



VMT ANALYSIS

DATE: April 26, 2022

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SUBJECT: 4450 Raley Boulevard VMT Analysis

Project #19179-018

In accordance with Senate Bill 743 (SB 743) and the resulting changes to the California Environmental Quality Act (CEQA) Guidelines published by the Natural Resources Agency, local agencies may no longer use measures of vehicle delay such as Level of Service (LOS) to quantify transportation impacts on the environment. VMT is a systemic metric and is a useful indicator of overall land use and transportation efficiency, where the most efficient system is one that minimizes VMT by encouraging shorter vehicle trip lengths, more walking and biking, or increased carpooling and transit. Vehicle miles traveled (VMT) has been codified in the CEQA Guidelines as the most appropriate measure for measuring transportation impacts under CEQA. This change went to effect statewide on July 1, 2020. The City of Sacramento's draft transportation impact guidelines is consistent with OPR's recommendation of using VMT as a metric.

Based on current practice of the City of Sacramento, transportation impacts are considered significant if the proposed project would result in a VMT per capita or office VMT per employee above 85% of the regional average, consistent with technical guidance published by the Governor's Office of Planning and Research (OPR). The OPR guidance does not specify a particular significance threshold for industrial employment and recommends that local jurisdictions determine this threshold based on local conditions. Some jurisdictions in the Sacramento region (including Sacramento County (adopted) and the City of Rancho Cordova (draft guidelines)) have determined that the significance threshold for industrial employment is 100% of regional average. The draft City of Sacramento Transportation Impact Analysis Guidelines do not specify a significance threshold for industrial land uses. For consistency purposes, this analysis applies the significance threshold of 100% of regional average for industrial uses.

The methodology in this analysis for evaluating VMT and completing an SB 743 compliant analysis of the proposed industrial buildings in the City of Sacramento is described below.

VMT SCREENING CRITERIA

Pursuant to SB 743 and technical guidance published by OPR, there are several screening procedures to potentially streamline project analysis (i.e., provide a presumptive non-impact finding and obviate the need for a VMT analysis). The various screening options are listed below with a brief determination of whether a given screen is triggered by the proposed project.

- **Project Size:** projects that generate fewer than 110 trips per day can be presumed to have a less than significant transportation impact. Based on total project building square footage of 67,500 square feet as presented in the Project application to the City, the Proposed Project would employ approximately 84 employees (based on an assumption of 800 square feet of building space per employee). The Institute of Transportation Engineers (ITE) *Trip Generation Manual, Tenth Edition* estimates approximately 260 daily trips for 84 “general light industrial” employees, which exceeds the threshold of 110 daily trips identified above. **Based on trip generation data, the proposed industrial use does not trigger this screen.**
- **Proximity to High Quality Transit:** residential or office projects within one-half mile of an existing major transit station or stop along an existing high-quality transit corridor can be presumed to have a less than significant transportation impact. The proposed project is located near the intersection of Raley Boulevard and Bell Avenue. Currently, no Sacramento Regional Transit (SacRT) bus routes travel along the roadways adjacent to the proposed project site. **Given that no existing “high quality” bus routes serve the proposed project, the project does not trigger this screen.**
- **Affordable Housing Development:** **The proposed project does not include the provision of housing, the proposed project does not trigger this screen.**
- **Locally Serving Retail:** typically less than 50,000 square feet. **The proposed project does not contain commercial square footage and thus does not trigger this screen.**
- **Infrastructure:** projects that would not likely lead to a substantial or measurable increase in vehicle travel are presumed to be VMT neutral and generally presumed to have a less than significant transportation impact (i.e., induced VMT). These include: Roadway Maintenance and Rehab Projects; Signal Timing / Synchronization / Adaptive Signal Control /Signal Preemption Improvements; Intersection Control Type and Turn Lane Channelization Improvements; Widening for Local or Local Collector Streets; and Transit / Bicycle / Pedestrian Infrastructure Improvements. **The proposed project does not contain any substantial infrastructure improvements that trigger this screen.**

Project Location: Projects that fall within an identified location (in this case SACOG’s hexagon methodology is used for screening purposes) that demonstrates VMT per Capita for

residential projects below 85% of the regional average for that metric, or VMT per Employee for employment-based projects below 100% of the regional average for that metric. The proposed project was identified as falling within two adjacent hexagons. Mapping shows that the two hexagons on which the project site is located demonstrate VMT per employee that are approximately 95.6% and 103.7% of the regional average, as shown below. For conservatism in the analysis, the higher value is used for screening purposes. **The proposed project does not fall within a geographic location (SACOG hexagon) that potentially triggers this screen.**

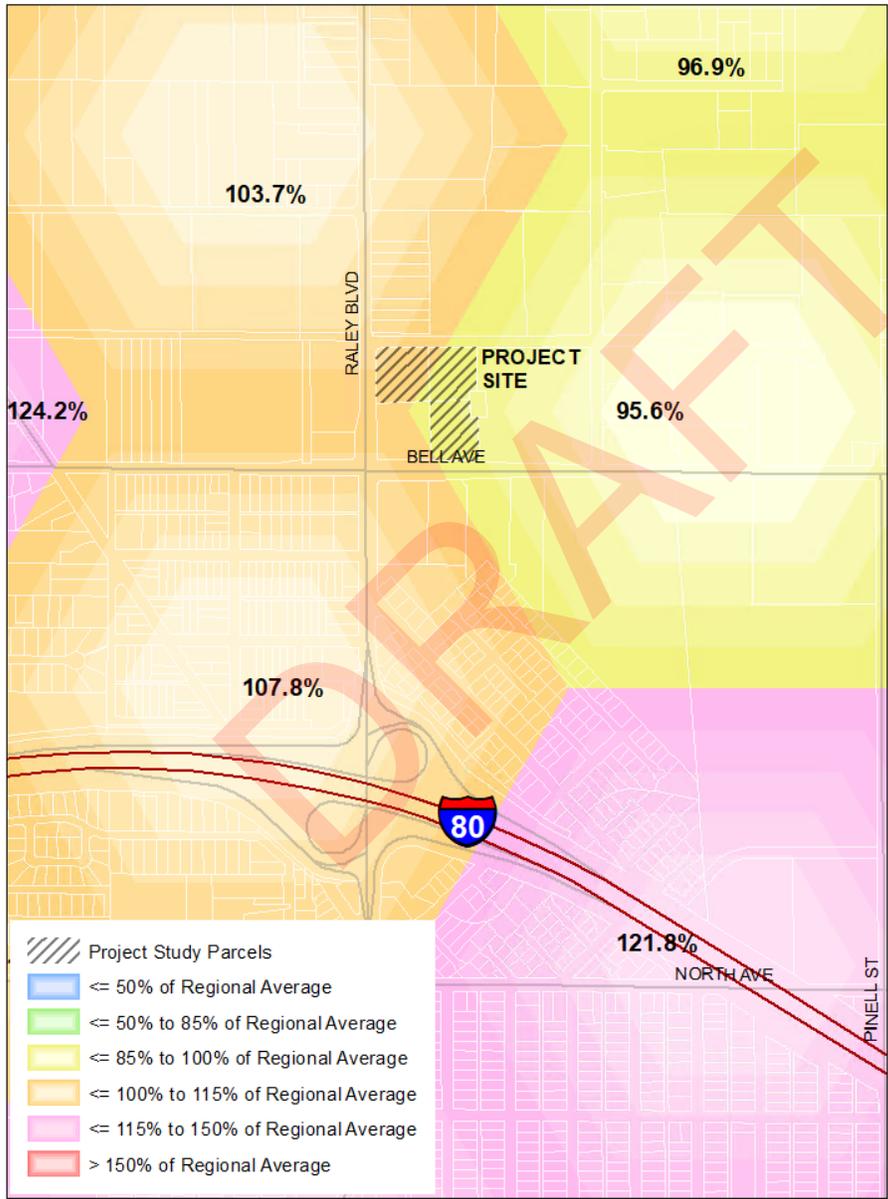


FIGURE 1: SACSIM19 2016 VMT PER CAPITA FOR PROJECT LOCATION

VMT ANALYSIS

Based on the screening assessment and the proposed project description, the operative VMT metric that requires analysis is VMT per employee. It is recommended that the proposed project's employment is analyzed according to the primary proposed land use type, as follows:

Work VMT – Establish baseline VMT and threshold on a per employee basis. “Work” uses include, but are not limited to industrial/ warehousing employment and support service staff employment,

The proposed thresholds are 100 percent of the existing baseline regional VMT per land use unit, as calculated within the SACOG region (office, commercial, manufacturing, industrial). These recommendations are consistent with OPR guidance and thresholds used by other local agencies.

TRAVEL DEMAND MODEL

The CEQA VMT analysis is based on the latest SACOG SACSIM-19 activity-based travel demand model (ABM) including scripts prepared by SACOG for this very analysis purpose. The analysis is tour-based, meaning that the analysis fully accounts for trips that are linked to trips that start or end at the project. This clarification means that intermediate trips, such as those occurring after someone has left the project area, such as a trip to pick-up lunch while at work, are accounted for in this analysis.

Based on the latest SACOG model scripts, SACSIM-19 also reflects the entire trip length, including the portion of the trip that occurs outside the SACOG region. External-internal and internal-external VMT is calculated via a script file provided by SACOG and included in their model for VMT post-processing. The post-processor determines the added VMT that occurs outside the SACOG region (i.e., for trips that either start or end outside of the region). This interregional VMT is then added to the internal-internal VMT to determine the total VMT. Consistent with OPR guidelines only automobile trips are considered as a part of this analysis. Heavy-duty truck and delivery vehicle VMT as well as alternative mode VMT (transit vehicles) are not reflected.

Based on the proposed building square footage of the proposed project (approximately 67,500 square feet) and an assumption of approximately 800 square feet per employee, 84 employees were added to the land use inputs of the SACSIM19 model and assigned to a new traffic analysis zone (TAZ). The subject parcels were separated from their “parent” zone (TAZ 230) into a new zone (TAZ 1534). This land use was processed through SACOG’s accessibility buffering process and a full model run was completed, along with the associated VMT post-processing script.

PROJECT USE (VMT PER EMPLOYEE METRIC)

For work-based land uses of the proposed project, SACSIM-19 was used with the SACOG script per guidance from the Office of Planning and Research (OPR). A regional baseline (2016) average VMT per employee metric was used to establish the threshold set at 100% of the regional average.

The project VMT per employee result is then compared to 100% of the 2016 regional average VMT per employee result, which is 16.05 VMT per employee. Resultant VMT per employee from the model for the project employees was calculated to be 8.52, which represents approximately 53.1% of the regional average, which falls below the 100% threshold used by multiple agencies in the region and recommended for this analysis, as shown in **Table 1**. **This represents a less than significant impact for the proposed project.**

TABLE 1: VMT ANALYSIS RESULTS

	REGIONAL ¹	PROPOSED PROJECT ²
VMT PER EMPLOYEE	16.05	8.52
PERCENT OF REGIONAL AVERAGE	100%	53.1%
EXCEEDS THRESHOLD		No

Note: ¹ Based on Published SACSIM19 2016 Baseline Model

² Based on Modified SACSIM19 2016 Model with Project employment added

VMT MITIGATION

Based on the results provided above, the proposed project land use does not exceed the 100% threshold for VMT per employee compared to the regional average, therefore no mitigation is required at this time.