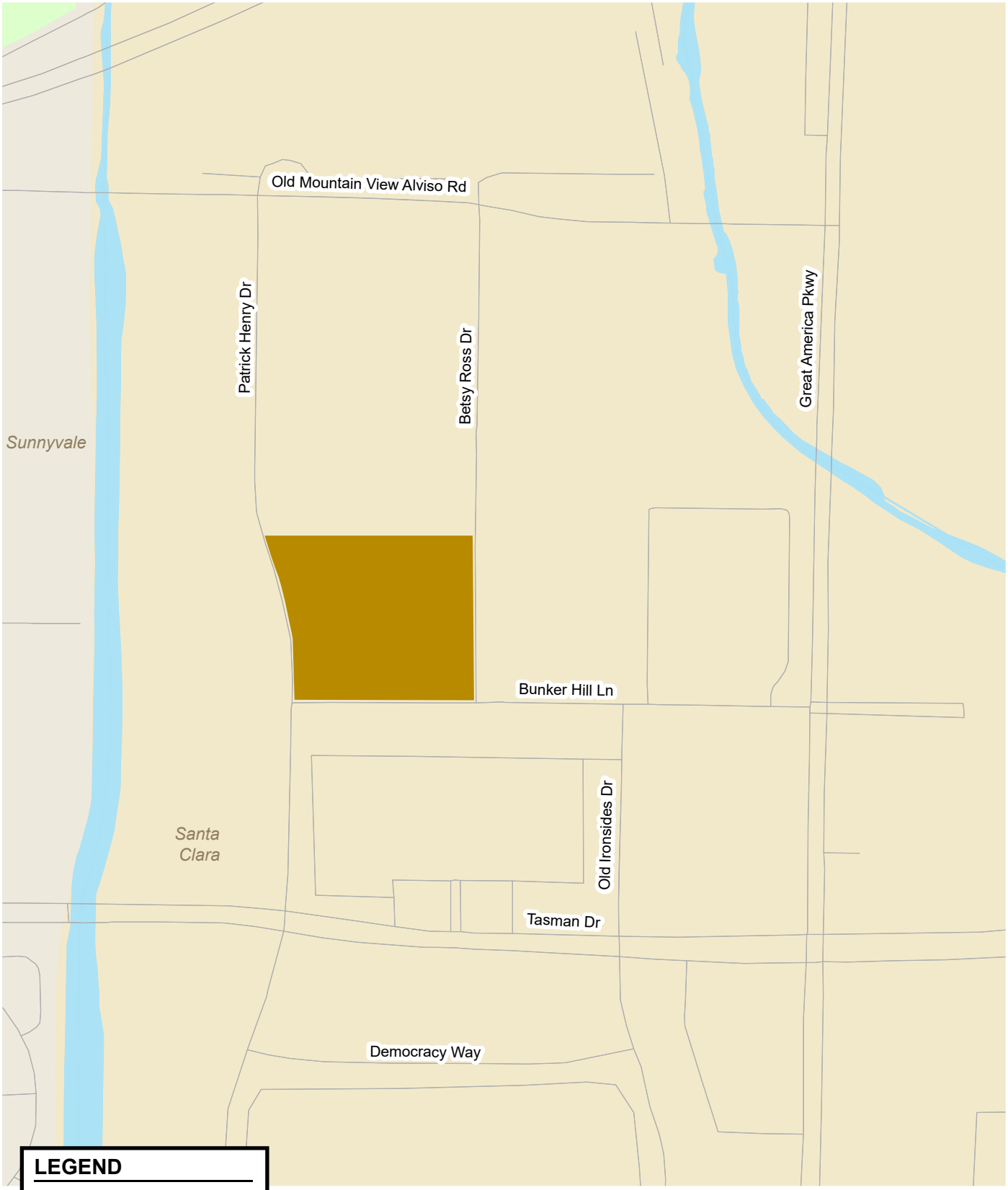


Figure 1
Project Site Location

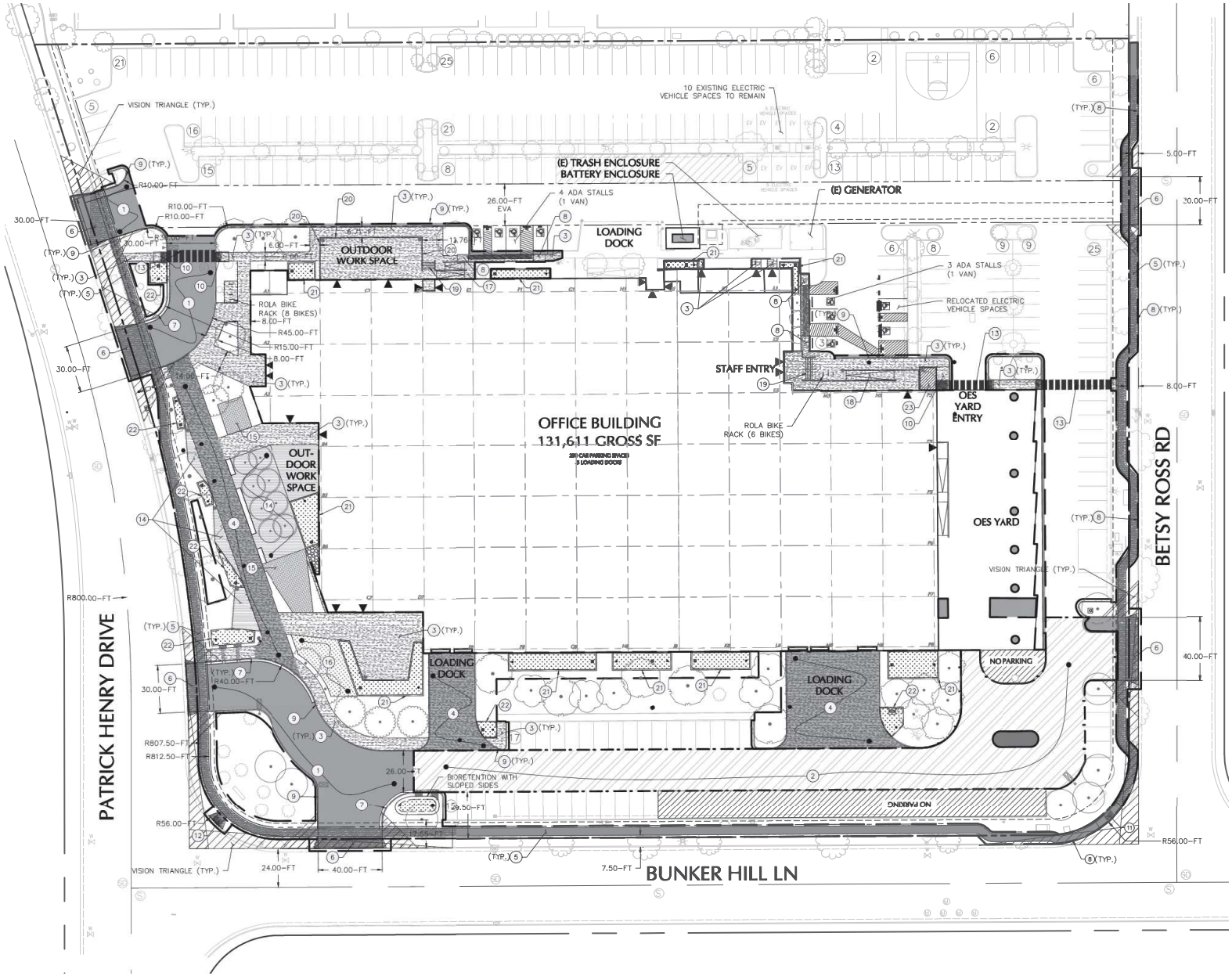


Figure 2
Project Site Plan

NORTH
Not to Scale

Project Trip Generation and Trip Reduction Target

Through empirical research, data have been collected that show trip generation rates for many types of land uses. The research is compiled in the ITE *Trip Generation Manual, 11th Edition*. The magnitude of traffic added to the roadway system by a particular development is estimated by multiplying the applicable trip generation rates by the size of the development. In accordance with the Santa Clara Valley Transportation Authority *Transportation Impact Analysis Guidelines* (2014), a six percent reduction in vehicle trips was applied to account for transit use because the project is within a 2,000 foot walk of the Old Ironsides Light Rail Station. For the purpose of TDM monitoring, no trip credits were applied for the existing office building to be replaced by the project. Because the project is expected to have fewer than 500 employees on site, it would not be subject to the VMT reduction requirements through active TDM set forth in the City of Santa Clara's *Climate Action Plan 2022*. However, in order to mitigate the project's significant impact on VMT, the TDM Plan would need to reduce VMT by 24.2 percent compared to the baseline VMT for this site. Thus, a 24.2 percent reduction for active TDM was applied.

Based on the ITE trip generation rates and the reductions for transit and active TDM, the proposed uses are estimated to generate 681 daily vehicle trips including 98 AM peak-hour trips and 90 PM peak-hour trips(see Table 1).

Table 1
Project Trip Estimates

			Total	Total	AM Peak Hour				PM Peak Hour			
Land Use	Size	Unit	Daily Rate	Daily Trips	Peak Rate	Trips In	Trips Out	Total Trips	Peak Rate	Trips In	Trips Out	Total Trips
Proposed Project												
Office [1]	67.492	ksf	10.84	732	1.52	91	12	103	1.44	16	81	97
Light Industrial [2]	45.780	ksf	4.87	223	0.74	30	4	34	0.65	4	26	30
	113.272	ksf										
Transit Reduction [3] (6%)				(57)		(7)	(1)	(8)		(2)	(6)	(8)
Active TDM Reduction [4] (24.2%)				(217)		(28)	(3)	(31)		(5)	(24)	(29)
Gross Project Trips				**681**		**86**	**12**	**98**		**13**	**77**	**90**

Notes:
All rates are from: Institute of Transportation Engineers, *Trip Generation, 11th Edition* (September 2021)
1. Land Use Code 710: General Office Building (average rates, expressed in trips per 1,000 s.f. gross floor area).
2. Land Use Code 110: General Light Industrial (average rates, expressed in trips per 1,000 s.f. gross floor area).
3. Standard auto trip reduction for employment near LRT based on Santa Clara Valley Transportation Authority *Transportation Impact Analysis Guidelines* , Oct. 2014.
4. TDM reduction based on the Santa Clara Countywide VMT Evaluation Tool projections.

2. Transportation Facilities and Services

Transportation facilities and services that support sustainable modes of transportation include VTA bus and shuttle routes, VTA light rail, and bicycle and pedestrian facilities. This chapter describes the existing facilities and services near the project site that will support the TDM measures contained in this plan.

HOV Lanes

High-Occupancy Vehicle (HOV) lanes, also known as diamond or carpool lanes, restrict use to vehicles with two or more occupants (carpool, vanpool, and buses), motorcycles, and ILEVs (a subcategory of clean-fuel vehicles that have essentially no fuel vapor emissions) during the morning (5:00 to 9:00 AM) and evening (3:00 to 7:00 PM) commute periods. HOV lanes are present on US 101, SR 237, and Lawrence Expressway from SR 237 to Stevens Creek Boulevard in the project vicinity. HOV lanes serve as an incentive for ridesharing by reducing the travel time of those who use them.

A list of HOV hours of operation and restrictions is available at https://511.org/carpool-vanpool/carpool/lanes.

Transit Services

VTA Bus and Shuttle Service

The existing bus and shuttle service in the project vicinity is provided by the Santa Clara Valley Transportation Authority (VTA). The project is served by five VTA bus or shuttle routes within walking distance (a half mile) of the project site. There is a shuttle stop for the ACE Green Shuttle adjacent to the project site on Patrick Henry Drive. The next closest bus stops to the project are approximately 0.2 miles away at the corner of Patrick Henry Drive and Tasman Drive and approximately 0.3 miles away at the intersection of Great America Parkway and Bunker Hill Road. The existing bus and shuttle services are summarized in Table 2 and shown in Figure 3.

Light Rail Transit (LRT) Service

Light rail transit (LRT) service is provided in the project area by VTA. The project area is served by the Green Line (Old Ironsides – Winchester), which provides service between Santa Clara and Campbell via downtown San Jose, and the Orange Line (Mountain View – Alum Rock), which extends from the Caltrain Station in downtown Mountain View past the Milpitas BART Station to East San Jose. The Green Line operates with 15-to-30-minute headways until 12:40 AM seven days a week. The Orange

Line operates with 15-to-30-minute headways until 12:44 AM seven days a week. The closest light rail stops to the project are 0.3-0.4 miles (roughly a 10-minute walk) away at the Old Ironsides and Reamwood Stations, respectively. The light rail services in the project area are shown in Figure 3.

Table 2
Existing VTA Bus and Shuttle Routes

Bus Route	Route Description	Closest Stop and Distance to Project Site	Weekday Hours of Operation[1]	Headway (minutes)[1]
ACE Green Shuttle	Great America ACE Station - North Santa Clara	Patrick Henry Drive (adjacent project site)	WB: 6:06 AM - 9:45 AM EB: 3:24 PM - 6:39 PM	WB: 60-90 EB: 55
Frequent Route 57	Old Ironsides Station - West Valley College	Patrick Henry Drive and Tasman Drive (0.2 mile)	5:53 AM - 10:52 PM	15
Local Route 55	Old Ironsides Station - De Anza College	Patrick Henry Drive and Tasman Drive (0.2 mile)	5:51 AM - 10:47 PM	30
Local Route 59	Stevens Creek & Saratoga - Baypointe Station via Alviso	Great America & Bunker Hill Lane (0.3 mile)	5:48 AM - 10:18 PM	30
Express Route 121	Gilroy/Morgan Hill - Lockheed Martin Station	Patrick Henry Drive and Tasman Drive (0.2 mile)	SB: 2:52 PM - 6:49 PM NB: 4:25 AM - 9:01 AM	SB: 90 NB: 60

Note:
1. Approximate weekday operation hours and headways during peak commute periods in the project area, as of September 2023.

Bicycle and Pedestrian Facilities

Pedestrian Facilities

Pedestrian facilities near the project site consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections. In the project vicinity, sidewalks and separated pedestrian walkways are provided along several roadways. Crosswalks at the nearby signalized intersections include pedestrian signal heads and push buttons. Sidewalks or separated pedestrian walkways are currently missing on the both sides of Patrick Henry Drive along an approximately 400-foot long segment north of Bunker Hill Lane, the north side of Bunker Hill Lane from Patrick Henry Drive to just before Old Ironsides Drive, the south side of Bunker Hill Lane from Old Ironsides Drive to Great America Parkway, the east side of Old Ironsides Drive from the bus stop approximately 150 feet north of Tasman Drive to Bunker Hill Lane, and on both sides of Betsy Ross Road along an approximately 600-foot long segment north of Bunker Hill Lane. Crosswalk are also missing at the intersections of Patrick Henry Drive and Bunker Hill Lane, Bunker Hill Lane and Betsy Ross Road, and Bunker Hill Lane and Old Ironsides Drive. Pedestrians are permitted to use the shared-use paths such as the Calabazas Creek Trail and John W. Christian Greenbelt, which are to the west of the project site, and the San Tomas Aquino Creek Trail, which is east of the project site. Shared-use paths are described below. The existing pedestrian facilities are shown in Figure 4.

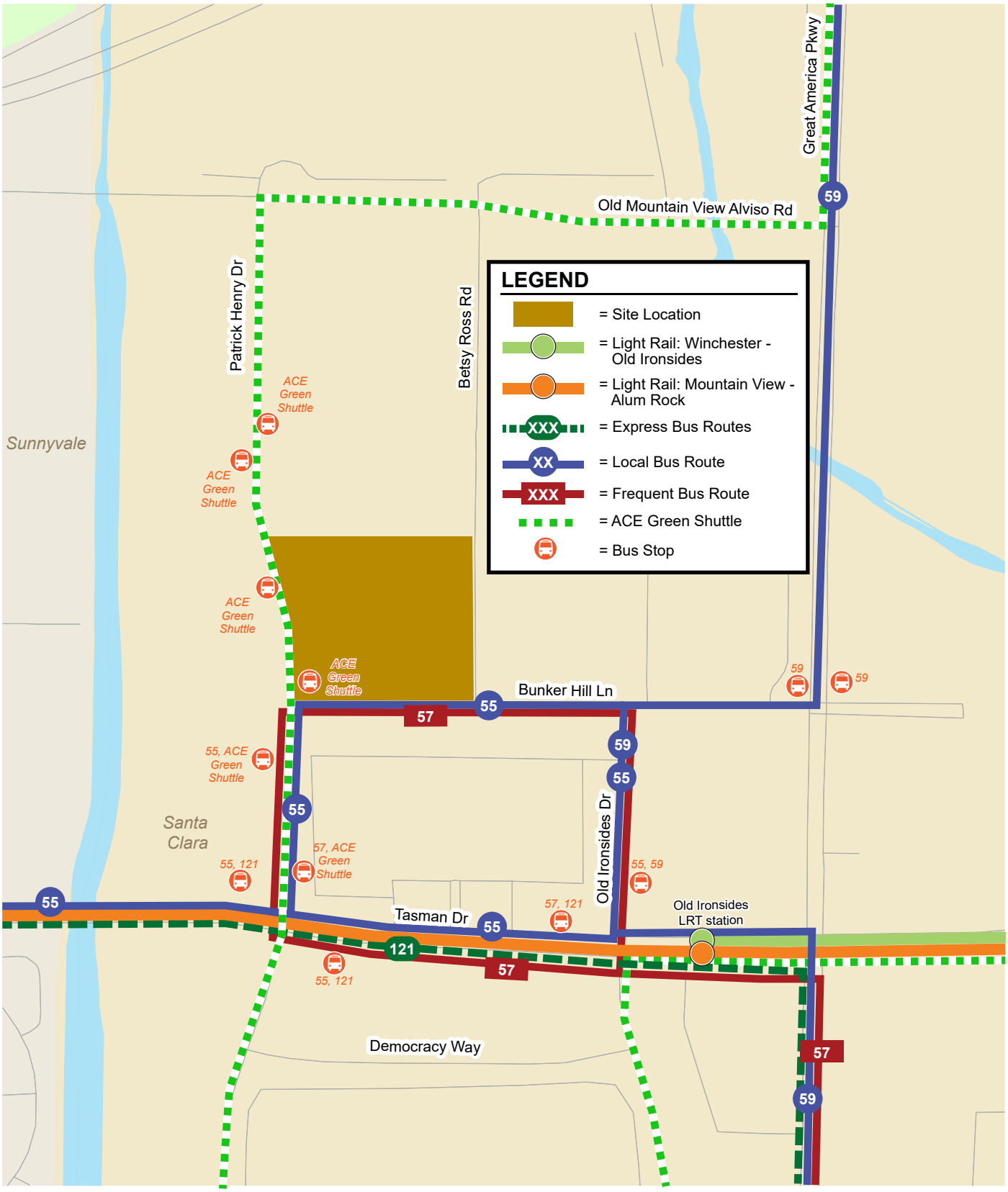


Figure 3
Existing Transit Services

NORTH
Not to Scale

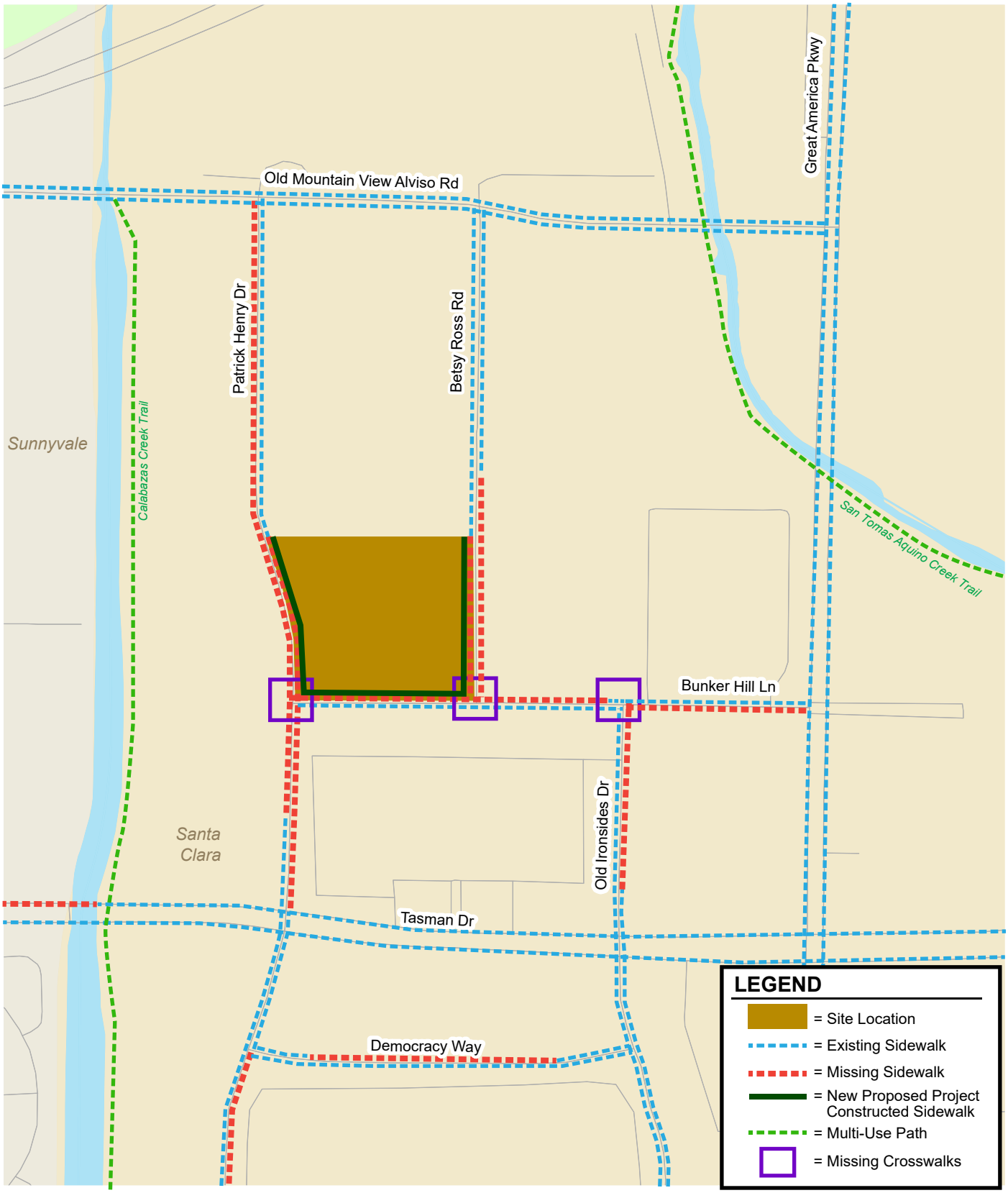


Figure 4
Existing and Proposed Pedestrian Facilities

Bicycle Facilities

The bicycle facilities that exist in the project vicinity include multi-use trails/paths (Class I bikeway), striped bike lanes (Class II bikeway), and shared bike routes (Class III bikeway). The existing bicycle facilities are shown in Figure 5.

Class I Trail or Path is an off-street path with exclusive right-of-way for non-motorized transportation used for commuting as well as recreation.

The Calabazas Creek Trail connects Mountain View-Alviso Road to Mission College Boulevard. This trail can be accessed via Tasman Drive or Mission College Boulevard. A pedestrian/bike bridge connects the Calabazas Creek Trail with the John W. Christian Greenbelt south of the project site.

The San Tomas Aquino Creek Trail runs from Homestead Road to State Route 237. This trail can be accessed via Mountain View-Alviso Road, Great America Parkway, and Tasman Drive.

Class II Bike Lanes are lanes on roadways designated for use by bicycles with special lane markings. Within a half-mile radius of the project site, striped bike lanes are present along the following roadway segments:

- Mountain View-Alviso Road/Lawrence Station Road from Elko Drive to Great America Parkway
- Great America Parkway, south of Great America Way (except for a small segment just north and south of Mission College Boulevard)
- Tasman Drive, east of Old Ironsides Drive and west of Calabazas Creek Bridge
- South side of Tasman Drive between Calabazas Creek Bridge and Patrick Henry Drive
- North side of Tasman Drive between Patrick Henry Drive and Old Ironsides Drive

Class III Bike Routes are streets designated for bike travel and shared with motor vehicles. Within a half-mile radius of the project site, bike routes are present along the following roadway segments:

- Tasman Drive across the Calabazas Creek Bridge
- North side of Tasman Drive between the Calabazas Creek Bridge and Patrick Henry Drive

According to the City of Santa Clara *Bicycle Plan Update 2018*, Class IV separated bike lanes are a high-priority recommendation along Great America Parkway and on Patrick Henry Drive south of Tasman Drive.

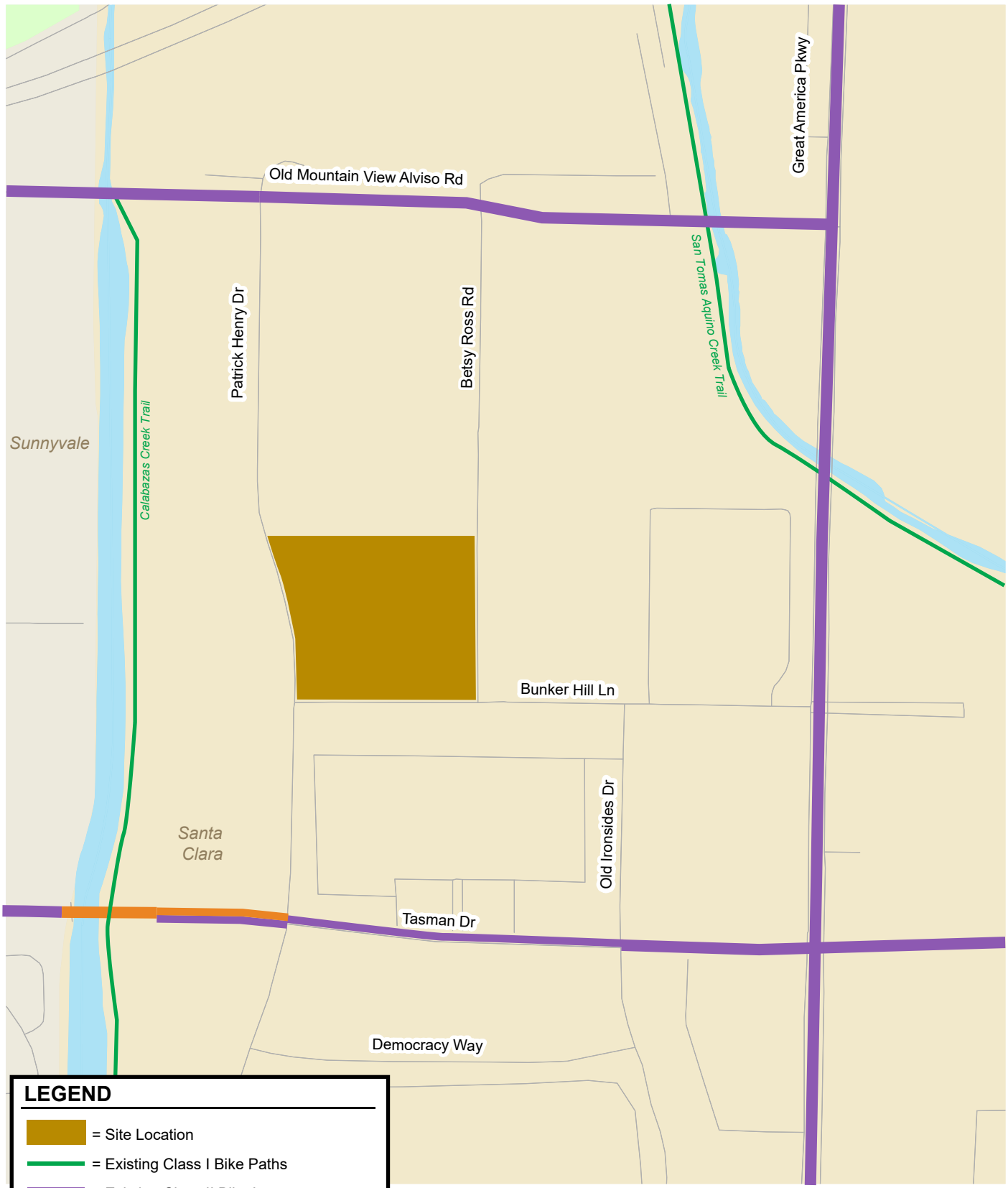


Figure 5
Existing Bicycle Facilities

3.
Proposed TDM Measures

This chapter describes TDM measures that will be implemented by the proposed project to mitigate the project's significant impact on VMT. The TDM measures include planning and design measures that encourage walking, biking, and the use of transit.

Table 3 shows the TDM measures that will be implemented by this project. An indication of who will have primary responsibility for implementing each measure is also shown in the table.

The project's VMT reduction has been estimated using a beta release of Version 2.1 of the Santa Clara Countywide VMT Evaluation Tool, which the VTA made available as a courtesy in advance of the public release. Version 2.1 incorporates minor changes to back-end data and parameters specified by the City of Santa Clara and the City of Morgan Hill. No changes to the back-end data/parameters or the tool results are expected between this beta release and the public release of Version 2.1 which is anticipated later in 2023. Based on the VMT Tool projections, the TDM program will reduce VMT by more than the 24.2 percent VMT reduction (from 18.66 to 14.14) required to satisfactorily mitigate the project's significant impact on VMT. After the project has been occupied and the TDM Plan has been implemented, driveway counts should serve as the monitoring tool to determine if the goal of a 24.2 percent VMT reduction has been met. If not, the Transportation Coordinator (appointed by the building management) will be responsible for implementing additional measures.

Table 3
Proposed TDM Measures

TDM Measure	Implementation Responsibility
Program Administration, Monitoring and Reporting	
Preparation of TDM Plan	Building Developer
Information and marketing to current and new employees	Transportation Coordinator
New employee welcome materials	Transportation Coordinator
Information posted in prominent on-site locations	Transportation Coordinator
Online Kiosk	Transportation Coordinator [1]
Designate a Transportation Coordinator	Building Developer
Annual Surveys	Transportation Coordinator
Target Trip Reduction Monitoring	Transportation Coordinator
Bicycle and Pedestrian Elements	
New sidewalks along project frontage	Building Developer
Bicycle parking	Building Developer
Showers/Lockers	Building Developer
Bike-share program for employees	Building Developer
Shared Ride Elements	
Ridematching Assistance	511.org (Available to public)
Incentives for New Carpools/Vanpools	511.org (Available to public)
Programs and Policies	
Telecommuting and Alternative Work Schedules	Building Tenant
Guaranteed Ride Home	VTA (Available to public)
On-Site Amenities	
On-site amenities that reduce trips (i.e. cafe, fitness room)	Building Developer

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

TDM Administration and Promotion

Designated Transportation Coordinator

The developer will identify a designated contact to support the TDM programs who will have Transportation Coordinator duties and be responsible for implementing commuter programs for the employees.

The Transportation Coordinator's primary responsibility will be implementing the TDM programs throughout the project and will be available to answer questions from employees. That person’s name and contact information will be provided to the City. The Transportation Coordinator will proactively present alternative transportation programs to commuters and will be responsible for ensuring that employees are aware of all transportation options and how to fully utilize the TDM Plan. The

Transportation Coordinator will provide the following services and functions to ensure the TDM Plan runs smoothly:

- Provide transportation information to all current and new employees.
- Maintain and distribute the employee welcome flyer.
- Maintain an online kiosk with information about alternatives to driving alone to work.
- Prepare periodic rideshare articles or emails. Commuter marketing will promote incentives and generate excitement about commuting alternatives.
- Register with the BAAQMD to receive regional air quality forecast bulletins about unhealthy air quality days for the Spare the Air program. Employees will receive these email updates to encourage alternative transit modes during peak advisory periods.
- Manage annual surveys and submit annual TDM monitoring reports to the City. The results will be used to determine whether the implemented TDM measures are effective and whether new TDM measures should be implemented.

Information and Marketing

Information will be provided to current and new employees to build awareness of the TDM programs, on-site amenities, and incentives for utilizing alternative modes. The information will include a variety of transportation options and links to the online transportation kiosk and relevant websites and apps. In addition to providing the information directly to employees, information and marketing materials will also be posted in prominent on-site locations, such as elevators or shared common spaces.

New Employee Welcome Flyer

The applicant will provide new employees with a commuter flier to be included with the new employee orientation materials. This flier will include (but is not limited to) information about transit opportunities, shuttles, bicycle routes, and on-site amenities and resources.

Online Transportation Kiosk

This TDM Plan proposes to establish an “online kiosk” with transportation information that employees could access from their smartphone, their desk at home, or anywhere else.

The developer will have responsibility for setting up this online information center. The Transportation Coordinator will have responsibility for the maintenance of the online kiosk with information regarding up-to-date non-auto transportation alternatives. Additionally, transportation news and commuter alerts will be posted online. TDM-related links and information will be posted on this forum, and the Transportation Coordinator will have host permissions to send employees email notifications about the TDM Plan and measures. The online kiosk will include information about all the measures, services, and facilities discussed in this Plan, including:

- A summary of VTA services and links to further information about their routes and schedules.
- Guaranteed Ride Home Program provided by VTA.
- Bicycling resources on 511.org.
- Local bikeways map.
- Information about ride-matching services via 511.org.
- A link to the many other trip-planning resources available in the Bay Area such as Moovit, Waze, real-time traffic conditions, etc.

Transit Elements

Proximity to Transit

The project is about 0.3-0.4 miles from the Old Ironsides and Reamwood Light Rail Stations, respectively, providing access to the Green Line and Orange Line. In addition, the project is located within a half mile of six VTA bus and shuttle stops. Available shuttle and transit resources encourage the use of VTA for employees of the proposed project. The project's proximity to transit is considered a passive TDM measure since it is related to the project's location and is not dependent upon the project characteristics or TDM programs implemented by the project. The reduction in VMT associated with the project's proximity to transit is reflected in the baseline (without project) VMT estimate generated by the VMT Tool.

Bicycle Facilities

Bicycle Parking

Providing secure bicycle parking encourages bicycle commuting and reduces daily vehicle trips. Bicycle parking facilities will include:

- Short-term bicycle racks located in convenient, secure, and prominent locations near main building entrances; and
- A lockable bicycle room with permanently anchored racks located on the ground floor of the building.

The project will provide 14 secure long-term bicycle parking lockers and 16 short-term bicycle parking spaces.

End-of-Trip Facilities

The project proposes to include end-of-trip facilities that include showers and lockers near the lockable bicycle room on the ground floor. The site plan shows that six showers and at least 10 lockers are to be provided.

Bike Share Programs

The project will construct a bike sharing station on site. Bike share programs offer employees an alternative for some driving trips and provide a first/last-mile connection for transit users, reducing auto trips and thereby reducing VMT. Currently there are no public bike share programs operating in northern Santa Clara. The developer will provide a pool of bikes for employees' use. The number of bikes provided may be adjusted from time to time based on usage data.

Pedestrian Facilities

Proposed Sidewalks

The project will construct new sidewalks along the entire project frontage along Patrick Henry Drive, Bunker Hill Lane, and Betsy Ross Road (see Figure 4). Currently no sidewalks or separated pedestrian walkways exist along the existing project frontage. These improvements will provide more direct connections for pedestrians to neighboring bus stops, light rail stations, and trails.

On-Site Amenities

A fitness room, game room, cafe, and outdoor workspaces will be available for use by employees for socializing and recreation. These on-site amenities will allow employees to avoid making a trip to similar off-site facilities. All of the on-site amenities will facilitate internalization of trips within the project.

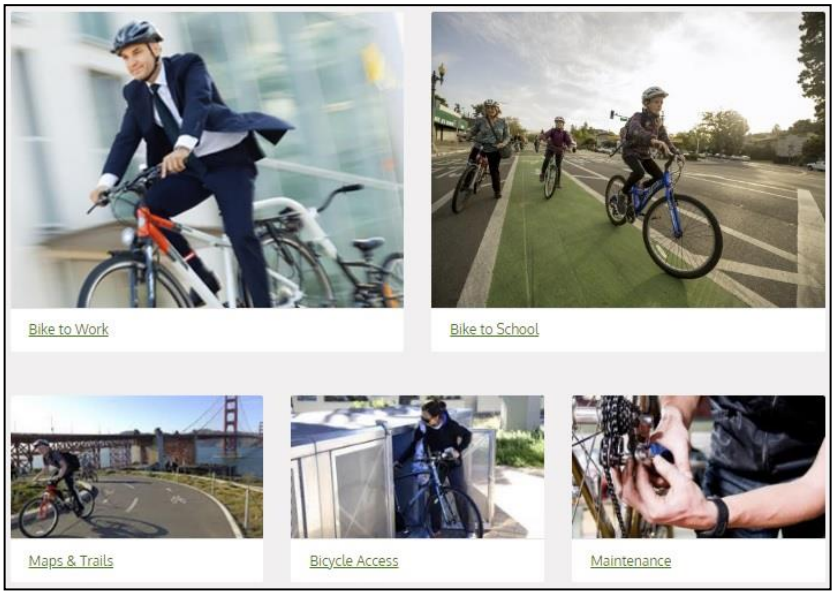
Resources & Incentives

Bicycle Resources

The virtual transportation kiosk or website will provide resources helpful to cyclists, including local and regional bikeway maps and bikes on transit guides.

The following resources are available to bicycle commuters through 511.org. Employees who are bicycle commuters will find cycling information and can log on to https://511.org/biking. The 511 system provides significant resources for bicycle commuters, including:

- Bicycle and trail maps
- Location of bike lockers
- How to take your bike on public transit
- How to take your bicycle across Bay Area toll bridges
- How to ride safely in traffic
- Tips for bike selection
- Links to bicycle organizations
- Bike to Work Day
- Bike Commute Calculator
- Bike maintenance
- Tips on bike commuting



Trip Planning Resources

Employees may not be aware of several free trip-planning resources. The virtual transportation kiosk will include information on these services.

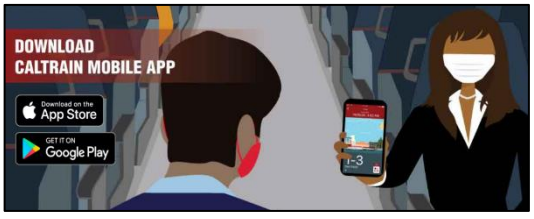
Google Maps

Google has collaborated with select regional transit agencies (including VTA, Caltrain, and ACE) to provide a public transit planner to riders. Employees can find free services online at www.google.com/maps/dir/.

Caltrain Mobile

The Caltrain Mobile app offers commuters the ability to purchase and use fares instantly on their mobile phones.

For easy access to Caltrain's schedules and rider alerts, employees can download the Caltrain Mobile app.



Clipper App

Clipper is the Bay Area's regional transit fare payment system, allowing users to travel on all Bay Area transit including bus, rail, ferry, and train. The traditional Clipper card stores cash value and transit passes. With the Clipper app, commuters can add cash value and passes, set up Autoload, and view user activity, real-time transit information, and helpful trip planning tools.

Ride Matching Resources

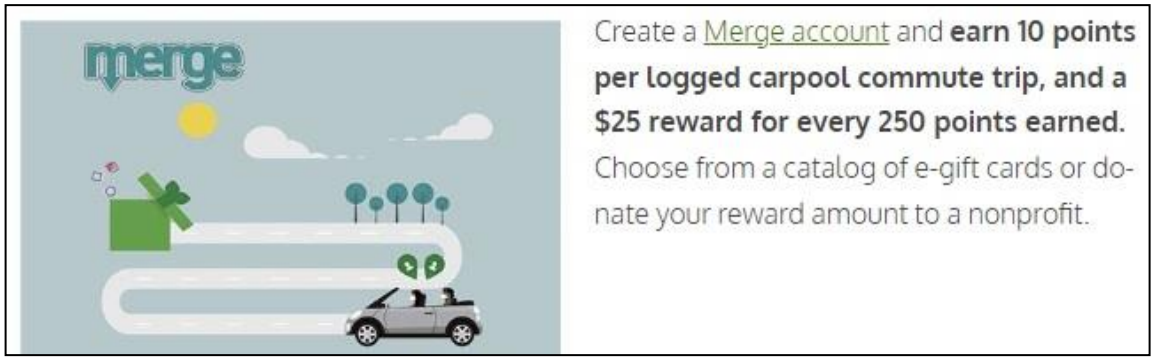
Merge

Merge is 511.org's free ride-matching service that provides an interactive, on-demand system that helps commuters find carpool and vanpool partners. The Transportation Coordinator will promote the online 511 services to employees. This free carpool and vanpool matching tool helps commuters find others with similar routes and travel patterns with whom they may share a ride. Registered users provide their commute information and get matched with other users. Participants can then contact a match to discuss schedules and see if the match is a good fit. The service also lists existing carpools and vanpools in their area that may have vacancies.

Carpool/Vanpool Incentives

Merge

Merge rewards all carpools. Users can carpool using Merge, or personal contact. Users who log their carpool trips earn 10 points per trip and receive a $25 reward for every 250 points earned. Rewards are given as an e-gift card or donated to a nonprofit.



Vanpool Programs

The Transportation Coordinator will inform employees about the $400 monthly vanpool subsidy from 511.org and the Metropolitan Transportation Commission (MTC). The Bay Area 511 Vanpool Program partnered with Commute with Enterprise to provide an all-inclusive option to make vanpooling easy. A

Commute with Enterprise vanpool comes with a newer model, low-mileage van, or SUV, including roadside assistance and maintenance.

VTA's Guaranteed Ride Home Program

The Guaranteed Ride Home (GRH) program is provided by VTA to encourage commuters to use a sustainable mode of transportation to get to work in Santa Clara County by providing reimbursement of the cost to get home in the event of a qualifying emergency. Participants in the program would be eligible to receive up to six reimbursements a year or $500 in total reimbursements, whichever comes first. Each qualified trip may be reimbursed up to $125. GRH participants may redeem a GRH reimbursement by creating a VTA GRH account and requesting the reimbursement via the GRH participant portal. The GRH program is completely free to join and participate in.

Telecommuting and Alternative Work Schedules

The developer shall encourage and allow employees to telecommute from home when possible or to even shift work schedules so that employees work slightly longer days resulting in fewer days in the office. This would allow for a reduction in commute trips which reduces VMT.

4. TDM Implementation and Monitoring

The plan's purpose is to reduce VMT and minimize single-occupancy vehicle trips. As described in the Mitigation Monitoring and Reporting Report, the project will submit annual reports describing the effectiveness of the implemented TDM measures. Reports will include the number of employees on-site and the success of the measures expressed in AM and PM peak-hour vehicle trips generated by the project.

Implementation

The project applicant will ensure that the TDM trip reduction measures are implemented. After construction and building occupancy, the applicant will identify a Transportation Coordinator. The Transportation Coordinator for the project will be responsible for implementing the ongoing TDM measures (e.g., maintaining the welcome flyer and online kiosk, marketing, and employee outreach).

Monitoring

As described in the Mitigation Monitoring and Reporting Program, the project is required to submit annual TDM monitoring reports to City staff to ensure that the project's VMT impact is satisfactorily mitigated. The Transportation Coordinator will utilize annual employee survey data and driveway trip counts to evaluate the success of the TDM Plan. The annual survey and driveway trip count results will be submitted to the City for review, along with an assessment of whether the TDM measures implemented during the preceding year led to the targeted trip reduction. If it is determined that the target trip reduction has not been achieved, the report will outline additional measures to be adopted in the coming year to achieve the goal.

Employee Surveys

To monitor progress towards the VMT reduction goal, the Transportation Coordinator will conduct an annual survey of all employees working on the site to determine the mode split among employees, whether the existing TDM measures are effective, and whether employees prefer different TDM measures. The Transportation Coordinator will administer the survey and communicate the results to the City.

In addition to obtaining quantitative data on the mode split, the survey will provide qualitative data regarding employee perceptions of the alternative transportation programs and perceptions of the obstacles to using an alternative transportation mode. The survey results will measure the relative effectiveness of individual program components and facilitate the design of possible program

enhancements. Along with collecting information on mode split, the survey can gather data on bike storage and bike share utilization.

Driveway Counts

Consistent with common traffic data collection principles, the project's trip generation will be measured through driveway counts at the site access points. The annual counts will be conducted for three weekdays during a week without a holiday to determine the daily project trips and trips during the AM and PM peak hours of commute traffic. The site Transportation Coordinator will work with an independent consultant to obtain traffic count data and document the results in a TDM monitoring report.

Annual Reports

The Transportation Coordinator will submit reports with the results of the surveys to the City of Santa Clara's Planning Division annually for the project's life. The annual report will detail the operation, utilization, and awareness of the TDM measures and quantify the site trip generation rates. If the report indicates that the project is failing to achieve the 24.2 percent VMT reduction, additional TDM measures will be implemented. Program enhancements will be developed based on the findings of the TDM monitoring report regarding the employee's awareness and usage of current TDM program elements. Additional TDM measures could include, but are not limited to, the following:

- On-site ride-matching services, and/or
- Transit subsidies

The individual preparing these reports for the City will coordinate with City staff on the City's reporting requirements. The City will determine whether the site has met its annual target.