

January 22, 2026



TJW ENGINEERING, INC.
TRAFFIC ENGINEERING &
TRANSPORTATION PLANNING
CONSULTANTS

Mr. Matthew Esquivel
WARMINGTON RESIDENTIAL
3090 Pullman Street
Costa Mesa, CA 92626

**SUBJECT: Arrow Highway Trip Generation and VMT Screening
City of Upland, California**

Dear Mr. Esquivel,

TJW Engineering, Inc. (TJW) is pleased to submit this Trip Generation Analysis and Vehicle Miles Traveled (VMT) Screening for the proposed project located along West Arrow Highway west of North San Antonio Avenue in the City of Upland, California. The proposed project is for the construction of 124 residential units. The purpose of this memorandum is to summarize the project Trip Generation Analysis and VMT Screening.

Proposed Project

The site for the proposed project is located along West Arrow Highway west of North San Antonio Avenue in the City of Upland, California. The proposed project is for the construction of 124 residential units. A site plan is attached for reference.

Site access will be provided via a proposed full-access roadway on West Arrow Highway.

Trip Generation Analysis

The trip generation analysis for the proposed project was developed based on the *City of Upland Traffic Impact Analysis Guidelines (City Guidelines)* (July 2020). The *City Guidelines* provide thresholds to determine whether or not a land use project requires a level of service, or LOS, analysis. Per *City Guidelines*, an LOS analysis is required when either AM or PM peak hour trip generation exceeds 100 vehicle trips or when the project will add 51 or more AM or PM peak hour trips to any intersection.

Per the *City Guidelines*, trip generation rates are to be obtained from the *Institute of Transportation Engineers Trip Generation Manual (ITE Manual)* (11th Edition, 2021). Trip generation volumes are based on the land uses of the proposed new buildings. The proposed project fits the *ITE Manual's* description of Single-Family Attached Housing. As shown in **Table 1** below, based on the ITE rates for Single-Family Attached Housing, the proposed project is expected to generate a net total of 893 daily trips which includes 60 AM peak hour trips and 71 PM peak hour trips.

Table 1
 Project Trip Generation

Proposed Land Use ¹	ITE Code	Qty	Unit ²	Daily		AM Peak Hour					PM Peak Hour				
				Rate	Volume	Rate	In:Out Split	Volume			Rate	In:Out Split	Volume		
								In	Out	Total			In	Out	Total
Single-Family Attached Housing	215	124	DU	7.2	893	0.48	25:75	15	45	60	0.57	59:41	42	29	71

1: Trip generation rates are from the ITE Trip Generation Manual (11th Edition, 2021).

2: DU = Dwelling Units.

The proposed project does not meet the *City Guidelines* thresholds requiring an LOS analysis as:

- 1) The project will generate less than 100 vehicle trips during either AM or PM peak hour.
- 2) The project will generate less than 51 inbound and less than 51 outbound trips for either AM or PM peak hour. As the distribution of project trips generated is 45% in from and out toward the eastward direction on Arrow highway and 55% in from and out toward the westward direction on Arrow Highway, any intersection with Arrow Highway in either direction of the project will not receive more than 51 trips each for either AM or PM peak hour. Therefore, the project will not contribute 51 or more trips to any intersection for either AM or PM peak hour. A map of the trip distribution is attached.

Vehicle Miles Traveled (VMT) Screening

Senate Bill (SB) 743 was adopted in 2013 requiring the Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within the California Environmental Quality Act (CEQA). For land use projects, OPR has identified Vehicle Miles Traveled (VMT) as the new metric for transportation analysis under CEQA. The regulatory changes to the CEQA guidelines that implement SB 743 were approved on December 28th, 2018, with an implementation date of July 1st, 2020, as the new metric.

The *City Guidelines* provide screening criteria and requirements for VMT assessment of land use projects. Screening Step 2: Low VMT Area indicates that a residential project located within a low VMT-generating area may be presumed to have a less than significant impact. The project location was entered into the San Bernardino County Transportation Authority (SBCTA) online VMT Screening Tool which determined that the project is located within a low VMT-generating area.

Summary

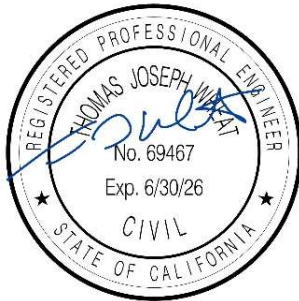
This memorandum provides an overview of the trip generation analysis for the proposed project. Based on the *City Guidelines*, the proposed project may be exempt from an LOS analysis as it will generate less than 100 peak hour vehicle trips and will contribute less than 51 peak hour vehicle trips to any single intersection. In addition, the project can be assumed to have a less than significant impact on VMT and screens from VMT analysis as it is located within a low VMT-generating area.

Please contact us at (949) 878-3509 if you have any questions regarding this analysis.

Sincerely,



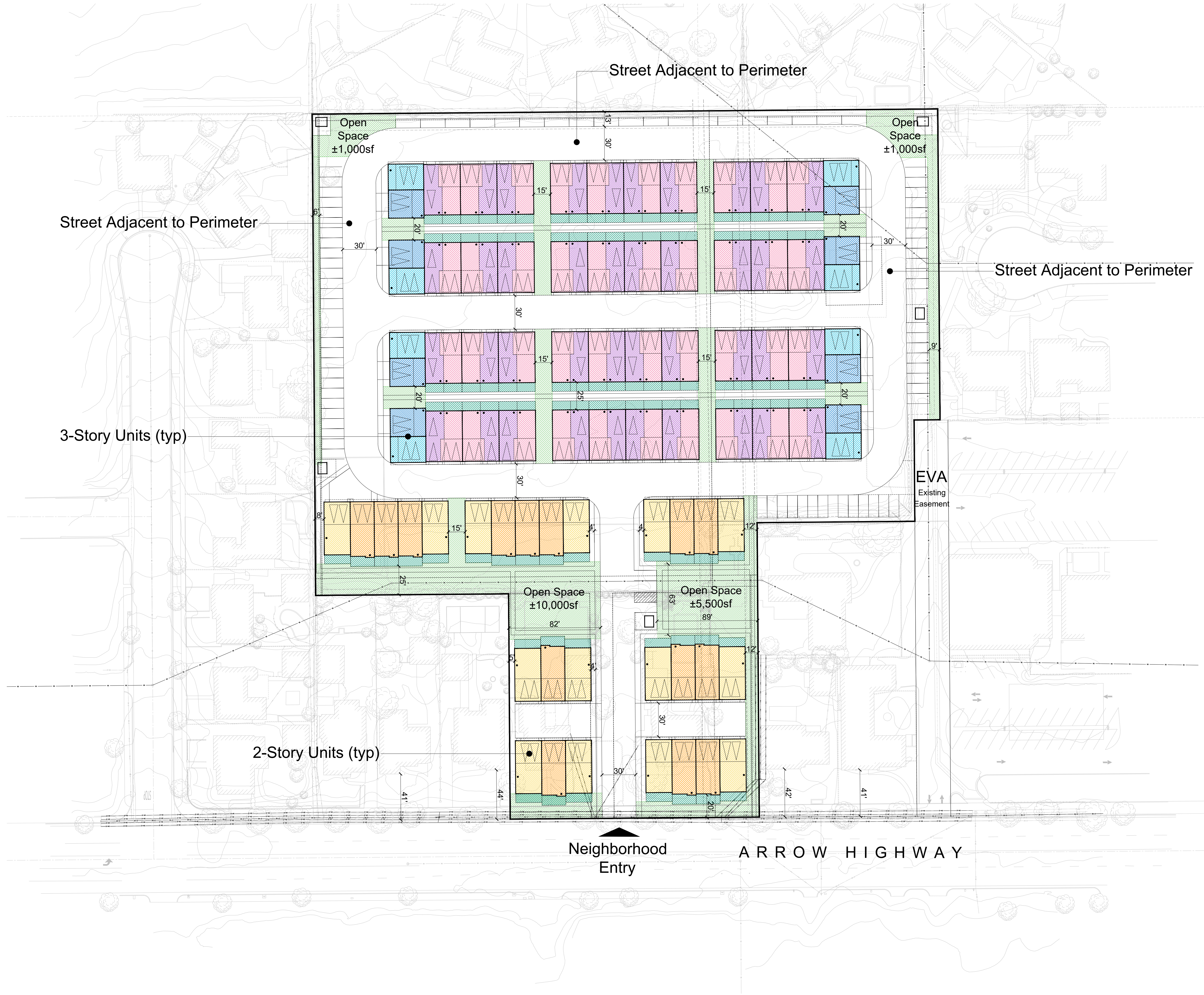
Thomas Wheat, PE, TE
President
Registered Civil Engineer #69467
Registered Traffic Engineer #2565



David Chew, PTP
Transportation Planner



Travis Yokota
Assistant Transportation Planner



SITE INFORMATION
City: Upland
County: San Bernardino County
Zoning:

RM-20 DEVELOPMENT STANDARDS
Density: 20 du/ac
Max Building Height: 40'
Front Setback 20'
Side Setback: 5'
Rear Setback: 15'
Multi-Family Bldg Sep: 15'
Private Outdoor Living Space: 100sf/unit (min 8' dim)
Common Outdoor Living Space: 250 sf/unit (25' clear on any side)
Parking Required per City Code:
1 bd: 1 sp/unit (covered)
2bd: 2 sp/unit (covered)
3bd+: 2.5 sp/unit (2 covered)
Guest parking 100+ units: 1 per 6 units

SITE SUMMARY
Site Area: ±6.1 ac

Units:
3-Story Units
8 units - Plan 1 (1459sf - 3bd/2.5ba, sxs)
8 units - Plan 2 (1476sf - 3bd/2.5ba, sxs)
40 units - Plan 3 (1440sf - 3bd/3ba, tandem)
40 units - Plan 4 (1700sf - 4bd/4ba, sxs)
2-Story Units
14 units - Plan 5 (1461sf - 3bd/2.5ba, sxs)
14 units - Plan 6 (1550sf - 3bd+loft (Opt bed4)/2.5ba, sxs)
124 units - Total

Density: ±20.3 du/ac

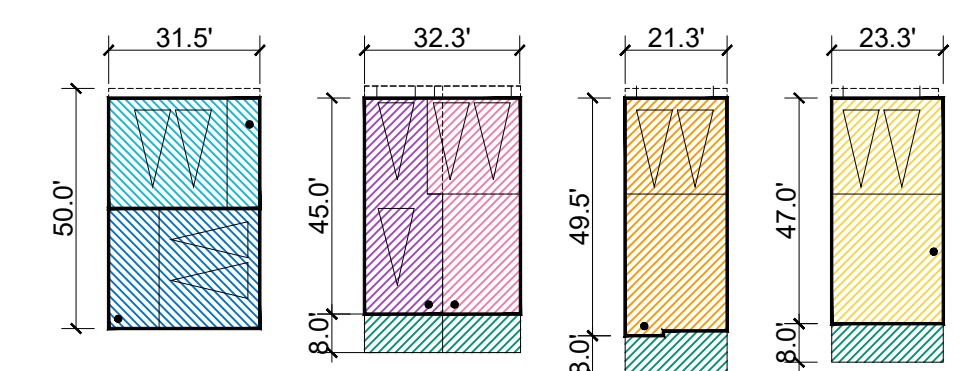
Parking Required: 2.67 sp/unit

Parking Provided:
248 spaces - Garages
83 spaces - Open
331 spaces - Total (±2.67 sp/unit)

Open Space Required: 250sf/unit (min 25' dim?)

Usable Open Space Provided*: ±17,500sf (±140sf/unit)
*min 25' dim

Additional Open Space Provided*: ±17,500sf (±140sf/unit)
*no min size or dimension





Legend:

-  Project Site
-  Study Intersection Location
- (XX%) Percent Trip Distribution



Exhibit: Proposed Project Trip Distribution

Arrow Highway Traffic Impact Analysis

sbcta

San Bernardino County

SBCTA VMT Screening Tool

Powered by Fehr & Peers

User's Guide

Find address or place

+

-

Home

Refresh

Complete #1 - 4, Then Click 'Run'

Input

Output

Project Area VMT

The result is drawn on the map.

...

×

Screening Results

The result is drawn on the map.

...

×

Low VMT Generating TAZs

The result is drawn on the map.

...

×

Map Layers

Project Area VMT

Screening Results

Low VMT Generating TAZs

Parcels

Jurisdiction Boundaries

TAZ

Transit Priority Area

300ft

-117.673 34.100 Degrees

Esri Community Maps Contributors, County of Los Angeles, County of San Bernardino, California

(3 of 3)

Completely within a TPA?

Yes (Pass)

Within a low VMT generating TAZ?

Yes (Pass)

Note

Screening results are based on location of parcel centroids. If results are desired considering the full parcel, please refer to the associated map layers to visually review parcel and TAZ boundary relationship.

Zoom to

...

Project Area VMT

Screening Results

Low VMT Generating TAZs

Parcels

San Bernardino County Line

Jurisdiction Boundaries

TAZ

Transit Priority Area

Options

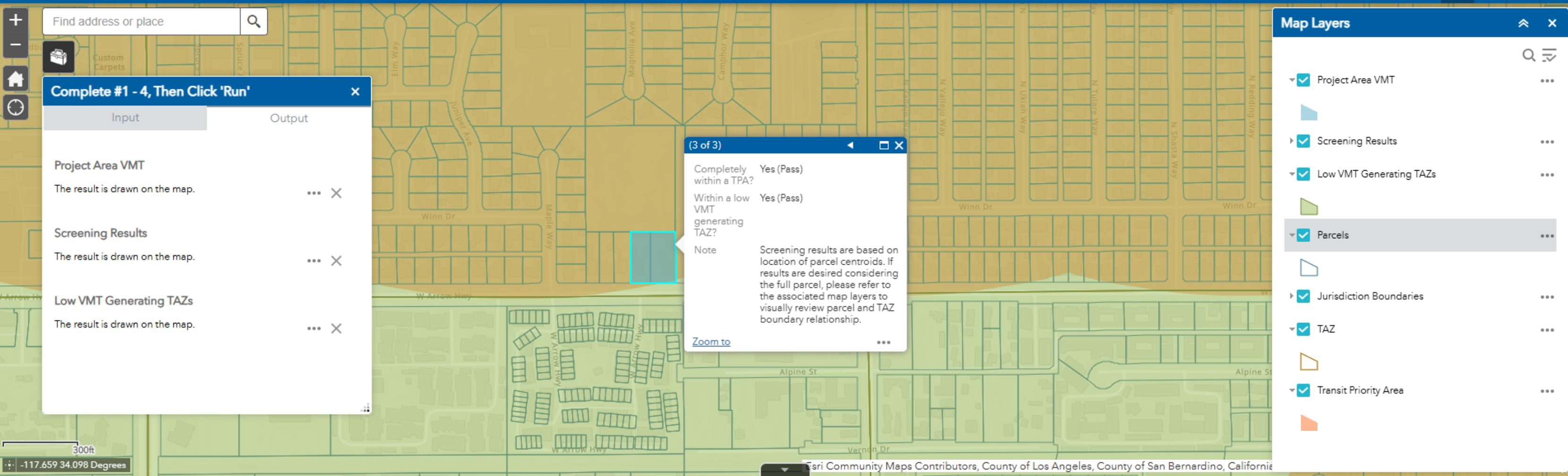
Filter by map extent

Zoom to

Clear selection

Refresh

OBJECTID	Assessor Parcel Number (APN)	Traffic Analysis Zone (TAZ)	Community Region	Inside a Transit Priority Area (TPA)	TAZ VMT	Jurisdiction VMT	% Difference	VMT Metric	Threshold	Community Regions have different thresholds (1=Yes, 0=No)	Note	Shape_Length	Shape_Area
1	100718102	53,636,101.00	Upland	Yes	10.40	13.20	-21.5%	PA VMT Per Population	11.20	0	Screening results are based on location of parcel centroids. If results are desired considering the full parcel, please refer to the associated map layers to visually review parcel and TAZ boundary relationship.	486.12	3,292.89
2	100718101	53,636,101.00	Upland	Yes	10.40	13.20	-21.5%	PA VMT Per Population	11.20	0	Screening results are based on location of parcel centroids. If results are desired considering the full parcel, please refer to the associated map layers to visually review parcel and TAZ boundary relationship.	566.15	19,995.57
3	104632143	53,636,101.00	Upland	Yes	10.40	13.20	-21.5%	PA VMT Per Population	11.20	0	Screening results are based on location of parcel centroids. If results are desired considering the full parcel, please refer to the associated map layers to visually review parcel and TAZ boundary relationship.	390.56	7,730.49



OBJECTID	Assessor Parcel Number (APN)	Traffic Analysis Zone (TAZ)	Community Region	Inside a Transit Priority Area (TPA)	TAZ VMT	Jurisdiction VMT	% Difference	VMT Metric	Threshold	Community Regions have different thresholds (1=Yes, 0=No)	Note	Shape_Length	Shape_Area
1	100718103	53,636,101.00	Upland	Yes	10.40	13.20	-21.5%	PA VMT Per Population	11.20	0	Screening results are based on location of parcel centroids. If results are desired considering the full parcel, please refer to the associated map layers to visually review parcel and TAZ boundary relationship.	222.15	2,713.06
2	100718104	53,636,101.00	Upland	Yes	10.40	13.20	-21.5%	PA VMT Per Population	11.20	0	Screening results are based on location of parcel centroids. If results are desired considering the full parcel, please refer to the associated map layers to visually review parcel and TAZ boundary relationship.	205.42	2,122.52