Appendix Ib

Lafayette Street Logistics Facility VMT Analysis

Prepared by

URBAN CROSSROADS

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SUBJECT: LAFAYETTE STREET LOGISTICS FACILITY VMT ANALYSIS

Dear Nicole Sauviat Criste:

Urban Crossroads, Inc. is pleased to provide the following vehicle miles traveled (VMT) analysis for the Lafayette Street Logistics Facility (referred to as "Project"), which is located south of Lafayette Street and east of Dale Evans Parkway in the Town of Apple Valley.

PROJECT OVERVIEW

The Project evaluated in this letter consists of 1,207,544 square feet (sf) of high cube warehouse/distribution use which is estimated to include 1,026,412 square of high cube warehouse floor area (85% of total), and 181,132 square feet of cold storage (15% of total).

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, the County of San Bernardino adopted Transportation Impact Study Guidelines (July 2019) (**County Guidelines**) which documents the County's VMT analysis methodology. In addition, the Town of Apple Valley adopted resolution 2021-08 Thresholds of Significance for Vehicle Miles Traveled (VMT) Under the California Environmental Quality Act (May 2021) (**Town Thresholds**), which documents the Town's approved VMT impact thresholds. The VMT analysis presented in this report has been developed based on the adopted County Guidelines and Town Thresholds.

PROJECT SCREENING

Consistent with County 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 County Guidelines:

- Step 1: Transit Priority Area (TPA) Screening
- Step 2: Low VMT Area Screening
- Step 3: Project Type Screening

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

STEP 1: TPA SCREENING

Consistent with the guidance identified in the County 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.

The Project site is not located within a TPA.

STEP 2: LOW VMT AREA SCREENING

As noted in the County Guidelines, projects located within a low VMT generating area as determined by the analyst will reduce VMT per person/employee.

The low VMT Area screening criteria is not met.

STEP3: PROJECT TYPE SCREENING

The County Guidelines identify that local serving uses (e.g., local parks, day care centers, public schools, etc.) are presumed to have a less than significant impact absent substantial evidence to the contrary. The Project as designed includes high cube warehouse/distribution.

Additionally, the County Guidelines indicate that projects generating fewer than 110 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 (3). As shown in Attachment A, the proposed Project is anticipated

[1] Pub. Resources Code, § 21064.3 ("'Major transit stop' means a site containing an existing rail transit station 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.").

to generate 2,569 two-way trips per day, with 148 AM peak hour trips, and 192 PM peak hour trips.

The Project type screening criteria is not met.

A project level VMT analysis has been prepared because the aforementioned screening criteria have not been met for these scenarios.

PROPOSED PROJECT GENERATED VMT

County Guidelines identify SBTAM as the appropriate tool for conducting VMT analysis for land use projects in San Bernardino County jurisdictions. 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 land use information into socio-economic data (SED) (i.e., employment) to be entered into the travel demand model. Adjustments in SED were made to an isolated TAZ to reflect the Project's proposed land use. Table 1 summarizes the land use and SED estimates for the Project.

TABLE 1: PROPOSED PROJECT POPULATION AND EMPLOYMENT ESTIMATES

Land Use Type	Quantity	Density Factor	Project Quantity
Logistics	1,207,544 SF	1,030 square feet per employee	1,172

Adjustments to SED to represent the Project were made for the base year and cumulative models. Project generated total VMT was then calculated for the base year and cumulative year conditions using the origin-destination (OD) trip matrices. The VMT value was then normalized by dividing by the Project's service population (SP), which in this case is employment.

Table 2 presents the key inputs for the calculation of project generated VMT per service population, resulting in a Project generated VMT per SP of 39.72 for baseline and 56.77 for cumulative conditions.

TABLE 2: PROJECT VMT PER SERVICE POPULATION

	Baseline	Cumulative
Project generated VMT	45,372	64,590
Service Population	1,172	1,172
VMT per Service Population	39.72	56.77

Table 3 illustrates a comparison between the Project's Baseline VMT per SP to the Town's adopted impact threshold (Town's General Plan buildout VMT per SP). The Proposed Project's baseline and cumulative VMT per Service Population are greater than the Town's impact threshold, so a potential Project impact is found.

TABLE 3: PROJECT GENERATED VMT PER SP COMPARISON

	Baseline	Cumulative
Town VMT per SP Threshold	26.41	26.41
Project VMT per SP	39.72	56.77
Potentially Significant?	Yes	Yes

PROJECT'S CUMULATIVE EFFECTS ON VMT

Consistent with Town Guidelines, projects should also assess a project's potential effect on townwide VMT. This analysis is performed using the boundary method, which includes all vehicle trips with one or both trip-ends within a specific geographic area of interest (i.e., the Town of Apple Valley). Once the areawide VMT value is calculated, it is then normalized by dividing by the service population (employees and population) in the Town (based on the SBTAM model). Cumulative link-level boundary VMT per SP is calculated for both No Project and With Project conditions. If an increase occurs for the With Project condition as compared to Without Project condition, then the impact is considered significant. As shown in Table 4, townwide VMT per SP was found to increase under cumulative conditions, so an impact is found.

TABLE 4: PROJECT TOWNWIDE VMT PER SERVICE POPULATION

	Baseline		Cumulative	
	Without Project	With Project	Without Project	With Project
SP	91,113	92,285	126,806	127,978
VMT	765,426	778,183	1,206,225	1,226,067
VMT per SP	8.40	8.43	9.51	9.58
Change in VMT/SP	0.03		0.07	
Potentially Significant?	Yes		Yes	

POTENTIAL VMT REDUCTION STRATEGIES

Potential commute trip reduction strategies have been considered for the purposes of reducing Project related VMT impacts (i.e., commute trips) determined to be potentially significant. As the future building tenants are not known for the Project, the effectiveness of each commute trip reduction measures may be limited. The Project can however consider the following measures that have the potential to reduce VMT, although no quantified benefit can be taken at this time. Potential VMT reduction measures that could be implemented are as follows:

- The Project may implement a Voluntary Commute Trip Reduction (CTR) measure. The purpose of the CTR would be to encourage alternative modes of transportation such as carpooling, which would reduce VMT. A proposed CTR program for this project could include providing on-site and/or online commute information services including information on available transit and ride coordination for employees.
- Provide designated carpool/vanpool parking in desirable locations on-site could be provided, which could encourage employees to carpool/vanpool to work and reduce VMT.
- The Project could install end-of-trip facilities such as bicycle parking and lockers which could encourage employees to use alternative modes of transportation and thus reduce VMT.
- The Project could install on-site electric vehicle charging stations beyond what is required by the 2019 California Green Building Code Standards (CALGreen) at designated parking areas. Although this measure would not directly reduce VMT, it would reduce greenhouse gas (GHG) emissions.
- The Project could increase sidewalks along the Project frontage and provide connections to existing trails (if applicable) in order to improve pedestrian access. This measure could encourage employees to walk to nearby destinations and therefore reduce VMT

CONCLUSION

The Project was not found to meet any of the Town's adopted screening criteria and a project generated VMT analysis was performed. Results from the VMT analysis finds that the Project experiences a potentially significant VMT impact for project generated VMT per SP and for project effect on VMT as compared to the Town's adopted impact threshold.

Implementation of feasible VMT reduction measures would not definitively reduce Project VMT or Project VMT impacts. Therefore, even with implementation of these measures, the Project VMT impact is assumed to exceed the Town VMT threshold. The Project VMT impact is therefore considered significant and unavoidable.

If you have any questions, please contact Marlie at (714) 585-0574 or John at (949) 375-2435.

Respectfully submitted,

URBAN CROSSROADS, INC.

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Attachments

ATTACHMENT 1: PROJECT TRIP GENERATION
SUMMARY ACTUAL VEHICLES

Proposed Project Trip Generation Rates[1]

Land Use	ITE LU Code	Quantity[2]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
High-Cube Warehouse[3]	-	1,026.412 TSF	0.094	0.028	0.122	0.046	0.119	0.165	2.129
Passenger Cars			0.066	0.020	0.086	0.033	0.082	0.115	1.489
2 to 4-Axle+ Trucks			0.028	0.008	0.036	0.014	0.036	0.050	0.640
High-Cube Cold Storage Warehouse[4,5,6]	157	181.132 TSF	0.085	0.025	0.110	0.034	0.086	0.120	2.12
Passenger Cars (69.2% AM, 78.3% PM, 67.8% Daily)			0.059	0.017	0.076	0.026	0.068	0.094	1.437
2-Axle Trucks (10.69% AM, 7.53% PM, 11.17% Daily)			0.009	0.003	0.012	0.003	0.006	0.009	0.237
3-Axle Trucks (3.39% AM, 2.39% PM, 3.54% Daily)			0.003	0.001	0.004	0.001	0.002	0.003	0.075
4-Axle+ Trucks (16.72% AM, 11.78% PM, 17.49% Daily)			0.014	0.004	0.018	0.004	0.010	0.014	0.371

Proposed Project Trip Generation Results

Land Use	ITE LU Code	Quantity[2]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
High-Cube Warehouse	-	1026.412 TSF							
- Passenger Cars			67	21	88	34	85	119	1,528
- Truck Trips (Actual)			29	9	38	14	37	51	657
High Cube Warehouse Subtotal			96	30	126	48	122	170	2,185
High-Cube Cold Storage Warehouse	157	181.132 TSF							
- Passenger Cars			11	3	14	5	12	17	260
- Truck Trips									
2-axle:			*2*	*1*	*3*	*1*	*1*	*2*	*43*
3-axle:			*1*	*0*	*1*	*0*	*0*	*0*	*14*
4+-axle:			*3*	*1*	*4*	*1*	*2*	*3*	*67*
- Net Truck Trips (Actual Vehicles)			6	2	8	2	3	5	124
High Cube Cold Storage Warehouse Subtotal			17	5	22	7	15	22	384
Passenger Cars Subtotal			78	24	102	39	97	136	1,788
Truck Trips Subtotal			35	11	46	16	40	56	781
PROJECT TOTAL TRIPS (ACTUAL VEHICLES)[7]			113	35	148	55	137	192	2,569

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

[2] TSF = Thousand Square Feet; DU = Dwelling Units

[3] Source: *TUMF High-Cube Warehouse Trip Generation Study* . Prepared by WSP, January 2019.
Passenger and Truck AM/PM peak hour (in/out) splits are estimated from based on ITE peak-to-daily relationship
Truck Daily Rate Source: *Notice of Preparation of a Draft Environmental Impact Report for the Proposed Potrero Logistics Center* .
Prepared by South Coast Air Quality Management District (SCAQMD), June 2020.

[4] Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Handbook, Third Edition (September 2017).

[5] Vehicle Mix Source: Institute of Transportation Engineers (ITE), High-Cube Warehouse Vehicle Trip Generation Analysis (October 2016).

[6] Truck Mix Source: SCAQMD Warehouse Truck Trip Study Data Results and Usage (2014).
With Cold Storage: 34.7% 2-Axle trucks, 11.0% 3-Axle trucks, 54.3% 4-Axle trucks

[7] Total Net Trips (Actual Vehicles) = Passenger Cars + Net Truck Trips (Actual Trucks).

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