

May 6, 2021

Mr. Gavin Powell
David Evans and Associates, Inc.
27574 Commerce Center Drive, Suite 235
Temecula, CA 92590

**SUBJECT: DIAZ ROAD WIDENING RIVTAM MODELING AND VEHICLE MILES TRAVELED (VMT)
CALCULATIONS**

Dear Mr. Gavin Powell:

The following vehicle miles traveled (VMT) analysis has been prepared for the proposed Diaz Road Widening (**Project**). The study corridor of Diaz Road, within the City of Temecula, extends from Rancho California Road to Cherry Street.

It is our understanding that the Diaz Road improvements will add lanes to intermittent existing segments with a single lane in each direction, expand intersections to accommodate planned connections across Murrieta Creek, and extend Diaz Road to Cherry Street (which currently does not exist west of Murrieta Creek).

Ultimately north of Cherry Street, Diaz Road will continue as Washington Avenue within the City of Murrieta. Cherry Street marks the City limit between Temecula and Murrieta and is planned as a Major Arterial to cross Murrieta Creek.

BACKGROUND

Changes to California Environmental Quality Act (CEQA) Guidelines were adopted in December 2018, which require all lead agencies to adopt VMT as a replacement for automobile delay-based level of service (LOS) as the new measure for identifying transportation impacts for land use projects. This statewide mandate was implemented on July 1, 2020. To aid in this transition, the Governor's Office of Planning and Research (OPR) released a Technical Advisory on Evaluating Transportation Impacts in CEQA (December of 2018) (**Technical Advisory**). (1)

Based on OPR's Technical Advisory, the City of Temecula has prepared their Traffic Impact Analysis Guidelines (**City Guidelines**). (2) This analysis has been prepared based on the City Guidelines which were adopted in May 26, 2020.

PROJECT SCREENING

The City Guidelines are consistent with the VMT analysis methodology recommended by OPR. For CEQA analysis purposes, the City Guidelines require an assessment of the Project's effect on VMT for roadway projects that have the potential to increase the total daily VMT. This applies for Projects that increase

motor vehicle capacity, such as adding lanes which have the potential to increase vehicle travel or “induced vehicle travel”, such as the additional lanes on Diaz Road. The VMT assessment consists of two key steps: (1) Project Screening to determine if a full VMT analysis is required, and (2) CEQA VMT Analysis to fully evaluate project and cumulative effects on VMT, if necessary.

The Technical Advisory and City Guidelines provides details on appropriate “screening thresholds” that can be used to identify when a proposed land use project is anticipated to result in a less-than-significant impact without conducting a more detailed VMT analysis. Transportation projects that do not require VMT analysis are related to maintenance and repair of existing transportation assets, roadway safety / shoulder improvements, turn pockets, improvements for bicyclists / pedestrians / transit users, etc. rather than roadway lane projects.

The Project screening criteria is not met, and a more detailed VMT analysis will be prepared.

PROJECT VMT ASSESSMENT

RIVTAM is a useful tool to estimate VMT as it considers interaction between different land uses based on socio-economic data such as population and employment. The City Guidelines identifies RIVTAM as the appropriate tool for conducting VMT analysis for land use projects in Riverside County.

Project VMT has been calculated using the most current version of RIVTAM. The With Project lane configurations and Without Project lane configurations have been coded into RIVTAM as shown on Table 1.

TABLE 1: DIAZ ROAD PROJECT LANES

South Cross-Street	North Cross-Street	Existing / Without Project	With Project
Rancho California	1600' north of Rancho California	4 ln	4 ln
1600' north of Rancho California	Via Montezuma	4 ln	4 ln
Via Montezuma	300' south of Av Alvarado / Overland	2 ln	4 ln
300' south of Av Alvarado / Overland	Dendy	4 ln	4 ln
Dendy	Cherry	0	3 ln

PROJECT LANES IMPACT ON VMT

The City guidelines state that the threshold of significance for VMT impacts related to a transportation project is a net increase in total existing VMT for the area. Temecula is located in western Riverside County, which is also known as the WRCOG Region (WRCOG refers to the Western Riverside Council of Governments). Consistent with Technical Advisory recommendations, it is appropriate to measure the total net change in VMT related to the implementation of a transportation project.

Citywide VMT was extracted from the RIVTAM model for both “without Project” and “with Project” model runs. This procedure is commonly referred to as “boundary method” and includes the sum of all weekday VMT on a roadway network within a designated boundary (i.e., the WRCOG Region). The boundary method VMT includes all trips, including those trips that do not begin or end in the designated boundary.

The boundary method procedures are performed for 2012 and 2040 conditions, then interpolated for baseline (2020) conditions. Table 2 provides a comparison of total citywide VMT without and with the network changes proposed by the Project for the various years. The proposed Project is forecast to result in a net decrease in WRCOG region VMT of approximately 0.01%.

TABLE 2: WRCOG SUB-REGIONAL VMT

	Without Project	With Project	Variance
2012 VMT	38,063,599	38,070,155	+6,556
2040 VMT	64,113,185	64,086,704	-26,481
2020 Interpolated VMT	45,506,338	45,503,455	-2,883
2020 Project % Change			-0.01%

To determine whether or not there is a significant impact using the boundary method, WRCOG Region VMT with the project lanes is compared to without project conditions. The WRCOG Region without Project lanes is estimated at 45,506,338, whereas with the Project lanes, the WRCOG Region VMT is estimated at 45,503,455. The project’s effect on VMT is not considered significant because it results in a cumulative sub-region VMT decrease under the plus project condition compared to the no project condition.

POTENTIAL VMT REDUCTION STRATEGIES

Transportation demand management (TDM) strategies have been evaluated for the purpose of reducing VMT impacts determined to be potentially significant. The effectiveness of TDM strategies to reduce VMT are generally based on the Quantifying Greenhouse Gas Mitigation Measures (CAPCOA, 2010).

The following are the potential TDM measures that have the potential to be relevant to the proposed Project.

- Measure 1: Provide Pedestrian Network Improvements. The Project plans include sidewalk connections and cross-walks, so the Project could potentially experience a slight reduction in Project VMT, as noted by CAPCOA (Quantifying Greenhouse Gas Mitigation Measures, p. 186).
- Measure 2: Provide Traffic Calming Measure. There is limited opportunity for the Project to implement meaningful enhanced improvements related to traffic calming in this area. This measure is therefore not evaluated further as means of providing a reduction in Project VMT.

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- Measure 3: Increase Transit Service Frequency and Speed. The area is currently served by Riverside Transit Agency (RTA), a public transit agency serving various jurisdictions within western Riverside County. As the Project has no control over the routes serviced or the frequency of public transit service, the measure is therefore not evaluated further as a means of providing a reduction in Project VMT.

It is also recognized that as the Project area and surrounding communities develop as envisioned under the City of Temecula general plan, new residential, office, retail, and industrial development would be implemented. These actions could collectively alter transportation patterns, improve the Region's jobs/housing ratio, diminish VMT, and support implementation of new or alternative TDM measures. There is no means, however, to quantify any VMT reductions that could result.

In summary, travel demand modeling of VMT for the Project based upon City of Temecula guidelines does not indicate a potential impact as VMT changes do not exceed VMT thresholds. The Project VMT not considered an impact.

If you have any questions, please contact us at (949) 375-2435 for John or (714) 585-0574 for Marlie.

Respectfully submitted,

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REFERENCES

1. **Office of Planning and Research.** *Technical Advisory on Evaluating Transportation Impacts in CEQA.* State of California : s.n., December 2018.
2. **City of Temecula.** *Traffic Impact Analysis Guidelines.* May 26, 2020.