
Appendix G-2

Vehicle Miles Traveled Report

February 8, 2022

c/o Mr. Cary Niu
Don Julian Investment, LLC
138 Glendora Avenue
Glendora, CA 91741

**SUBJECT: 5006 & 5010 MISSION BOULEVARD WAREHOUSE VEHICLE MILES TRAVELED (VMT)
ANALYSIS**

Dear Mr. Cary Niu:

The following VMT Analysis has been prepared for the proposed 5006 & 5010 Mission Boulevard Warehouse (**Project**), which is located in the City of Montclair.

PROJECT OVERVIEW

The Project is proposed to construct a new 114,875 sf warehouse building with storage, which is intended for manufacturing industrial park use. Examples include, but are not limited to: industry and light manufacturing services, including assembling, fabricating, processing, and the compounding and sale of materials which are wholly or partially manufactured or processed.

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**) (1). Based on OPR's Technical Advisory specific procedures for complying with the new CEQA requirements for VMT analysis the City of Montclair adopted Resolution No. 20-3281 Establishing Vehicle Miles Traveled (VMT) Thresholds for the Purpose of Analyzing Transportation Impacts (**City Guidelines**) (2), which documents the City's VMT analysis methodology and approved impact thresholds. The VMT screening evaluation presented in this report has been developed based on the adopted City Guidelines.

PROJECT SCREENING

The City Guidelines provides information on appropriate screening thresholds that can be used to identify when a proposed land use project is anticipated to result in a less than significant impact without

the need to conduct a more detailed project level assessment. The City's adopted screening thresholds are listed below:

- Small projects daily trips screening
- Local serving project type screening
- TPA screening
- Low VMT area screening

SMALL PROJECT DAILY TRIP SCREENING

The City Guidelines identifies that projects that generate fewer than 110 daily trips would not cause a substantial increase in the total citywide or regional VMT and are therefore presumed to have a less than significant impact on VMT. 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 (3). The proposed Project is anticipated to generate a net total of 308 vehicle trip-ends per day (see Attachment A). The Project is anticipated to generate more than 110 trips per day. Therefore, would not meet the screening threshold.

Small Project screening criteria is not met.

LOCAL SERVING PROJECT TYPE SCREENING

City Guidelines state that local serving retail projects less than 50,000 square feet may be presumed to have a less than significant impact. In addition to local serving retail, other local serving land uses such as public facilities, day care centers, gas stations, etc. would tend to provide local services and result in reducing overall VMT.

Low Project Type screening criteria is not met.

TPA SCREENING

Consistent with guidance identified in the City Guidelines, 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;

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.").

- 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.

Based on the Screening Tool results presented in Attachment B, the Project site is located within ½ mile of an existing major transit stop, or along a high-quality transit corridor. However, the project as design does not meet the aforementioned secondary criteria.

TPA screening criteria is not met.

LOW VMT AREA SCREENING

As described in the City Guidelines, “Development in a low VMT generating area consistent with an RTP/SCS and consistent with existing land use that is generating low VMT/SP. This will include both a land use (type, density, demographics, etc.).”³

It is our understanding that the City of Montclair 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 City. The Project’s physical location based on APN(s) is selected in the Screening Tool to determine project generated VMT as compared to the City’s adopted impact threshold. The parcels containing the proposed Project were selected and the Screening Tool was run for the VMT per service population measure of VMT. Based on the Screening Tool results, the Project is not located within a low VMT generating zone as compared to the City adopted threshold of 15% below the existing County of San Bernardino VMT per service population (See Attachment B).

Low VMT Area screening criteria is not met.

VMT ANALYSIS METHODOLOGY

The Project was not found meet any of the screening thresholds and would therefore require a full VMT analysis.

The City has identified following recommended threshold:

³ City Guidelines; Page 8

- If the following condition is satisfied in the cumulative conditions, then the Project-generated VMT has a significant impact under CEQA; the project generated VMT per service population exceeds 15% below what the County of San Bernardino average VMT per service population.

VMT ANALYSIS

The calculation of VMT for land use projects is based on the total number of trips generated and the average trip length of each vehicle. The San Bernardino Transportation Analysis Model (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 City Guidelines identifies SBTAM as the appropriate tool for conducting VMT analysis for land use projects in the City of Montclair. Therefore, the vehicle trips and average daily trip length for project-related vehicle trips are model derived from SBTAM.

Project VMT has been calculated using the most current version of SBTAM. Adjustments in socio-economic data (SED) (i.e., employment) have been made to the appropriate traffic analysis zone (TAZ) within the SBTAM model to reflect the Project's proposed land uses (i.e., warehouse). Table 1 summarizes the employment estimates for the Project. It should be noted that the employment estimates are consistent with the employment density factors identified in the Southern California Association of Governments (SCAG) Employment Density Study (October 2001) (4).

TABLE 1: EMPLOYMENT ESTIMATES

Land Use	Quantity (SF)	Employment Density Factor ⁴	Estimated Employees
Warehouse	114,875	1 employee per 1,195 SF	97

Adjustments to employment for the Project's TAZ were made to the SBTAM baseline year model. Project generated total VMT was calculated for the cumulative condition. The total VMT is then normalized by dividing by the Project's service population (SP) (e.g., employees). As shown in Table 2, the Project Baseline VMT per SP is 18.67.

TABLE 2: PROJECT VMT PER SP

	Cumulative
Employment	97
VMT	1,811
VMT / SP ⁵	18.67

⁴ Table II-B of the SCAG Employment Density Study.

⁵ Since the Project does not have a residential component, the service population consists entirely of employment.

PROJECT LEVEL VMT ASSESSMENT

SBCTA provides VMT calculations for each of its member agencies and for the County of San Bernardino region. Urban Crossroads has obtained this data from SBCTA, which for San Bernardino County is VMT per SP is 35.3 and a 15% below threshold of 30.0 VMT per SP.

Table 3 illustrates the comparison between Project generated VMT per SP to the regional (San Bernardino County) VMT per SP. As shown, the Project's VMT per SP would be 47.1% below City's adopted impact threshold. The Project's VMT impact is therefore considered less than significant.

TABLE 3: PROJECT VMT PER SP COMPARISON

	Cumulative
Regional Average	35.3
Impact Threshold @ 15% Below Regional Average	30.0
Project-generated	18.67
Percent Change vs Regional Average	-47.1%
Potentially Significant?	No

PROJECT'S CUMULATIVE IMPACT ON VMT

The Technical Advisory notes that "... metrics such as VMT per capita or VMT per employee, i.e., metrics framed in terms of efficiency (as recommended below for use on residential and office projects), cannot be summed because they employ a denominator. A project that falls below an efficiency-based threshold that is aligned with long-term goals and relevant plans has no cumulative impact distinct from the project impact. Accordingly, finding of a less-than-significant project impact would imply a less than significant cumulative impact, and vice versa. This is similar to the analysis typically conducted for greenhouse gas emissions, air quality impacts, and impact that utilize plan compliance as a threshold of significance."⁶ Since the Project was found to have a less than significant impact at the project level, it is considered to be less than significant cumulative impact as well.

CONCLUSION

The Project was evaluated against City Guidelines stated VMT screening criteria but was found to not meet available screening thresholds. As required by City Guidelines, a project level VMT analysis was performed consistent with the requirements identified for single use warehouse projects. The Project was not found to exceed 15% below the County of San Bernardino's regional average VMT per SP. The Project's impact to VMT is therefore presumed to be less than significant.

⁶ Page 6 of the OPR's Technical Advisory.

Mr. Cary Niu
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February 8, 2022
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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 'AS', with a long horizontal flourish extending to the right.

Alexander So
Senior Analyst

Mr. Cary Niu
Don Julian Investment, LLC
February 8, 2022
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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 Montclair.** *Resolution No. 20-3281 Establishing Vehicle Miles Traveled (VMT) Thresholds for the Purpose of Analyzing Transportation Impacts .* City of Montclair : s.n., August 2020.
3. **Institute of Transportation Engineers.** *Trip Generation Manual.* 11th Edition. 2021.
4. **Southern California Association of Governments.** *Employment Density Study.* October 2001.

ATTACHMENT A
PROJECT TRIP GENERATION

TABLE 1: PROJECT TRIP GENERATION RATES

Land Use ¹	Units ²	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Actual Vehicle Trip Generation Rates									
General Light Industrial ³	TSF	110	0.651	0.089	0.740	0.091	0.559	0.650	4.870
Passenger Cars			0.642	0.088	0.730	0.090	0.550	0.640	4.620
2-Axle Trucks			0.001	0.001	0.002	0.001	0.001	0.002	0.042
3-Axle Trucks			0.001	0.001	0.002	0.001	0.001	0.002	0.052
4+Axle Trucks			0.004	0.002	0.006	0.003	0.003	0.006	0.157
Warehousing ³	TSF	150	0.131	0.039	0.170	0.050	0.130	0.180	1.710
Passenger Cars			0.116	0.034	0.150	0.042	0.108	0.150	1.110
2-Axle Trucks			0.002	0.001	0.003	0.003	0.002	0.005	0.100
3-Axle Trucks			0.002	0.002	0.004	0.003	0.003	0.006	0.124
4+Axle Trucks			0.007	0.006	0.013	0.010	0.009	0.019	0.376

¹ Trip Generation and Vehicle Mix Source: Institute of Transportation Engineers (ITE), [Trip Generation Manual](#), Eleventh Edition (2021).

² TSF = thousand square feet

³ Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.
Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.

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:								
General Light Industrial	34.605 TSF							
Passenger Cars:		22	3	25	3	19	22	160
2-axle Trucks:		0	0	0	0	0	0	2
3-axle Trucks:		0	0	0	0	0	0	2
4+axle Trucks:		0	0	0	0	0	0	6
Total Truck Trips (Actual Vehicles):		0	0	0	0	0	0	10
Total Trips (Actual Vehicles)²		22	3	25	3	19	22	170
Warehousing	80.745 TSF							
Passenger Cars:		9	3	12	3	9	12	90
2-axle Trucks:		0	0	0	0	0	0	8
3-axle Trucks:		0	0	0	0	0	0	10
4+axle Trucks:		1	0	1	1	1	2	30
Total Truck Trips (Actual Vehicles):		1	0	1	1	1	2	48
Total Trips (Actual Vehicles)²		10	3	13	4	10	14	138
Total Passenger Cars		31	6	37	6	28	34	250
Total Trucks		1	0	1	1	1	2	58
Project Total (Actual Vehicles)		32	6	38	7	29	36	308

¹ TSF = thousand square feet

² Total Trips = Passenger Cars + Truck Trips.

ATTACHMENT B
SBCTA VMT SCREENING TOOL RESULTS

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

5006 Mission Blvd, Montclair, CA X

Show search results for 5006 Mission ...

Complete #1 - 4, Then Click 'Run'

#2. Select the VMT Metric. 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.*

OD VMT Per Service Population

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

2022

#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 (-15%)

Project Area VMT (1 of 2)

Assessor Parcel Number (APN)	101131117
Traffic Analysis Zone (TAZ)	53618102
TAZ VMT	52.7
Jurisdiction VMT	33.3
% Difference	58.13%
VMT Metric	OD VMT Per Service Population
Threshold	28.3
Zoom to	...

Map Layers

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