



June 21, 2021

Mr. Randy Nichols,
Senior Project Manager - Environmental Planning
Michael Baker International
3760 Kilroy Airport Way, Suite 270
Long Beach, CA 90806

Subject: Signal Hill Industrial (Michael Baker Project ID 171776) – Vehicle Miles Traveled Analysis

Dear Randy:

Translutions, Inc. (Translutions) is pleased to provide this letter discussing the preliminary Vehicle Miles Traveled (VMT) analysis for the proposed industrial development to be located on both sides of Walnut Avenue north of Jenni Rivera Park in the City of Signal Hill in Los Angeles County. The project includes the construction of 151,075 square feet of industrial uses. The City of Signal Hill has not adopted VMT analysis guidelines. Therefore, this memo is a preliminary evaluation that includes methodologies and multiple impact thresholds.

MODEL DISCUSSION

Consistent with most jurisdictions within Los Angeles County, the analysis is based on the Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) model. Translutions has the 2016 RTP model and the data presented in this analysis were based on the 2016 model with updated 2020 socio-economic data (SED). This is the latest data set released to consultants by SCAG and is being used by many jurisdictions in Los Angeles County. It should be noted that while the 2020 RTP was approved by SCAG in September 2020, an updated model has not been released by SCAG as the model documentation is not yet ready.

The 2016 RTP model is a tour-based model, and the primary inputs are socio-economic data and the roadway network. The model is broken down into areas generally bounded by major roadways. These areas are called Traffic Analysis Zones (TAZs) and represent the area characteristics such as residential households, income, population, employment and employment type, and income characteristics.

For this evaluation, since the project is an employment generator, work related VMT (also known as home-based work, or HBW-VMT) was used for this screening. This is consistent to recommendations from the Governor’s Office of Planning and Research (OPR), Los Angeles County, and neighboring jurisdictions that have adopted VMT based thresholds.

PROJECT SITE TAZ BASELINE VMT

As stated earlier, the project is on two sides of Walnut Avenue. Walnut Avenue forms the boundary between two TAZs (TAZ 21427100 west of Walnut Avenue and TAZ 21427200 east of Walnut Avenue). Therefore, the preliminary project VMT was based on the weighted average VMT for the two TAZs. Table A shows the calculations and results. As seen on Table A, the weighted average VMT per employee is 16.49 miles.

Table A – VMT for Project Zones

TAZ	Employment	HBW VMT	VMT/Employee
21427100	1406	25655	18.25
21427200	2861	44709	15.63
Weighted Average	4267	70364	16.49

REGIONAL AND CITY BASELINE EMPLOYEE VMT

Regional. The SCAG model indicates that the average employee VMT across the entire six-county region is 18.19 miles¹.

City of Signal Hill. The SCAG model indicates that the average employee VMT for the City's jurisdictional area is 16.73 miles.

VMT SIGNIFICANT IMPACT THRESHOLDS

Thresholds Recommended by California Office of Planning and Research. The OPR recommends that a significant impact would occur if the project VMT per capita (or employee for employment projects) is greater than 85% of the existing VMT for the region. Therefore, the threshold is essentially, 15% below the regional VMT. The VMT per employee for the SCAG region is 18.19 miles. One threshold that the City could adopt is 15% below SCAG region, or 15.46 miles.

Threshold Adopted by the County of Los Angeles. The County of Los Angeles has adopted thresholds wherein the project VMT has to be 16.8% below the existing VMT of the region (North County or South County). For South County, the existing VMT per capita is 18.4 miles/employee which results in a threshold of 15.3 miles per capita².

Threshold Adopted by the City of Long Beach. The City of Long Beach has adopted thresholds wherein the project VMT has to be 15% below the existing average VMT per employee of Los Angeles County, which is 21.2³. This results in a threshold of 18.0 miles per capita.

Threshold Adopted by Other Agencies in Southern California. As seen above jurisdiction have latitude in choosing their own thresholds. A sample of potential thresholds could be:

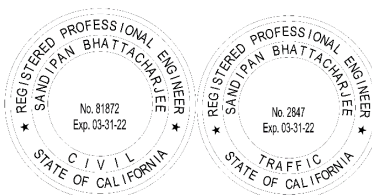
- No greater than existing City VMT per employee – Many jurisdictions have adopted a “no greater than existing City VMT” threshold. This has been adopted by most jurisdictions in San Bernardino and Riverside Counties.
- No greater than existing County VMT per employee – Many jurisdictions have adopted a “no greater than existing County VMT” threshold. This has been adopted by several jurisdictions in Southern California.
- The County of San Bernardino (Unincorporated) has adopted a threshold of 4% below existing County VMT.
- Several cities have adopted thresholds based on General Plan Buildout VMT.

We hope you will find this information helpful. Should you have any questions, please don't hesitate to call me at (949) 656-3131.

Sincerely,

translutions, Inc.

Sandipan Bhattacharjee, P.E., T.E., AICP, ENV SP
Principal



Attachments:

1. Los Angeles County VMT Thresholds
2. City of Long Beach VMT Thresholds

¹ Based on SCAG RTP Model

² Based on Los Angeles County Guidelines.

³ Based on City of Long Beach VMT Guidelines.