



## MEMORANDUM

**DATE:** December 15, 2023  
**To:** Alicia Velasco, City of Cypress  
**FROM:** Ambarish Mukherjee, P.E., AICP  
**SUBJECT:** 5665 Plaza Drive Project – Vehicle Miles Traveled (VMT) Analysis

LSA has prepared this memorandum documenting the methodology and findings of a vehicle miles traveled (VMT) analysis for the 5665 Plaza Drive (Goodman Commerce Center) Project (project) in the City of Cypress (City), California.

### BACKGROUND

On December 28, 2018, the California Office of Administrative Law cleared the revised California Environmental Quality Act (CEQA) guidelines for use. Among the changes to the guidelines was the removal of vehicle delay and level of service (LOS) from consideration under CEQA. With the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on VMT.

### PROJECT DESCRIPTION

It is LSA's understanding that GLC Cypress LLC (Applicant) is proposing to demolish an approximately 150,626-square-foot (sf) office building (Assessor's Parcel Number 241-101-26) located at 5665 Plaza Drive and construct a 191,394 square foot warehouse building. The existing warehouse/office building is currently vacant and generating only nominal vehicle trips.

### ANALYSIS METRICS

The City is yet to adopt the Senate Bill 743 (SB 743) guidelines; therefore, the VMT analysis has been based upon the methodology and significant threshold criteria identified in the Governor's Office of Planning and Research (OPR) *Technical Advisory* (TA), dated December 2018.

The project includes industrial land uses only. The OPR TA does not specifically recommend any VMT metric or threshold for industrial uses. However, since the land use is non-residential and could not be classified as retail land use, VMT-per-employee metric was used for purposes of evaluating the project.

Based on the OPR TA recommendations, the threshold for determining VMT impacts has been considered as 15 percent below the region's baseline VMT per capita for residential projects, and 15 percent below the region's baseline VMT per employee for non-residential/non-retail projects.

As per the OPR TA, a region should be defined based on where the majority of the project trips are contained. As such, the majority of project trips are estimated to start or end within the region defined for VMT analysis purposes. Typically, it is the county boundary within which a majority of those trips are contained. While the city boundary can also be considered as the region for residential uses, given that the project land use is non-residential and based on the understanding of the local trip patterns, it was determined that the entire Orange County would be the most appropriate region for the project for purposes of VMT analysis. As such, as recommended in the OPR Guidelines, if the project VMT per employee is greater than 85 percent of the existing countywide VMT per employee, the project constitutes a significant VMT impact.

## **METHODOLOGY**

The OPR TA provides multiple screening criteria for land use projects. One of the screening criteria is a daily trip threshold. If the land use project generates less than 110 daily trips, the project can be screened from a detailed VMT analysis. The project includes demolition of existing office land uses and replaces them with industrial land uses. A trip generation analysis conducted by the traffic consultant looked at the difference in daily trips between the existing land uses and proposed land uses. It was observed that the proposed land uses produce 196 more daily trips than the existing office land uses. Since the difference in daily trips between the proposed and existing uses is greater than 110, it was concluded that a detailed VMT analysis using the regional travel demand model would be required to evaluate the project VMT impact. The Orange County Transportation Analysis Model (OCTAM) was used to determine the VMT impact of the project.

### **Project Traffic Analysis Zone Update**

The first step in the preparation of this analysis was to update the Traffic Analysis Zones (TAZs) in the model that include the project area. The project needs to be isolated in a separate TAZ to estimate/determine the project VMT. OCTAM doesn't include the capability to split/add new TAZs, so a TAZ was borrowed for the project. That TAZ was used to estimate the project VMT and efficiency metric (i.e., VMT per employee).

OCTAM is a socioeconomic data-based model, hence project land uses were converted into model employment using land use-to-employment conversion factors. The project socioeconomic data were added to the project TAZ for the model run.

### **VMT Analysis**

A baseline model run was conducted using socioeconomic data for the project and project location TAZs (as indicated above). No circulation/network modifications were identified for inclusion in the model network. The outputs from this updated model run were used to calculate the VMT per employee for the project.

As indicated before, VMT per employee metric is used to evaluate the project land use. The proposed project would constitute a significant impact if the project VMT metric is greater than 85 percent of the regional existing VMT metric. Hence the proposed project would constitute a significant impact if project VMT per employee is greater than 85 percent of the Orange County VMT

per employee (threshold). As can be seen from Table A, existing project VMT per employee is lower than the significant threshold; therefore, the project doesn't constitute any significant VMT impact.

**Table A: Baseline Project and Regional VMT Per Employee Comparison**

<b>2016</b>	<b>5665 Plaza Drive (project)</b>	<b>Entire Orange County <sup>1</sup></b>	<b>Threshold <sup>2</sup></b>	<b>% Difference</b>	<b>Significant Impact</b>
VMT per employee	20.3	24.1	20.5	-1%	No

Source: Compiled by LSA (2023).

<sup>1</sup> Obtained from Final Draft Guidelines For Evaluating Vehicle Miles Traveled Under CEQA for the County of Orange, September 17, 2020.

<sup>2</sup> 85% of the regional average (24.1\*0.85=20.5) Baseline. Base year of the OCTAM model is 2016.

OCTAM = Orange County Transportation Analysis Model

VMT = vehicle miles traveled

## CONCLUSIONS

Based on the recommendations from the OPR TA, the proposed 5665 Plaza Drive warehouse project was evaluated using VMT per employee metric. The project is not eligible to be screened out of a VMT analysis and therefore, a detailed VMT analysis was conducted for the project using the OCTAM model and using Orange County as the region. Based on the significance threshold criteria determined within the OPR TA, the project VMT per employee does not exceed the threshold. Therefore, the project will have a less than significant transportation impact.

Attachment: Vehicle Miles Traveled (VMT) Analysis Worksheet



**Appendix A - VMT Calculation Worksheet**  
**Goodman Commerce Center Building 3, City of Cypress - VMT Analysis**

<b>2016</b>	<b>Goodman Commerce Center (project)</b>	<b>Entire Orange County *</b>	<b>Threshold **</b>
<b>Total Employment</b>	93	1,710,147	
<b>Homebased Work (HBW) VMT</b>	1,886	41,174,971	
<b>HBW VMT per employee</b>	<b>20.3</b>	<b>24.1</b>	<b>20.5</b>

\*: Obtained from Final Draft Guidelines For Evaluating Vehicle Miles Traveled Under CEQA for the County of Orange, September 17, 2020

\*\* : 85% of the regional average (24.1\*0.85=20.5)