



# HEXAGON TRANSPORTATION CONSULTANTS, INC.

## Memorandum

**Date:** April 14, 2025

**To:** Mr. Tyler Rogers, David J. Powers & Associates

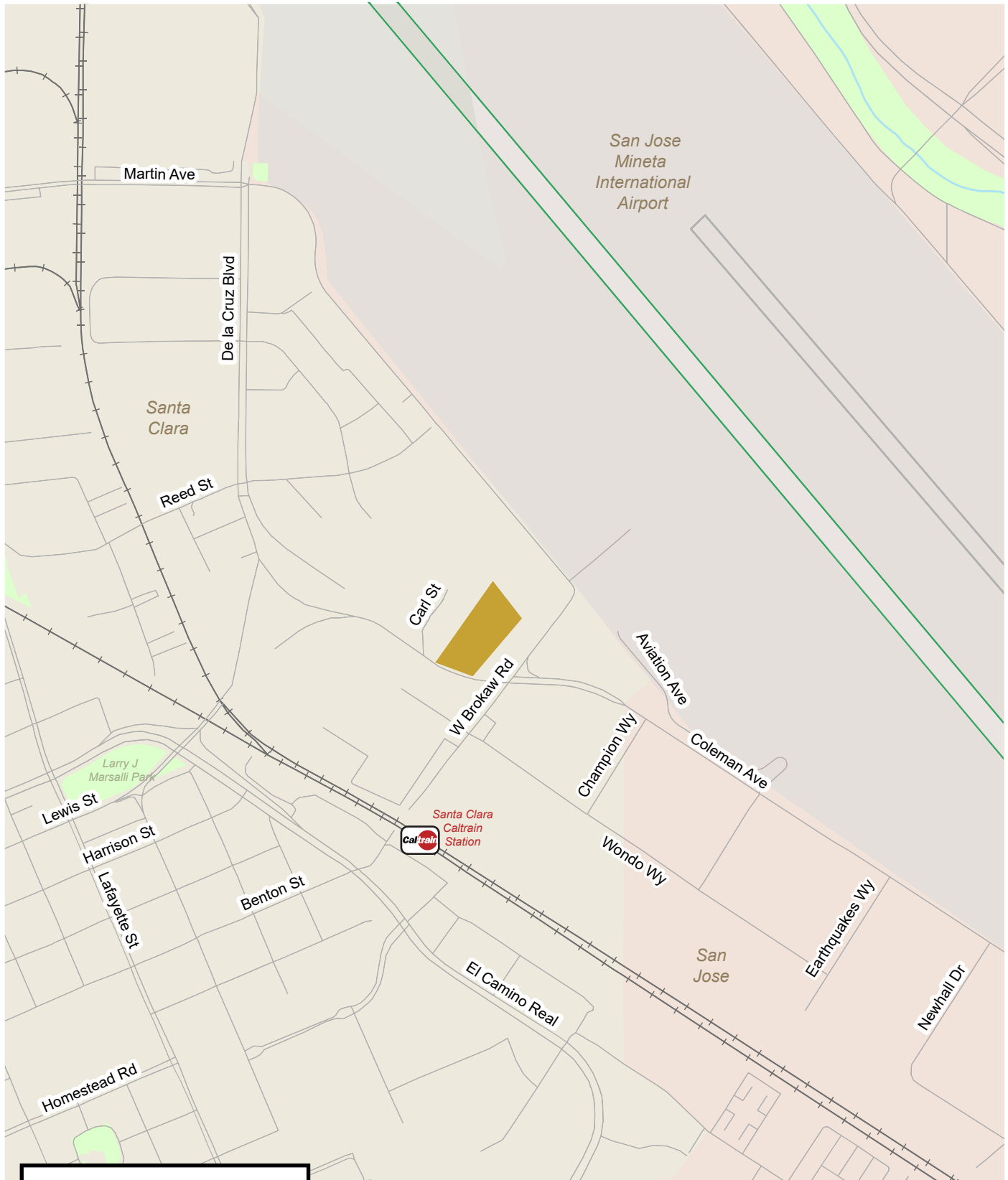
**From:** Trisha Dudala  
Katie Riutta

**Subject:** VMT and Site Access Analysis for the Proposed Residential Development at 1400 Coleman Avenue in Santa Clara, California

Hexagon Transportation Consultants, Inc. has completed a vehicle miles traveled (VMT) and site access analysis for the proposed residential development at 1400 Coleman Avenue in Santa Clara, California. The project site is located on the north side of Coleman Avenue between Brokaw Road and Carl Street (see Figure 1). The project would demolish the existing office and industrial buildings (totaling 22,190 square feet of office space and 11,418 square feet of industrial space) on the site and construct 119 for-sale townhomes with a total of 143 units (see Figure 2). Of the 119 for-sale townhomes, 24 townhomes would contain two units (for a total of 48 units) and 95 townhomes would be traditional single-family townhomes. Approximately 33.5 percent of the total units (48 units) would be below market rate (BMR) and affordable for low-income households. The project would also include a dog park and community gathering spaces. Vehicle access to the project site would be provided by one full-access driveway on Coleman Avenue. The project would provide a 1- or 2-car garage in each townhome and 39 surface parking spaces, for a total of 246 parking spaces. The project would provide secured bicycle parking within each townhome's garage and bike racks along the project frontage.

The property is within the Santa Clara Station Area Plan and has a General Plan Use designation of Regional Commercial and is zoned Light Industrial. The project is proposing a general plan amendment from Regional Commercial to High Density Residential (37-50 units per acre) and a rezone from ML-Light Industrial to High Density Residential R4 (37-60 units per acre).

New development projects are required to evaluate vehicle miles traveled (VMT) per the California Environmental Quality Act (CEQA) and per the City of Santa Clara VMT policy. In addition, the City requires that new development projects conduct a Local Transportation Analysis (LTA) to evaluate a project's effects on local roadways for projects that would generate more than 100 peak-hour trips. The project would generate fewer than 100 peak-hour trips. Therefore, the project is not required to conduct an LTA. However, a review of site access and on-site circulation is provided to determine the adequacy of the proposed site plan.



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



Figure 2  
Site Plan

## Project Trip Generation

Trip generation resulting from the development was estimated using the trip rates published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 11th Edition (2021)*. Trips that would be generated by the proposed development were estimated using the ITE trip rates for "Low-Rise Multifamily Housing" (Land Use 220) and "Single-Family Attached Housing" (Land Use 215). The "Low-Rise Multifamily Housing" ITE land use category includes residential developments that have two or three floors of living space and was used to estimate trips for the townhomes that include two units. The "Single-Family Attached Housing" ITE land use category includes duplexes and townhomes/rowhouses and was used to estimate trips for the traditional single-unit townhomes.

Based on the published trip rates, the proposed residential development is expected to generate 1,008 daily vehicle trips, including 65 AM peak hour trips and 78 PM peak hour trips (see Table 1). The existing buildings on the project site are occupied by office and industrial uses. Trips generated by the existing uses were estimated using the ITE trip rates for "General Office Building" (Land Use 710) and "General Light Industrial" (Land Use 110). After taking credit for existing uses on the project site, the proposed residential development is expected to generate 711 net new daily trips, including 23 net new AM peak hour trips and 39 net new PM peak hour trips.

**Table 1**  
**Project Trip Generation Estimates**

Land Use	Size	Daily		AM Peak Hour					PM Peak Hour				
		Rate	Trips	Rate	In %	In	Out	Total	Rate	In %	In	Out	Total
<b>Proposed Uses</b>													
Multifamily Townhomes <sup>1</sup>	48 units	6.74	324	0.40	24%	5	14	19	0.51	63%	15	9	24
Single-Family Townhomes <sup>2</sup>	95 units	7.20	684	0.48	31%	14	32	46	0.57	57%	31	23	54
<i>Total Proposed Trips</i>			<i>1,008</i>			<i>19</i>	<i>46</i>	<i>65</i>			<i>46</i>	<i>32</i>	<i>78</i>
<b>Existing Uses</b>													
Office <sup>3</sup>	22,190 ksf	10.84	(241)	1.52	88%	(30)	(4)	(34)	1.44	17%	(5)	(27)	(32)
Industrial <sup>4</sup>	11,418 ksf	4.87	(56)	0.74	88%	(7)	(1)	(8)	0.65	14%	(1)	(6)	(7)
<i>Total Existing Trips</i>			<i>(297)</i>			<i>(37)</i>	<i>(5)</i>	<i>(42)</i>			<i>(6)</i>	<i>(33)</i>	<i>(39)</i>
<b>Net Project Trips</b>			<b>711</b>			<b>(18)</b>	<b>41</b>	<b>23</b>			<b>40</b>	<b>(1)</b>	<b>39</b>

Notes:

Source: ITE Trip Generation Manual, 11th Edition, 2021.

1. Average trip rates expressed in trips per dwelling unit for Low-Rise Multifamily Housing (Land Use 220) are used for the 48 BMR units.

2. Average trip rates expressed in trips per dwelling unit for Single-Family Attached Housing (Land Use 215) are used.

3. Average trip rates expressed in trips per 1,000 square feet (ksf) for General Office Building (Land Use 710) are used.

4. Average trip rates expressed in trips per 1,000 square feet (ksf) for General Light Industrial (Land Use 110) are used.

## Vehicle Miles Traveled

The City of Santa Clara’s Transportation Analysis Policy establishes screening criteria, standards, and thresholds for new development projects. The policy outlines procedures for determining project impacts on VMT based on project description, characteristics, and/or location. VMT is the total miles of travel by personal motorized vehicles a project is expected to generate in a day. VMT measures the full distance of personal motorized vehicle trips with one end within the project.

If a project meets the screening criteria, it is then presumed that it would result in a less-than-significant VMT impact, and a VMT analysis is not required. For a project that does not screen out, the project’s VMT is compared to the appropriate thresholds of significance based on the project location and type of development. If the project is found to have a significant impact on VMT, mitigation measures must be identified to reduce the impact to a less-than-significant level. Per the State’s guidance and the City’s VMT Policy, the project qualifies as a transit supportive development and thus would not require a detailed VMT analysis. However, since the project is requesting a general plan amendment, a detailed VMT analysis was conducted.

The VMT analysis was conducted using the Santa Clara Countywide VMT Evaluation Tool – Version 2. According to the City of Santa Clara’s VMT impact thresholds, a residential project would have a significant VMT impact if the average VMT per resident would exceed 15 percent below the existing Countywide VMT per resident. Based on the Santa Clara County VMT Evaluation Tool, the County average for residential uses is 13.33 daily VMT per resident. Therefore, the project would have a significant impact on VMT if the project generated home-based work VMT per resident would exceed 11.33.

### 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 daily VMT per capita of 6.34, which is substantially less than the threshold of 11.33 for residential uses. Therefore, the project would have a less-than-significant impact on VMT.

**Table 2  
Project Generated VMT Assessment**

Project Type	Significance Criteria	Threshold <sup>1</sup>	Project Parcel VMT <sup>2</sup>
Residential	Project exceeds existing countywide home-based VMT per resident by 15%	11.33	6.34
<u>Notes:</u>			
<sup>1</sup> The threshold for project-generated VMT per resident is 15% below the Santa Clara County average.			
<sup>2</sup> VMT With Project per the Santa Clara County VMT Evaluation Tool.			

## Site Access and Circulation

Site access and on-site circulation were evaluated using commonly accepted transportation principles. This review is based on the site plan by City Ventures dated February 21, 2025 (see Figure 2).

### Vehicle Site Access

Vehicle site access was evaluated to determine the adequacy of the site driveway based on stopping sight distance and traffic volumes. Project-generated traffic would access the site via a full-access driveway on Coleman Avenue. According to the Santa Clara Zoning Code (Section 18.38.060.C), two-way driveways providing access to 25 or more residential parking spaces or garage spaces should have a minimum width of 26 feet and a maximum width of 30 feet. Based on the site plan, the driveway and main drive aisle would have a width of 26 feet. Therefore, the project would meet the requirement.

The project is estimated to generate 19 gross inbound trips and 46 gross outbound trips during the AM peak hour and 46 gross inbound trips and 32 gross outbound trips during the PM peak hour at the proposed driveway. Thus, one vehicle would enter every three to four minutes and exit every one to two minutes during the AM peak hour. During the PM peak hour, one vehicle would enter and one vehicle would exit the project site every one to two minutes. Coleman Avenue has three lanes in each direction and a two-way left-turn lane to help vehicles safely turn left from both directions. Vehicles exiting the project driveway and turning left onto eastbound Coleman Avenue would have the option of turning into the two-way left-turn lane to wait for a gap in eastbound traffic. Vehicles making a left turn into the project driveway would enter the center turn lane and wait for gaps in the westbound traffic without causing any delays to the through traffic on Coleman Avenue. Thus, the project driveway is not anticipated to have a noticeable effect on traffic operations on Coleman Avenue.

### Sight Distance

The proposed project driveway should be free and clear of any obstructions to optimize sight distance. Providing the appropriate sight distance reduces the likelihood of a collision at the driveway and provides drivers with the ability to locate sufficient gaps in traffic and exit the site. Coleman Avenue is relatively straight, and on-street parking is not permitted. According to the site plan, the project proposes to provide trees along the project frontage on Coleman Avenue. Street trees typically have a high canopy and are not expected to obstruct the view of drivers exiting the project driveway.

Sight distance generally should be provided in accordance with Caltrans stopping sight distance design standards. Sight distance requirements vary depending on the roadway speeds. The posted speed limit on Coleman Avenue is 40 miles per hour (mph). Therefore, the Caltrans stopping sight distance for a driveway along this street is 360 feet (based on a design speed of 45 mph). This means that a driver must be able to see 360 feet down Coleman Avenue to locate a sufficient gap to turn out of the driveway.

Hexagon conducted a sight distance check at the project site. Sight distance is expected to be adequate in both directions. However, there is a gap between the top of the hedge and bottom of the tree canopy along the frontage of the neighboring parcel to the east that allows just enough visibility to see oncoming vehicles. Hexagon recommends that hedges be maintained so that they do not exceed a height of 42 inches, which is assumed to be the distance between the pavement surface and the driver's eyes.

**Recommendation:** Existing landscaping should be trimmed regularly so that hedges do not exceed 42 inches to maintain visibility for vehicles exiting the site.

## On-Site Circulation

On-site circulation was reviewed in accordance with generally accepted traffic engineering standards. The project would have a full-access driveway on Coleman Avenue that leads to a main drive aisle with 90-degree and parallel surface parking spaces and connections to seven drive aisles that provide access to individual garages and additional surface parking spaces. Each parking garage would include single or tandem parking stalls. Based on the Santa Clara Zoning Code Table 3-5, the required width for two-way drive aisles with 90-degree parking is 24 feet. The width of the drive aisles is shown to be between 24 and 26 feet, which would meet the City's requirements.

Emergency response vehicles would be able to access the project site via the main drive aisle off Coleman Avenue. Emergency vehicles would be able to turn around to exit the project site via a three-point turn using the drive aisle in the northeast or southwest corners of the site. Garbage bins would be wheeled out for collection in front of each garage. Garbage trucks would be able to maneuver within each drive aisle to access the bins for collection. Delivery vehicles and rideshare/carpool vehicles would utilize the guest parking spaces along the main drive aisle. On-site vehicle circulation would be adequate.

## Parking

### Vehicle Parking

According to Section 18.38.030 of the Santa Clara Zoning Code, the project is not required to provide any parking, as it is located within ½ mile of the Santa Clara Transit Center. According to the site plan, the project would provide a 1- or 2-car garage in each townhome and 39 surface parking spaces, for a total of 246 parking spaces. According to the Santa Clara Zoning Code Table 3-5, 90-degree standard parking stalls should have a minimum width of 9 feet and minimum length of 18 feet, and parallel parking stalls should have a minimum width of 9 feet and a minimum length of 20 feet. The site plan does not show the measurements of the parking spaces within the garages.

**Recommendation:** Prior to final design, the dimensions of the parking spaces should meet the City's requirements.

### Bicycle Parking

According to the Santa Clara Zoning Code Table 3-4, residential uses should provide a minimum of one Class I long-term bicycle parking space per unit. The project would provide 143 secure bicycle parking spaces within the garages, with shared bike parking in the garages of the townhomes with two units. Therefore, the project would meet the City's requirement.

Table 3-4 of the Zoning Code also states that residential uses should provide a minimum of one Class II short-term bicycle parking space per 20 units. With a total of 143 units, the project should provide a minimum of 7 short-term bicycle parking spaces. The project would provide 8 short-term bicycle parking spaces within bike racks adjacent to the project driveway, which would meet the requirement.

## Pedestrian, Bicycle and Transit Analysis

Pedestrian facilities near the project site consist of sidewalks along the streets in the project vicinity that connect the project to the Santa Clara Transit Center and the nearby retail and office centers, and crosswalks with pedestrian signal heads located at the nearby signalized intersections on Coleman Avenue at Brokaw Road and Champions Way. The proposed project would replace the existing attached sidewalk with a new detached sidewalk along its frontage on Coleman Avenue. New landscaping and lighting would be provided along the sidewalk to enhance the pedestrian environment. The project would also construct pedestrian facilities throughout the project site to connect project residents to the sidewalk on Coleman Avenue and the common areas on site. Overall, the existing network of sidewalks and crosswalks provides pedestrians with safe routes to transit services and other points of interest in the project vicinity. The project would not remove any pedestrian facilities, nor would it conflict with any adopted plans or policies for new pedestrian facilities. Accordingly, the project would have no significant impact on pedestrian facilities.

Along the project frontage, the City's *De La Cruz Boulevard/Coleman Avenue Bikeway Planning Study* (January 2025) calls for a new Class IV two-way cycle track along the northern side of Coleman Avenue between Reed Street and Brokaw Road. There are currently no bicycle facilities along the project frontage. The project site plan shows a buffered bike lane along the project frontage. Based on initial communication with the City, a two-way cycle track can be installed along the project frontage without moving the curb line. The project would provide short-term and long-term bicycle parking facilities on the site. The project would not remove any bicycle facilities. Thus, the project would have no significant impact on bicycle facilities.

Existing transit services within the project vicinity are provided by Caltrain, Altamont Corridor Express (ACE), Amtrak, Capitol Corridor, and the Santa Clara Valley Transportation Authority (VTA), which all serve the Santa Clara Transit Center. The Santa Clara Transit Center is located 2,100 feet (approximately an 8-minute walk) from the project site. In addition, VTA Frequent Route 60 serves the project vicinity with the closest bus stop located on Coleman Avenue at Brokaw Road, 660 feet (approximately a 3-minute walk) from the project site. There are continuous pedestrian facilities connecting the project site and these transit stops. The project is expected to add some new transit riders. However, given the extensive services available, the new riders can be accommodated. The project would not produce a detrimental impact to local transit service. The project would therefore have no significant impact on transit service.

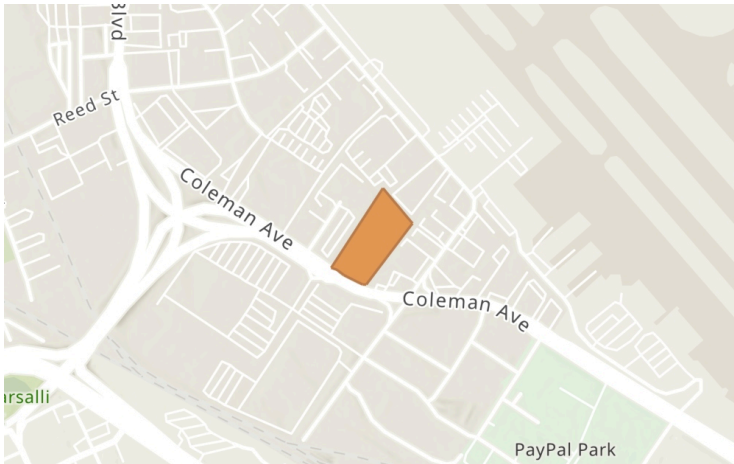
**Appendix A**  
**Santa Clara County**  
**VMT Evaluation Tool Report**

## Project Details

Timestamp of Analysis	March 03, 2025, 04:13:11 PM
Project Name	1400 Coleman Avenue Residential Project
Project Description	143 For-Sale Townhome Units

## Project Location Map

Jurisdiction:	<table border="1"> <tr> <th>APN</th> <th>TAZ</th> </tr> <tr> <td>23005021</td> <td>1243</td> </tr> </table>	APN	TAZ	23005021	1243
APN	TAZ				
23005021	1243				
Santa Clara					



## Analysis Details

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

## Project Land Use

### Residential:

Single Family DU:	95
Multifamily DU:	48
<b>Total DUs:</b>	<b>143</b>

### Non-Residential:

Office KSF:	
Local Serving Retail KSF:	
Industrial KSF:	

### Residential Affordability (percent of all units):

Extremely Low Income:	0 %
Very Low Income:	0 %
Low Income:	33 %

### Parking:

Motor Vehicle Parking:	246
Bicycle Parking:	172

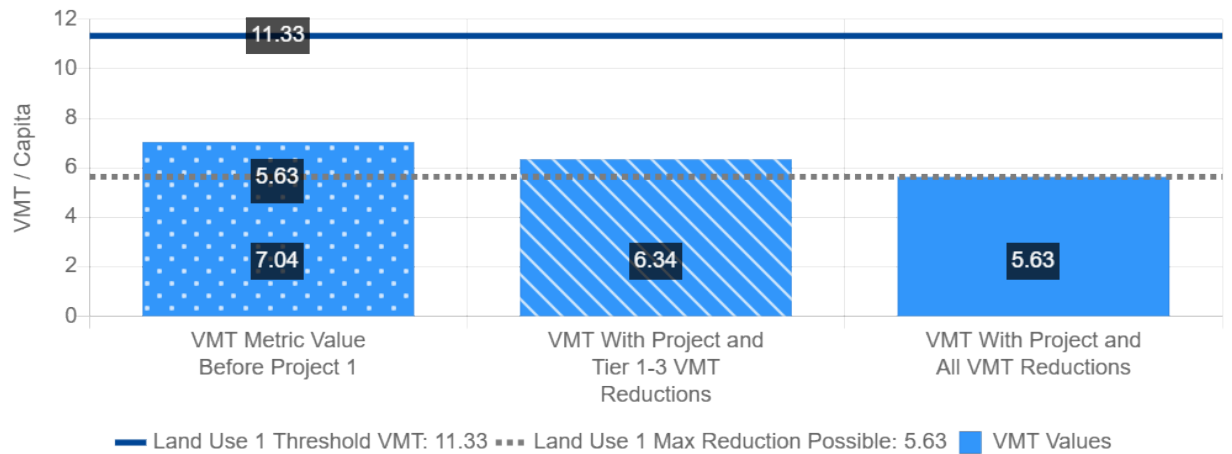
## Proximity to Transit Screening

Inside a transit priority area?	Yes (Pass)
---------------------------------	------------

## Residential Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 1:	Residential
VMT Metric 1:	Home-based VMT per Capita
VMT Baseline Description 1:	County Average
VMT Baseline Value 1:	13.33
VMT Threshold Description 1 / Threshold Value 1:	-15% / 11.33
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	7.04	6.34	5.63
Low VMT Screening Analysis	Yes (Pass)	Yes (Pass)	Yes (Pass)



## Tier 1 Project Characteristics

### PC01 Increase Residential Density

Existing Residential Density:	15.82
With Project Residential Density:	28.48

### PC03 Affordable Housing

Low Income:	33 %
-------------	------

## Tier 4 TDM Programs

### TP07 Subsidized Transit Program

Percent of Transit Subsidy:	100 %
-----------------------------	-------

### TP15 Behavioral Intervention

Percent of Eligible Individuals Participating:	100 %
--	-------