

# TECHNICAL MEMORANDUM

**DATE:** March 13, 2025  
**TO:** Nicole Morse, T&B Planning  
**FROM:** Alex So, Urban Crossroads, Inc.  
**JOB NO:** 11796-03 VMT

## **SUBJECT: DEL AMO TECHNOLOGY CENTER VEHICLE MILES TRAVELED (VMT) ANALYSIS**

Urban Crossroads, Inc. has completed the following Vehicle Miles Traveled (VMT) Analysis for the Del Amo Technology Center (Project), which is located north of Del Amo Boulevard and between Prairie Avenue/Madrona Avenue and Maple Avenue in the City of Torrance.

### **PROJECT OVERVIEW**

The Project is proposed to consist of the following uses:

- 362,730 square feet of High-Cube Fulfillment Center (Sort) (90% of the total square footage)
- 40,303 square feet of High-Cube Cold Storage Warehouse (10% of the total square footage)
- **Total of 403,033 square feet**

A Project Site Plan can be found in Attachment 1.

### **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. The VMT analysis presented in this report has been developed based on the adopted City of Torrance [Traffic Impact Assessment Guidelines for Land Use Projects](#) (January 2021) (3) (**City Guidelines**). This VMT Analysis has been prepared based on the adopted City Guidelines.

### **VMT SCREENING**

City Guidelines state that a project may be determined to have a non-significant transportation impact if it meets one or more VMT screening criteria. Each of the screening criteria listed in the City Guidelines are described in Table 1 along with a determination of the Project's eligibility to meet each criterion.

**TABLE 1: SCREENING FOR LAND USE PROJECTS EXEMPT FROM VMT CALCULATIONS**

Screening Criteria	Description	Result
<b>Small Projects</b>	Projects generating fewer than 110 daily trips are presumed to have a less than significant impact on VMT.	Does not meet.
<b>Map-Based Screening for Residential and Office Projects</b>	Projects that are located in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT.	Does not meet.
<b>Proximity to Transit</b>	Projects located within a high-quality transit corridor (i.e., within a half mile of an existing major transit stop or an existing stop along a high-quality transit corridor) are presumed to have a less than significant impact on VMT.	Does not meet.
<b>Affordable Residential Development</b>	If a residential project is 100% or if the residential component of a mixed-use project is 100% affordable housing, a less than significant determination can be made.	Does not meet.
<b>Local-Serving Retail</b>	A retail project or the retail component of a mixed-use project is 50,000 SF or less, a less than significant determination can be made.	Does not meet.
<b>Local-Serving Public Facility</b>	Local-serving public facilities such as transit centers, public schools, libraries, parks, post offices, park-and-ride lots, police and fire facilities, and government offices are presumed to have less than significant impact on VMT.	Does not meet.

Consistent with the City Guidelines, as the Project was not found to meet any of the applicable screening criteria, a Project-level VMT analysis has been prepared.

## TRAFFIC MODELING METHODOLOGY

City Guidelines identify the Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) trip-based model as the preferred tool for conducting VMT analysis for land use projects in the City of Torrance. SCAG 2016 RTP 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 calculation of VMT for land use projects is based on the total number of trips generated and the average trip length of each vehicle type.

## VMT ANALYSIS METHODOLOGY

Consistent with City Guidelines, VMT has been estimated using the Origin/Destination method. VMT is presented as total VMT. Total VMT is an estimate of total vehicle travel and considers all vehicle trips and trip purposes.

### ORIGIN/DESTINATION VMT

The Origin/Destination (OD) method for calculating VMT sums all weekday VMT generated by trips with at least one trip end in the study area (i.e., project boundary) and tracks those trips to their estimated origins/destinations. Origins are all vehicle trips that start in a specific traffic analysis zone (TAZ) and destinations are all trips that end in a specific TAZ.

## VMT METRIC AND SIGNIFICANCE THRESHOLD

The City Guidelines state that for industrial projects (e.g., light industrial, manufacturing, warehousing, and self-storage) the appropriate VMT metric for evaluation is VMT per employee, however, for unique land uses such as fulfillment centers, conference centers, sports venues, etc., the City Guidelines note that the VMT metric shall be determined on a project-by-project basis and approved by the City Traffic Engineer. Based on City Guidelines, the appropriate VMT metric would be **net increase in Total VMT for Los Angeles County**. This measure of potential VMT impact is appropriate for this type of land use as it looks at the change in Total VMT for the region (i.e., Los Angeles County) for both without and with Project conditions. In addition, the net change in Total VMT would include all trip purposes and vehicle types (i.e., passenger cars, light-duty trucks, medium-duty trucks, and heavy-duty trucks) also consistent with expected vehicle types of the proposed type of land use.

- Projects that will generate a net increase in Baseline Total VMT will have a significant VMT impact.
- Projects that will generate a net increase in Total VMT for Buildout Year 2040 will have a significant Cumulative VMT impact.

## VMT ESTIMATES

Adjustments in socio-economic data (employment) were made to the appropriate traffic analysis zone (TAZ) within the SCAG model to reflect the Project's proposed land use. Table 2 presents employment data converted from the Project's land use assumptions.

**TABLE 2: SCAG MODEL PROJECT SOCIO-ECONOMIC DATA**

TAZ (Tier 2)	Project	Employment Density Factor <sup>1</sup>	Employees
TAZ# 21280100	403,033 SF	1,581 SF per employee	255

<sup>1</sup> SCAG Employment Density Report, 2001

The calculation of vehicle miles traveled has two components – the total number of trips generated and the average trip length of each vehicle. As the proposed Project is a regional serving land use, both trip origins and destinations were used from all the trip purpose matrices in the SCAG model. Using the peak and off-peak person trip matrices, skim (distances) matrices, total VMT was calculated for the Los Angeles County, for without and with Project scenarios for both the existing (2012) and cumulative (2040) conditions as shown in Table 3 and Table 4, respectively.

**TABLE 3: BASELINE CONDITIONS VMT COMPARISON**

Region	Existing No Project	Existing With Project	Net Change in VMT	Net % Change in VMT
Los Angeles County	450,979,123	450,806,485	-172,638	-0.038%

Source: Kimley-Horn (SCAG 2012)

**TABLE 4: CUMULATIVE CONDITIONS VMT COMPARISON**

Region	Existing No Project	Existing With Project	Net Change in VMT	Net % Change in VMT
Los Angeles County	519,223,681	519,198,250	-25,430	-0.005%

Source: Kimley-Horn (SCAG 2040)

## PEER REVIEW

As outlined in the City Guidelines, VMT modeling review shall be undertaken by an independent third-party reviewer to be proposed by the applicant and approved by the City. Urban Crossroads has coordinated with Fehrs & Peers and City Staff to provide the City-requested peer review of the VMT modeling and calculations. As provided in Attachment 2, results based on the peer review has confirmed that Kimley-Horn’s VMT model operation inputs and output calculations appropriately analyze the Del Amo Technology Center Project according to the methodology provided in the VMT Scoping Agreement approved by the City in December 2024 (Attachment 3) and the City Guidelines.

## CONCLUSION

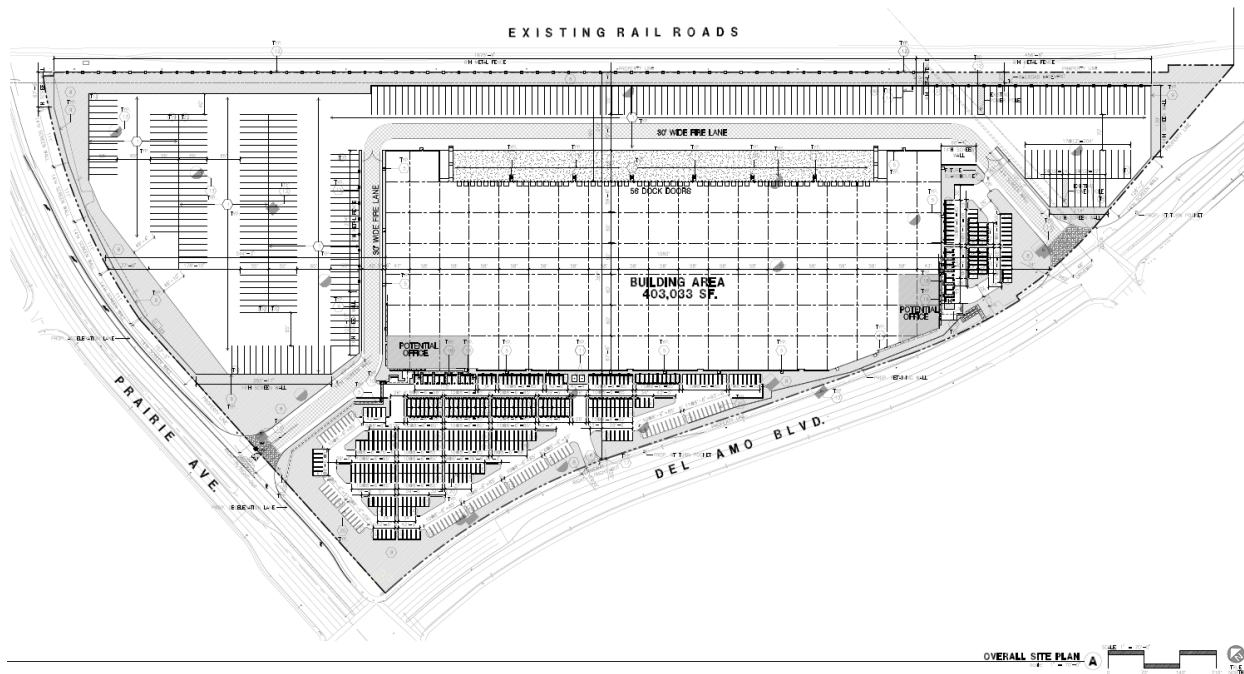
In summary, Countywide VMT was evaluated under both without and with Project conditions. Analysis using the SCAG travel demand model found that the Project does not increase Countywide VMT under either baseline or cumulative conditions. The slight reduction in total VMT between these scenarios is due to the Project introducing a new employment land use in a predominantly vacant area of the city. This improves the balance between origins and destinations within the City and Region, leading to shorter trip lengths. As a result, the Project is expected to have a less than significant impact on VMT.

If you have any questions, please contact me directly at [aso@urbanxroads.com](mailto:aso@urbanxroads.com).

## REFERENCES

1. **City of Torrance.** *Traffic Impact Assessment Guidelines for Land Use Projects.* January 2021.

# ATTACHMENT 1: PROJECT SITE PLAN



Source: HPA



**ATTACHMENT 2:  
PEER REVIEW MEMORANDUM**

# Memorandum

Date: March 11, 2025

To: Aric Evatt and Alex So, Urban Crossroads Inc.

From: Sarah Brandenberg, Biling Liu

**Subject: Torrance Port Logistics Warehouse VMT Peer Review**

*LB21-0038*

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## Scope

Fehr & Peers conducted a peer review of the VMT analysis prepared for the Torrance Port Logistics project located in the City of Torrance. This peer review is based on the information provided in the Torrance Port Logistics VMT Analysis Scoping Agreement approved by the City in December 2024 and the City's Traffic Impact Guidelines for Land Use Projects published in January 2021.

### Peer Review Results

The peer review process consisted of the following:

1. Kimley Horn updated the Southern California Association of Governments (SCAG) model to reflect the proposed project, conducted the SCAG model runs, and calculated VMT according to the City's Guidelines. The Torrance Port Logistics VMT Analysis Scoping Agreement states that project VMT impacts will be based on a net increase in Total VMT for Los Angeles County. The Scoping Agreement states that project VMT impacts will be based on a net increase in Total VMT for Los Angeles County and that VMT should be calculated for the opening year of the project (2027) and cumulative year (2040).
2. Kimley Horn sent Fehr & Peers the VMT analysis results and the SCAG input and output model files used to produce the Total VMT estimates for 2027 and 2040 conditions. Fehr & Peers confirmed the following:
  - a. The model inputs correctly reflect the proposed project.
  - b. The 2012 & 2040 model scenarios reflected the proposed project, including employment quantity and category, along with the Project TAZ – see **Table 1**.



**Table 1: Project Description in the 2016 SCAG RTP/SCS Travel Demand Model**

2016 SCAG RTP/SCS Model Year Scenario	Project TAZ	Project Description	Total Project Employment	Employment Factor
2012 & 2040	21280100	362,730 sq. ft high cube fulfillment center & 40,303 sq. ft cold storage warehouse	255 (Transport Employment Category in SCAG model)	1,581 sq. ft per employee for warehouse (Source: SCAG, 2001)

Source: Fehr & Peers, 2025.

- Fehr & Peers used the model output files to calculate the Total VMT for Los Angeles County with and without the proposed project for 2012 and 2040 conditions. Year 2027 was estimated using straight-line interpolation between 2012 and 2040.
- Table 2** below provides a summary of the Project VMT and confirms that the Total LA County VMT calculations of Fehr & Peers match the results produced by Kimley Horn.

**Table 2: Verified LA County VMT Results With and Without the Project**

2016 SCAG RTP/SCS Model Year Scenario	Total LA County VMT without the Project	Total LA County VMT with the Project	Net Change in Total VMT $\Delta$	% Difference
2012	450,979,123	450,806,485	-172,638	-0.038%
2040	519,223,681	519,198,250	-25,431	-0.005%

Source: Fehr & Peers, 2025, with data provided by Kimley Horn.

Notes: Total LA County VMT includes external trips to/from non-SCAG zones.

As summarized above, our peer review confirms that the VMT study appropriately analyzes the Torrance Port Logistics Warehouse project according to the methodology provided in the VMT Analysis Scoping Agreement approved by the City in December 2024 and the City's Traffic Impact Guidelines for Land Use Projects published in January 2021.



# Sarah Brandenburg, PE

## Principal

### EDUCATION

Bachelor of Science, Civil and Environmental Engineering, Cal Poly San Luis Obispo

### REGISTRATIONS

Licensed Traffic Engineer, State of California (#2213)

### PRESENTATIONS

Measuring the Miles: CEQA Changes with SB 743 in Los Angeles, CA, Association of Environmental Planners, 2017

### EXPERTISE

- Land Use and Transportation
- CEQA Updates under SB 743
- Transportation Infrastructure & Corridor Studies
- Travel Demand Forecasting & Traffic Operations
- University Planning
- Long Range Planning

### ABOUT

Sarah Brandenburg has over 20 years of experience with Fehr & Peers and is a licensed Traffic Engineer. Sarah served as the Operations Manager of the Los Angeles office for seven years, and is currently the Regional Principal-in-Charge of Southern California. Sarah has managed a variety of complex studies, such as transportation impact studies, EIR transportation sections, transportation planning studies, and corridor studies focused on roadway operations, transit and active transportation. Sarah has worked on multiple studies requiring VMT analysis in adherence with new CEQA guidelines. Other key projects include the City of Los Angeles Mobility Plan 2035 EIR, Beverly Hills On-Call Transportation Services, Westside Mobility Plan, Marina del Rey Mobility Plan, and Hollywood Community Plan Update. Sarah's ability to work closely with clients, complete a high-quality technical analysis, and clearly communicate study findings have been and will continue to be critical to project success.

### PROJECT EXPERIENCE RELATED TO VMT ANALYSIS

#### SB 743 Implementation for the following jurisdictions:

- Los Angeles County
- Santa Barbara County
- City of Santa Clarita
- City of Lancaster
- City of Gardena
- City of Calabasas
- City of Beverly Hills

#### VMT Analysis for Project Impacts under CEQA (sample projects):

- City of Calabasas Housing Element
- Residential Developments in Lancaster
- Lancaster Health District Master Plan
- Beverly Hilton Specific Plan Update
- Artic Cold Agricultural Facility



**ATTACHMENT 3:  
VMT SCOPING AGREEMENT**

Approved 12/12/2024  
- J. Que

**DATE:** December 4, 2024  
**TO:** Jessamine Que, City of Torrance  
**FROM:** Alex So, Urban Crossroads, Inc.  
**JOB NO:** 11796-01 VMT Scoping

## DEL AMO TECHNOLOGY CENTER VMT SCOPING AGREEMENT

Urban Crossroads, Inc. has completed following Del Amo Technology Center (**Project**) VMT Scoping Agreement. The Project is located which is located north of Del Amo Boulevard and between Prairie Avenue/Madrona Avenue and Maple Avenue in the City of Torrance. This letter describes the proposed VMT analysis methodology and has been prepared in accordance with the City of Torrance Traffic Impact Assessment Guidelines for Land Use Projects (1) (City Guidelines).

### PROJECT OVERVIEW

The Project is proposed to consist of the following uses:

- 362,730 square feet of High-Cube Fulfillment Center (Sort) (90% of the total square footage)
- 40,303 square feet of High-Cube Cold Storage Warehouse (10% of the total square footage)
- **Total of 403,033 square feet**

A Project Site Plan can be found in Attachment A.

The following ITE land use codes and vehicle mixes have been utilized in the approved traffic scoping agreement and LOS-based traffic analysis (TCA):

- High-Cube Fulfillment Center Warehouse (ITE Land Use Code 155) has been used to derive site specific trip generation estimates for up to 362,730 square feet (90% of the proposed Project). The ITE Trip Generation Manual has trip generation rates for high-cube fulfillment center use for both non-sort and sort facilities (ITE land use code 155). As defined by ITE, a high-cube warehouse is a building that typically has at least 200,000 gross square feet of floor area, has a ceiling height of 24 feet or more, and is used primarily for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. A typical high-cube warehouse has a high level of on-site automation and logistics management. The automation and logistics enable highly-efficient processing of goods through the high-cube warehouse. The ITE Trip Generation Manual has two subcategories for the High-Cube Fulfillment Center use: sort and non-

sort. ITE describes a sort facility as a fulfillment center that ships out smaller items, requiring extensive sorting, typically by manual means. In comparison, a non-sort facility is a fulfillment center that ships large box items that are processed primarily with automation rather than through manual means. Some limited assembly and repackaging may occur within the facility. Given this description, a sort facility has been assumed for the purposes of calculating trip generation for the Project in an effort to conduct a conservative analysis.

- High-Cube Cold Storage Warehouse (ITE Land Use Code 157) has been used to derive site specific trip generation estimates for up to 40,303 square feet (10% of the proposed Project). High-cube cold storage warehouses include warehouses characterized by the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. High-cube cold storage warehouses are facilities typified by temperature-controlled environments for frozen food or other perishable products.

## VMT METRIC

The City Guidelines state that for industrial projects (e.g., light industrial, manufacturing, warehousing, and self-storage) the appropriate VMT metric for evaluation is VMT per employee, however, for unique land uses such as fulfillment centers, conference centers, sports venues, etc., the City Guidelines note that the VMT metric shall be determined on a project-by-project basis and approved by the City Traffic Engineer. Based on City Guidelines, the appropriate VMT metric would be **net increase in Total VMT for Los Angeles County**. This measure of potential VMT impact is appropriate for this type of land use as it looks at the change in Total VMT for the region (i.e., Los Angeles County) for both without and with Project conditions. In addition, the net change in Total VMT would include all trip purposes and vehicle types (i.e., passenger cars, light-duty trucks, medium-duty trucks, and heavy-duty trucks) also consistent with expected vehicle types of the proposed type of land use. This approach in evaluating a potential VMT impact is consistent with guidance described within the State of California's Office of Planning and Research's (OPR's) Technical Advisory.

## MODELING METHODOLOGY AND VMT ANALYSIS

The Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) trip-based model 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 the SCAG model as the appropriate tool for conducting VMT analysis for land use projects in the City of Torrance. Kimley-Horn and Associates will be conducting the SCAG modeling for this Project using the SCAG RTP2016 model.

## PEER REVIEW

As outlined in the City Guidelines, VMT Modeling review shall be undertaken by an independent third-party reviewer to be approved by the City. Urban Crossroads will coordinate with Fehrs &

Peers to provide the City requested peer review of the VMT modeling and calculations. Results based on the peer review will be confirmed that the Kimley-Horn's VMT model run inputs and output calculations appropriately analyzes the Torrance Port Logistics Warehouse project according to the methodology provided in this VMT Analysis Scoping Agreement and the City Guidelines.

If you have any questions or comments, I can be reached at [aso@urbanxroads.com](mailto:aso@urbanxroads.com)

**ATTACHMENT A**  
**SITE PLAN**

