

DATE: October 23, 2023
TO: Kaitlyn Dodson-Hamilton, Tom Dodson & Associates
FROM: Alex So, Urban Crossroads, Inc.
JOB NO: 14152-05 VMT

ROUTE 66 TRUCK PARKING AND CARGO TERMINAL (PROJ-2021-0066) VEHICLE MILES TRAVELED (VMT) SCREENING EVALUATION

Urban Crossroads, Inc. is pleased to provide the following Vehicle Miles Traveled (VMT) Screening Evaluation for the Route 66 Truck Parking and Cargo Terminal (**Project**) (APN:0262-021-13), which is located east of Cajon Blvd. and west of the railway tracks. The northernmost corner of the site is located just south of where Cajon Blvd. and the railroad intersect unincorporated County of San Bernardino.

PROJECT OVERVIEW

The proposed Project consists of a 28,680 square foot truck terminal warehouse with 32 loading dock doors.

A preliminary site plan is shown Attachment A.

BACKGROUND

The California Environmental Quality Act (CEQA) requires all lead agencies to adopt VMT as the measure for identifying transportation impacts for land use projects. To comply with CEQA, the County of San Bernardino developed and adopted their own adopted their own San Bernardino County Transportation Impact Study Guidelines (**County Guidelines**) (1) which documents the County's VMT analysis methodology and approved impact thresholds. This VMT screening evaluation has been developed based on the adopted County Guidelines.

VMT SCREENING

Consistent with the screening thresholds identified in the County Guidelines, the San Bernardino County Transportation Authority (SBCTA) VMT Screening Tool (**Screening Tool**) was used to aid in the VMT screening process. The County Guidelines state that a project may have a less than significant impact and screen out of requiring a project level VMT analysis if it meets at least one of the County's VMT screening criteria. The County's adopted VMT screening criteria are as follows:

- Local Serving Project Screening
- Project's Generating Less than 110 Daily Vehicle Trips
- Transit Priority Area (TPA) Screening
- Low VMT Area Screening

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

LOCAL SERVING PROJECT SCREENING

County Guidelines exempt projects that serve the local community from VMT assessments. These projects typically include retail spaces under 50,000 square feet and other essential local services, such as local parks, day care centers, public schools, medical/dental office buildings, and more.

The Project does not intend to develop any locally serving uses.

The Project Type screening criteria is not met.

PROJECTS GENERATING LESS THAN 110 DAILY VEHICLE TRIPS

County Guidelines state small projects generating less than 110 daily vehicles trips are presumed to have a less than significant impact on VMT.

TRIP GENERATION

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development.

To determine the traffic characteristics of the proposed project, trip generation rates were developed using empirical data gathered from existing facilities with similar operations. The trip generation statistics found in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021) for Truck Terminal (ITE Land Use Code 30) land use are based on limited data surveys conducted 20-30 years ago in locations outside of California. Additionally, ITE lacks a truck mix for ITE Land Use Code 30.

To establish a rate that closely aligns with the expected operations of the Project, data collected from three local sites, surveyed over two days, was used to derive an average trip generation rate:

- 700 Eckhoff Street, Orange, California: November 10 & 12, 2020
- 2550 E. 28th Street, Vernon, California: November 24 & 25, 2020
- 20388 Harvill Avenue, Perris, California: November 30 & December 1, 2021

TRIP GENERATION RATE DEVELOPMENT

Traffic counts were collected at the driveways for 700 Eckhoff Street in Orange, California on November 10, and 12, 2020. A summary of the count data collected over the 2 days is provided in Attachment B. Table B-1 in Attachment B provides the total trip generation for the site for each day and also shows the average 2-day trip generation. This location has 95 dock doors.

Similarly, traffic counts were collected at a second location at 2550 E. 28th Street in Vernon, California on November 24, and 25, 2020. A summary of the count data collected over the 2 days is provided in Attachment B. Table B-2 in Attachment B provides the total trip generation for the site for each day and also shows the average 2-day trip generation. This location has 80 dock doors.

Lastly, traffic counts were recently collected at a third location at 20388 Harvill Avenue in Perris, California on November 30, and December 1, 2021. A summary of the count data collected over 2 days is provided in Attachment B. Table B-3 in Attachment B provides the total trip generation for the site for each day and also shows the average 2-day trip generation. This location has 154 dock doors.

The number of dock doors has been utilized as the independent variable in calculating the trip generation rates as opposed to square footage since the proposed building is not intended to be used for the storage of materials. The trip generation for a truck terminal warehouse could be better correlated to the number of dock doors due to the truck activity associated with the transfer of goods.

Table B-4 in Attachment B presents the trip generation rates calculated for the proposed truck terminal land use based on an average of data collected at the 3 sites discussed above. The data collected at the 3 sites indicates most of the truck activity occurs outside of the typical morning and evening peak hours (7-9 AM and 4-6 PM). The average 2-day trip generation for each site was then divided by the number of applicable dock doors to develop the trip generation rates for each site and then averaged between the 3 sites. The resulting average trip generation rate for the 3 sites is shown on Table 1

TABLE 1: TRIP GENERATION RATES

Land Use	Units ¹	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Actual Vehicles:								
Truck Terminal Warehouse ²	DD							
Passenger Cars:		0.110	0.055	0.165	0.048	0.036	0.084	1.673
2-axle Trucks:		0.002	0.006	0.008	0.005	0.000	0.005	0.147
3-axle Trucks:		0.006	0.010	0.016	0.041	0.013	0.053	0.447
4+-axle Trucks:		0.017	0.033	0.051	0.033	0.019	0.052	0.966
Passenger Car Equivalent (PCE):								
Truck Terminal Warehouse ²	DD							
Passenger Cars:		0.110	0.055	0.165	0.048	0.036	0.084	1.673
2-axle Trucks:		0.003	0.009	0.012	0.007	0.000	0.007	0.221
3-axle Trucks:		0.012	0.020	0.032	0.081	0.025	0.106	0.894
4+-axle Trucks:		0.052	0.100	0.152	0.100	0.056	0.156	2.899

¹ DD = Dock Doors

² Trip generation rates calculated based on average of 2-day trip generation data collected at 3 existing facilities.

PROPOSED PROJECT TRIP GENERATION

Based on the trip generation rates shown in Table 1, the Project trip generation has been calculated and is shown in Table 2. As shown in Table 2, the proposed Project is anticipated to generate 106 two-way daily trips.

TABLE 2: PROJECT TRIP GENERATION SUMMARY

Land Use	Quantity Units ¹	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Actual Vehicles:								
Truck Terminal Warehouse	32 DD							
Passenger Cars:		4	2	6	2	1	3	54
2-axle Trucks:		0	0	0	0	0	0	6
3-axle Trucks:		0	0	0	1	0	1	14
4+-axle Trucks:		1	1	2	1	1	2	32
Total Trucks:		1	1	2	2	1	3	52
Total Trips (Actual Vehicles)²		5	3	8	4	2	6	106

¹ DD = Dock Doors

² Total Trips = Passenger Cars + Truck Trips.

The proposed Project is estimated to generate 106 daily vehicle trips, which is below the County's 110 daily trips screening threshold.

Projects Generating Less Than 110 Daily Vehicle Trips Screening criteria is met.

TPA SCREENING

County Guidelines state that projects located within a Transit Priority Area (TPA) (i.e., within ½ mile of an existing “major transit stop”¹ or an existing stop along a “high-quality transit corridor”²) may be presumed to have a less than significant impact absent substantial evidence to the contrary. However, the presumption may not be appropriate if a project:

- Has a Floor Area Ratio (FAR) of less than 0.75;
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

¹ Pub. Resources Code, § 21064.3 (“Major transit stop” means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.”).

² Pub. Resources Code, § 21155 (“For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.”).

Based on the Screening Tool results presented in Attachment C, the Project site is not located within ½ mile of an existing major transit stop, or along a high-quality transit corridor.

TPA Screening criteria not met.

LOW VMT AREA SCREENING

As noted in the County Guidelines, “development in efficient areas of the County will reduce VMT per person/employee and is beneficial to the region”³ County Guidelines state that projects with VMT per person/employee lower than 4% below the existing VMT per person for the unincorporated County are considered to have a less than significant VMT impact.

The Screening Tool enables users to input an assessor's parcel number (APN) to assess if a project's location meets one or more of the screening thresholds for land use projects. It employs the sub-regional San Bernardino Transportation Analysis Model (SBTAM) to evaluate VMT performance within individual traffic analysis zones (TAZs) in the region. The Project's physical location is input into the Screening Tool to compare the VMT in the project-located TAZ with the jurisdictional average. The parcel containing the proposed Project and the Screening Tool was ran for the VMT per worker (employee) metric. According to the Screening Tool results (see Attachment C), the Project's TAZ is not located in a low VMT area.

Low VMT Area Screening criteria is not met.

CONCLUSION

- The Project was evaluated against screening criteria as outlined in the County Guidelines.
- The Project was found to meet the Projects Generating Less Than 110 daily trips criteria.
- The Project is presumed to have a less than significant VMT impact.

If you have any questions, please contact me directly at aso@urbanxroads.com.

³ County Guidelines; Page 19

REFERENCES

1. **San Bernardino County.** *Transportation Impact Study Guidelines.* July 2019.

ATTACHMENT A
PRELIMINARY SITE PLAN



ATTACHMENT B
EXISTING DRIVEWAY COUNTS

TABLE B-1: 700 ECKHOFF STREET, ORANGE, CA TRIP GENERATION

Land Use	700 Eckhoff Street ²						Daily
	AM Peak Hour			PM Peak Hour			
	In	Out	Total	In	Out	Total	
Day 1: November 10, 2020							
Passenger Cars:	9	7	16	6	4	10	212
2-axle Trucks:	0	0	0	1	0	1	15
3-axle Trucks:	1	2	3	6	3	9	50
4+-axle Trucks:	1	4	5	3	2	5	92
Total Truck Trips:	2	6	8	10	5	15	157
Total Trips¹	11	13	24	16	9	25	369
Day 2: November 12, 2020							
Passenger Cars:	13	10	23	8	5	13	189
2-axle Trucks:	0	1	1	0	0	0	18
3-axle Trucks:	0	0	0	4	0	4	49
4+-axle Trucks:	1	1	2	2	2	4	80
Total Truck Trips:	1	2	3	6	2	8	147
Total Trips¹	14	12	26	14	7	21	336
2-Day Average Trip							
Passenger Cars:	11	9	20	7	5	12	201
2-axle Trucks:	0	1	1	1	0	1	17
3-axle Trucks:	1	1	2	5	2	7	50
4+-axle Trucks:	1	3	4	3	2	5	86
Total Truck Trips:	2	4	6	8	4	12	152
Total Trips¹	13	13	25	15	8	23	353

* Note: data collected on November 10 and 12, 2020.

¹ Total Trips = Passenger Cars + Truck Trips.

² Trip generation represents the sum of all driveways, by day.

TABLE B-2: TRIP GENERATION 2550 E. 28TH STREET, VERNON, CA TRIP GENERATION

Land Use	2550 E. 28th Street ²						Daily
	AM Peak Hour			PM Peak Hour			
	In	Out	Total	In	Out	Total	
Day 1: November 24, 2020							
Passenger Cars:	7	4	11	4	1	5	145
2-axle Trucks:	0	0	0	1	0	1	15
3-axle Trucks:	1	2	3	6	3	9	50
4+-axle Trucks:	1	4	5	3	2	5	92
Total Truck Trips:	2	6	8	10	5	15	157
Total Trips ¹	9	10	19	14	6	20	302
Day 2: November 25, 2020							
Passenger Cars:	9	3	12	5	3	8	115
2-axle Trucks:	0	1	1	0	0	0	18
3-axle Trucks:	0	0	0	4	0	4	49
4+-axle Trucks:	1	1	2	2	2	4	80
Total Truck Trips:	1	2	3	6	2	8	147
Total Trips ¹	10	5	15	11	5	16	262
2-Day Average Trip Generation:							
Passenger Cars:	8	4	12	5	2	7	130
2-axle Trucks:	0	1	1	1	0	1	17
3-axle Trucks:	1	1	2	5	2	7	50
4+-axle Trucks:	1	3	4	3	2	5	86
Total Truck Trips:	2	4	6	8	4	12	152
Total Trips¹	10	8	17	13	6	18	282

* Note: data collected on November 24 and 25, 2020.

¹ Total Trips = Passenger Cars + Total Truck Trips.

² Trip generation represents the sum of all driveways, by day.

TABLE B-3: 20388 HARVILL AVENUE, PERRIS, CA TRIP GENERATION

Land Use	20388 Harvill Avenue ²						Daily
	AM Peak Hour			PM Peak Hour			
	In	Out	Total	In	Out	Total	
Day 1: November 30, 2021							
Passenger Cars:	19	4	23	1	5	6	187
2-axle Trucks:	1	1	2	0	0	0	8
3-axle Trucks:	1	0	1	2	1	3	27
4+-axle Trucks:	6	6	12	4	1	5	143
Total Truck Trips:	8	7	15	6	2	8	178
Total Trips (Actual Vehicles) ²	27	11	38	7	7	14	365
Day 2: December 1, 2021							
Passenger Cars:	16	6	22	3	6	9	208
2-axle Trucks:	1	1	2	1	0	1	11
3-axle Trucks:	1	2	3	0	0	0	35
4+-axle Trucks:	3	7	10	9	2	11	140
Total Truck Trips:	5	10	15	10	2	12	186
Total Trips (Actual Vehicles) ²	21	16	37	13	8	21	394
2-Day Average Trip Generation							
Passenger Cars:	18	5	23	2	6	8	198
2-axle Trucks:	1	1	2	1	0	1	10
3-axle Trucks:	1	1	2	1	1	2	31
4+-axle Trucks:	5	7	11	7	2	8	142
Total Truck Trips:	7	9	15	8	2	10	182
Total Trips (Actual Vehicles)²	24	14	38	10	8	18	380

* Note: data collected on November 30 and December 1, 2021.

¹ Total Trips = Passenger Cars + Total Truck Trips.

² Trip generation represents the sum of all driveways, by day.

TABLE B-4: SUMMARY OF AVERAGE TRIP GENERATION RATE BY SITE

Land Use	Units ¹	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
700 Eckhoff Street ²	DD							
Passenger Cars:		0.116	0.089	0.205	0.074	0.047	0.121	2.111
2-axle Trucks:		0.000	0.005	0.005	0.005	0.000	0.005	0.174
3-axle Trucks:		0.005	0.011	0.016	0.053	0.016	0.068	0.521
4+-axle Trucks:		0.011	0.026	0.037	0.026	0.021	0.047	0.905
2550 E. 28th Street ³	DD							
Passenger Cars:		0.100	0.044	0.144	0.056	0.025	0.081	1.625
2-axle Trucks:		0.000	0.006	0.006	0.006	0.000	0.006	0.206
3-axle Trucks:		0.006	0.013	0.019	0.063	0.019	0.081	0.619
4+-axle Trucks:		0.013	0.031	0.044	0.031	0.025	0.056	1.075
20388 Harvill Avenue ⁴	DD							
Passenger Cars:		0.114	0.032	0.146	0.013	0.036	0.049	1.282
2-axle Trucks:		0.006	0.006	0.013	0.003	0.000	0.003	0.062
3-axle Trucks:		0.006	0.006	0.013	0.006	0.003	0.010	0.201
4+-axle Trucks:		0.029	0.042	0.071	0.042	0.010	0.052	0.919

¹ DD = Dock Doors

² Trip generation rates developed from data summarized on Table B-1: Divide the 2 day average total by the number of dock doors.

³ Trip generation rates developed from data summarized on Table B-2: Divide the 2 day average total by the number of dock doors.

⁴ Trip generation rates developed from data summarized on Table B-3: Divide the 2 day average total by the number of dock doors.

ATTACHEMENT C
SBCTA SCREENING TOOL RESULTS

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

N Cajon Blvd, San Bernardino, CA

Show search results for N Cajon Blvd,...

Complete #1 - 4, Then Click 'Run'

have adopted a different metric by which they measure VMT. Please consult with the jurisdiction to verify which metric to use for your analysis.*

PA VMT Per Worker

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

2016

#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 County Baseline (0%)

[Help](#) **Run**

Map Layers

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

Project Area VMT (1 of 2)

Assessor Parcel Number (APN)	026202109
Traffic Analysis Zone (TAZ)	53747302
TAZ VMT	26
Jurisdiction VMT	17.1
% Difference	52.37%
VMT Metric	PA VMT Per Worker
Threshold	17.1

[Zoom to](#)