



November 8, 2021

Mr. David Liu
Leu, Liu and Associates a California General Partnership
1803 Virginia Road
San Marino, CA 91108

SUBJECT: VICTORVILLE RESIDENTIAL VEHICLE MILES TRAVELED (VMT) ANALYSIS

Dear Mr. David Liu:

The following VMT Analysis has been prepared for the proposed Victorville Residential development (**Project**), which is located on the southwest corner of Seneca Road and Mesa Linda Avenue in the City of Victorville.

PROJECT OVERVIEW

The Project is to consist of 210 single family detached residential dwelling units (DU).

BACKGROUND

Changes to California Environmental Quality Act (CEQA) Guidelines were adopted in December 2018, which require all lead agencies to adopt VMT as a replacement for automobile delay-based level of service (LOS) as the measure for identifying transportation impacts for land use projects. This statewide mandate went into effect July 1, 2020. To aid in this transition, the Governor's Office of Planning and Research (OPR) released a Technical Advisory on Evaluating Transportation Impacts in CEQA (December of 2018) (**Technical Advisory**). (2) Based on OPR's Technical Advisory, the City of Victorville adopted VMT impact screening criteria in June of 2020 (**City Guidelines**) (3), which documents the City's VMT analysis methodology and approved impact thresholds. The VMT analysis presented in this report has been developed based on the adopted City Guidelines.

PROJECT SCREENING

Consistent with City Guidelines, projects that meet certain screening thresholds based on their location and project type may be presumed to result in a less than significant transportation impact. The following screening criteria are described within the City Guidelines:

- Low VMT Area Screening
- Daily Trip Screening
- Land Use Type Screening

A land use project need only meet one of the above screening criteria to result in a less than significant impact.

LOW VMT AREA SCREENING

As noted in the Technical Advisory, “residential and office projects that locate in areas with low VMT and that incorporate similar features (density, mix of uses, and transit accessibility) will tend to exhibit similarly low VMT.” (1) It is our understanding that the City of Victorville utilizes the San Bernardino County Transportation Authority (SBCTA) VMT Screening Tool (**Screening Tool**). The Screening Tool allows users to input an assessor’s parcel number (APN) to determine if a project’s location meets one or more of the screening thresholds for land use projects. The Screening Tool uses the sub-regional San Bernardino Transportation Analysis Model (SBTAM) to measure VMT performance within individual traffic analysis zones (TAZ’s) within the region. The Project’s physical location, based on parcel number, is input into the Screening Tool to determine project generated VMT. The parcel containing the proposed Project was selected and the Screening Tool was run for Production/Attraction (PA) VMT per service population (SP) (i.e., population and employment) measure of VMT.

The City Staff Report¹ indicates that projects with VMT per SP less than the City’s future year General Plan buildout VMT per SP are considered to have a less than significant impact. SBCTA has published VMT per SP values for the City of Victorville. Based on the Screening Tool results (see Attachment A), the future year General Plan buildout VMT per SP is 25.04. The TAZ in which the Project resides, is estimated to generate 41.9 VMT per SP. Note the Project TAZ does not include any residential land uses as the Project is proposing. Therefore, the Project does not reside within a TAZ that generates VMT per SP below the City’s General Plan buildout VMT per SP threshold.

The Low VMT Area screening criteria is not met.

DAILY TRIP SCREENING

The City Guidelines indicate that projects generating fewer than 1,285 daily vehicle trips may be presumed to have a less than significant impact. Trips generated by the Project’s proposed land uses have been estimated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, 2021. (1) The proposed Project is anticipated to generate 1,982 vehicle trip-ends per day (see Attachment B). Therefore, the Project exceeds the 1,285 vehicle trips per day threshold.

The Daily Trip screening criteria is not met.

LAND USE SCREENING

The City Guidelines identify that residential land uses less than 136 dwelling units or other local serving essential services (e.g., local parks, day care centers, public schools, affordable housing, etc.) are

¹ City Guidelines; Page 3

presumed to have a less than significant impact absent substantial evidence to the contrary. The Project, as designed includes dwelling units above 136.

The Land Use screening criteria is not met.

As none of the aforementioned screening criteria has been met. A project level VMT analysis shall be prepared.

PROJECT GENERATED VMT

City Guidelines identifies San Bernardino Transportation Analysis Model (SBTAM) as the appropriate tool for conducting VMT analysis for land use projects in City of Victorville. SBTAM is a useful tool to estimate VMT as it considers interaction between different land uses based on socio-economic data such as population, households and employment.

The initial step to prepare a project-level VMT analysis is to convert the Project’s residential land use information into socio-economic data (SED) (i.e., households and population) to be entered into the travel demand model. Adjustments in SED were made to an isolated TAZ to reflect the Project’s proposed residential land use. Table 1 summarizes the residential density factor for the Project based on information contained in the City of Victorville Housing Element.² The population density per household was calculated utilizing existing 2016 population data, future growth predictions of 2045 and interpolated to 2021 values.

TABLE 1: SED DENSITY FACTORS ESTIMATES

	Project
Households	210
Density Factor	3.03 persons per household
Population	637

Adjustments to SED to represent the Project were made for the baseline model. Project generated total VMT was then calculated for the baseline conditions. Project VMT is then normalized by dividing by the Project’s service population, which is the summation of population and employment for a TAZ or group of TAZ’s. Project generated VMT was calculated using the production/attraction (PA) trip matrices. The VMT value was then normalized by dividing by the Project’s service population (i.e., number of people). Project generated VMT was calculated for both the base year model (2016) and cumulative year model (2040) and linear interpolation was used to determine the baseline (2021) project generated VMT.

Table 2 presents the key inputs for the calculation of project generated VMT per service population. Resulting in a baseline Project generated VMT per SP of 20.46. Additionally, the Project’s TAZ in existing conditions does not include any existing population or households. Because of the absence of residential

² Housing factors were derived from interpolating 2022 housing rate from the provided 2016 and 2045 data. Victorville Housing Element 2021-2029 Draft; Page 2-1 City of Victorville Housing Element Update Draft; Page 2-1

land uses included the Project TAZ under base model year conditions, a reasonableness check with surrounding existing TAZs that contained similar characteristics (i.e., population and households) was performed. Other TAZs surrounding the Project reported similar levels of VMT per SP, consistent with results calculated for the Project.

TABLE 2: PROJECT VMT PER SERVICE POPULATION

	Base Year (2016)	Cumulative Year (2040)	Baseline (2021)
Project generated VMT	13,148	12,594	13,033
Service Population	637	637	637
VMT per Service Population	20.64	19.77	20.46

Table 3 illustrates a comparison between the Project’s Baseline VMT per SP to the City’s adopted impact threshold of better than City’ General Plan build out VMT per SP³. The Project’s baseline VMT per Service Population is 18.29% below the County’s Baseline VMT per SP. The VMT impact is less than significant.

TABLE 3: PROJECT GENERATED VMT PER SP COMPARISON

	Baseline
City GP Buildout VMT per SP	25.04
Project VMT per SP	20.46
Percent Change	-18.29%
Potentially Significant?	No

CONCLUSION

The Project was not found to meet any of the City’s adopted screening criteria and a project generated VMT analysis was performed. Results from the VMT analysis finds that the Project is less than significant VMT impact for project generated VMT per SP as compared to the City’s adopted impact threshold (i.e., better than City’s General Plan buildout VMT per SP).

³ City Guidelines; Page 4

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If you have any questions, please contact me directly at 949-660-1994.

Respectfully submitted,

URBAN CROSSROADS, INC.

A handwritten signature in black ink, appearing to read 'Alex So', with a long horizontal flourish extending to the right.

Alex So
Senior Analyst

REFERENCES

1. **Office of Planning and Research.** *Technical Advisory on Evaluating Transportation Impacts in CEQA.* State of California : s.n., December 2018.
2. **City of Victorville.** *City of Victorville Vehicle Miles Traveled (VMT) Guidelines.* June 2020.
3. **Institute of Transportation Engineers.** *Trip Generation Manual.* 11th Edition. 2021.

ATTACHMENT A
SBCTA SCREENING TOOL RESULTS

SBCTA VMT Screening Tool Powered by Fehr & Peers User's Guide

Mesa Linda Ave & Seneca Rd, V X

Show search results for Mesa Linda A...

Complete #1 - 4, Then Click 'Run'

VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*

PA VMT Per Service Population

#3. Select the Baseline Year. The years available for analysis are from 2016 to 2040.*

2021

#4. Select the Threshold (% reduction from baseline year). Note each jurisdiction may have adopted a different metric by which they measure VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*

Below City Future Buildout (0%)

[Help](#) **Run**

Project Area VMT (2 of 2)

Assessor Parcel Number (APN)	310355105
Traffic Analysis Zone (TAZ)	53913102
TAZ VMT	41.9
Jurisdiction VMT	25
% Difference	67.19%
VMT Metric	PA VMT Per Service Population
Threshold	25

[Zoom to](#) ...

Map Layers

- Project Area VMT
- Screening Results
- Low VMT Generating TAZs
- Parcels
- Jurisdiction Boundaries
- TAZ
- Transit Priority Area

City of Victorville, Bureau of Land Management,

ATTACHMENT B
PROJECT TRIP GENERATION SUMMARY

TABLE 1: TRIP GENERATION SUMMARY

Land Use	Units ²	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Trip Generation Rates¹									
Single Family Detached Residential	DU	210	0.18	0.52	0.70	0.59	0.35	0.94	9.43

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).

² DU = Dwelling Units

Land Use	Quantity Units ¹	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Trip Generation Summary								
Victorville Residential	210 DU	38	109	147	124	74	197	1,982

¹ DU = Dwelling Units