

October 14, 2019

Ms. Tracy Zinn
T&B Planning, Inc.
17542 17th Street, #100
Tustin, CA 92780

SUBJECT: SEATON TECH CENTER VEHICLE MILES TRAVELLED (VMT) ASSESSMENT

Dear Ms. Tracy Zinn:

The following Vehicle Miles Travelled (VMT) Assessment has been prepared for the proposed Seaton Tech Center development (referred to as “Project”) located on the southeast corner of Seaton Avenue and Perry Street in the County of Riverside (County). The Project is proposed to consist of up to 162,867 square feet of high-cube transload/short-term storage warehouse (without cold storage) use (80 percent of the total square footage) and 40,717 square feet of general light industrial use (20 percent of the total square footage) for a total of 203,584 square feet within a single building (see Exhibit 1).

BACKGROUND

Senate Bill 743 (SB 743), approved in 2013, endeavors to change the way transportation impacts will be determined according to the California Environmental Quality Act (CEQA). The Office of Planning and Research (OPR) has recommended the use of VMT as the replacement for automobile delay-based level of service (LOS). As of December 2018, the Natural Resources Agency finalized updates to CEQA Guidelines to incorporate SB 743 (i.e., VMT). While a lead agency has the option to immediately apply the new VMT based analysis methodology and thresholds for the purposes of evaluating transportation impacts, statewide application of the new guidelines is required July 1, 2020.

The OPR published an updated Technical Advisory on Evaluating Transportation Impacts in CEQA in December 2018, which provided guidance in evaluating transportation impacts based on VMT. The OPR’s current Technical Advisory has the following recommended numeric thresholds for residential, office and retail projects:

- For residential projects, a proposed project exceeding a level of 15% below existing VMT per capita may indicate a significant transportation impact. Existing VMT per capita may be measured as regional VMT per capita or as City VMT per capita.
- For office projects, a proposed project exceeding a level of 15% below existing regional VMT per employee may indicate a significant transportation impact.
- For retail projects, a net increase in total VMT may indicate a significant transportation impact.
- Numerical thresholds are not provided for other project types such as industrial uses.

Furthermore, the Western Riverside Council of Governments (WRCOG) recently published a SB 743 Implementation Pathway Document Package in March 2019 (“WRCOG Document”). The WRCOG Document includes recommendations on VMT assessment methodology, thresholds of significance and examples of potential mitigation measures.

The WRCOG Document recommends use of the Riverside County Transportation Analysis Model (RivTAM) for VMT impact analysis in the WRCOG region. RivTAM is a sub-regional travel demand model based on the regional travel demand model maintained by Southern California Association of Governments (SCAG). In addition, the following thresholds to determine significant transportation impacts based on VMT were presented as part of the SB 743 Implementation Pathway roll-out:

- Below City-wide average VMT
- Below WRCOG regional average VMT

However, it is our understanding that as of May 2019, the County of Riverside has not elected to adopt VMT thresholds of significance for purposes of determining transportation impacts under CEQA and has instead elected to continue to use LOS in unincorporated areas of Riverside County. As such, the information presented in this memo are for informational purposes only.

PROJECT VMT

The calculation of vehicle miles traveled has two components – the total number of trips generated and the average trip length of each vehicle. The RivTAM is a useful tool to estimate the average trip length as it takes into account interaction between different land uses based on socio-economic data derived from RivTAM such as population, households and employment. However, the trips generated from the Project used to determine the impacts are typically based on size of the development and rates published in Institute Transportation Engineers (ITE) Trip Generation Manual or other similar sources.

AVERAGE TRIP LENGTH

To calculate average trip length, a select-zone model run for the traffic analysis zone (TAZ) in which the Project is located was conducted using the most current version of RivTAM. Adjustments were made to the socio-economic data to reflect the Project’s land use. Socio-economic data inputs were derived based on Riverside County General Plan, Appendix E-2: Socioeconomic Build-out Assumptions and Methodology. The higher of the base year (2012) and horizon year (2040) RivTAM model average trip length was utilized to provide a conservative analysis.

Table 1 provides a summary of model VMT, model daily flow, and average trip length for the Project TAZ. As shown on Table 1, the average trip length based on RivTAM was 12.5 miles for automobiles and 34.3 miles for heavy trucks.

TABLE 1: AVERAGE TRIP LENGTH

Vehicle Type	Model VMT (Vehicle-Miles)	Model Daily Flow (Vehicles)	Average Trip Length (Miles)
Automobiles	22,103	1,763	12.5
Heavy Trucks	3,905	114	34.3

TRIP GENERATION

In order to be consistent with other technical analyses prepared for the Project (i.e., Noise, Air Quality, GHG and HRA), the daily vehicle trips for the Project has been calculated based on trip generation rates consistent with the ITE Trip Generation Manual, 10th Edition (2017). As shown on Table 2, the proposed Project is anticipated to generate a net total of 434 trip-ends per day with 316 daily automobile trips and 118 daily truck trips.

TABLE 2: PROJECT TRIP GENERATION SUMMARY¹

Project	Quantity	Units ²	Daily ³
General Light Industrial (20%) and High-Cube Transload Short-Term Warehouse (80%)	203.584	TSF	
Automobiles:			316
Truck Trips (Actual Vehicles):			118
Project Trips			434

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 10th Edition (2017).

² TSF = thousand square feet

³ Source: Seaton Tech Center Traffic Impact Analysis (August 2019, Urban Crossroads, Inc.)

PROJECT VMT PER SERVICE POPULATION

Table 3 provides a summary of Project VMT for passenger cars and trucks. As shown on Table 3, the estimated VMT for the Project is 3,950 vehicle-miles per day for automobiles and 4,048 vehicle-miles per day for trucks resulting in a total VMT of 7,998 vehicle-miles.

TABLE 3: PROJECT VMT

Vehicle Type	Project Trip Generation (Daily)	Average Trip Length (Miles)	Project VMT (Vehicle-Miles)
Automobiles	316	12.5	3,950
Trucks	118	34.3	4,048
Total	434	18.43	7,998

Service Population (SP) is defined as the sum of residents and employees. Since the Project does not have any residential component, the Project SP consists of employees only. Because the tenant of the Project's building is not yet known, the number of jobs that the Project would generate cannot be precisely determined; therefore, for purposes of this analysis, employment estimates were calculated using data and average employment density factors utilized in the County of Riverside General Plan.

The General Plan estimated that Light Industrial (LI) businesses would employ one (1) worker for every 1,030 SF of building area (Riverside County General Plan, Appendix E-2, Table E-5). Based on this employment generation rate, the Project is expected to create approximately 200 new recurring jobs. As shown on Table 4, the Project's total VMT per SP is 39.99.

TABLE 4: PROJECT VMT PER SP

Project Employment	200
Project VMT	7,998
Project VMT per SP	39.99

COUNTY OF RIVERSIDE (UNINCORPORATED WRCOG REGION) AVERAGE VMT PER SERVICE POPULATION

The average VMT per SP for the County of Riverside was calculated based on jurisdictional VMT per SP data for 2012 and 2040 provided by WRCOG. The 2012 and 2040 jurisdictional VMT data provided by WRCOG were derived from the RivTAM model.

The Baseline (2019) average VMT per SP was calculated by linear interpolation between 2012 and 2040 data for unincorporated WRCOG region of Riverside County; Baseline 2019 average VMT per SP is 39.76.

FINDINGS

The Project generates 39.99 VMT per SP compared to 39.76 average VMT per SP estimated for the unincorporated WRCOG region, which is less than a 0.6% difference.

If you have any questions, please contact me directly at (949) 336-5992.

Respectfully submitted,

URBAN CROSSROADS, INC.



Aric Evatt, PTP
President



Pranesh Tarikere, PE
Senior Engineer

EXHIBIT 1: PRELIMINARY SITE PLAN

