

**APPENDIX 9b**



May 8, 2020

Mr. Tom Dodson  
Tom Dodson & Associates  
PO Box 2307  
San Bernardino, CA 92406

**SUBJECT: JEFFERSON RESIDENTIAL VEHICLE MILES TRAVELED (VMT) ANALYSIS**

Dear Mr. Tom Dodson:

The following VMT Analysis has been prepared for the proposed Jefferson Residential (Project), which is located east of Jefferson Avenue and south of Ivy Street/Los Alamos Road in the City of Murrieta. Interstate 15 (I-15) is located approximately 0.5 miles east of the Project site via Murrieta Hot Springs Road. The Project is to consist of 160 market rate apartments.

**BACKGROUND**

Changes to California Environmental Quality Act (CEQA) Guidelines were adopted in December 2018, which requires 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 takes effect 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). (2) Based on OPR's Technical Advisory, the Western Riverside Council of Governments (WRCOG) prepared a WRCOG SB 743 Implementation Pathway Document Package (March 2019) to assist its member agencies with implementation tools necessary to adopt analysis methodology, impact thresholds and mitigation approaches for VMT. To add to the previous work effort, WRCOG in February 2020 released its Recommended Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (WRCOG Guidelines), which provides specific procedures for complying with the new CEQA requirements for VMT analysis. (3)

**VMT ANALYSIS METHODOLOGY**

Through consultation with City of Murrieta staff, it is our understanding that the City of Murrieta has yet to adopt its own VMT analysis guidelines and thresholds. For the purposes of this analysis the recommended VMT analysis methodology and thresholds identified within the Technical Advisory have been used.

The Technical Advisory provides for the following recommended threshold for residential projects:

"A proposed project exceeding a level of 15 percent 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. Proposed development referencing a threshold based on city VMT per capita

(rather than regional VMT per capita) should not cumulatively exceed the number of units specified in the SCS for that city, and should be consistent with the SCS.”<sup>1</sup>

Consistent with OPR’s Technical Advisory, projects that meet certain screening thresholds based on their location and project type may be presumed to result in a less-than-significant transportation impact. For example, projects located within a Transit Priority Area (TPA) or a low VMT generating traffic analysis zone (TAZ) (subject to some secondary screening criteria) and absent substantial evidence to the contrary are anticipated to result in a less-than-significant impact. Based on available data, the Project is not located within a TPA. The Project is not located in a low VMT generating TAZ based on Total VMT per Service Population (SP); it is, however, located in a low VMT generating TAZ based on Home-Based VMT per capita. Since the City of Murrieta has yet to adopt its own VMT analysis guidelines and thresholds, a project-level VMT analysis has been provided.

## PROJECT VMT

The calculation of VMT for land use projects is based on the total number of trips generated and the average trip length of each vehicle. The Riverside Transportation Analysis Model (RIVTAM) is a useful tool to estimate VMT as it considers interaction between different land uses based on socio-economic data such as population, households and employment. The WRCOG 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. Adjustments in socio-economic data (SED) (i.e., residential) have been made to the appropriate traffic analysis zone (TAZ) within the RIVTAM model to reflect the Project’s proposed land uses (i.e., residential). Table 1 summarizes the population estimates for the Project.

**TABLE 1: POPULATION ESTIMATES**

Land Use	Quantity (in dwelling units)	Estimated Population <sup>2</sup>
Residential	160	534

Adjustments to population for the Project’s TAZ were made to both the RIVTAM base year model (2012) and the cumulative year model (2040). Project-generated total and home-based (HB) VMT was then calculated for both the base year model (2012) and cumulative year model (2040) and linear interpolation was used to determine the Project’s baseline (2020) Total and HB VMT. The Total and HB VMT is then normalized by dividing by the number of Project service population. Since the Project does not include an employment component, the service population consists entirely of residents. As shown

<sup>1</sup> Page 15 of the OPR’s Technical Advisory.

<sup>2</sup> Urban Crossroads, Inc. used the population factor of 3.34 persons per household based on California’s Department of Finance (DOF) Report E-5 for Cities, Counties, and the State for Murrieta in 2019.

in Table 2, the Project baseline (2020) Total VMT per SP is 24.76 and HB VMT per capita is 11.10.

**TABLE 2: PROJECT-GENERATED VMT**

	Project
Population	534
Total VMT	13,222
Total VMT / Service Population	24.76
HB VMT	5,927
HB VMT / Capita	11.10

**REGIONAL VMT**

WRCOG provides VMT calculations for base model year (2012) and cumulative model year (2040) for each of its member agencies and for the WRCOG region. Urban Crossroads has obtained this data from WRCOG and has used linear interpolation to calculate the WRCOG regionwide baseline (2020) Total VMT per SP is 30.81 and HB VMT per capita is 14.58.

**PROJECT LEVEL VMT ASSESSMENT**

Table 3 illustrates the comparison between Project-generated Total VMT per SP and HB VMT per capita to the existing (2020) regional (WRCOG) Total VMT per SP and HB VMT per capita. As shown, the Project would be 15% below the current regional (WRCOG) Total VMT per SP by 5.46% and HB VMT per capita by 10.41%. As such, the Project’s impact based on VMT is less-than-significant.

**TABLE 3: VMT COMPARISON**

	Total VMT/SP	HB VMT/Capita
Project	24.76	11.10
15% below regional VMT per Capita <sup>3</sup>	26.19	12.39
Difference	- 1.43	- 1.29
Percent Change	- 5.46%	- 10.41%

**PROJECT’S CUMULATIVE EFFECT ON VMT**

The Project as proposed is consistent with the City of Murrieta General Plan; which results in the Project being consistent with assumptions in the current Southern California Association of Governments (SCAG) Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS). The Technical Advisory

<sup>3</sup> 15% below the regional (WRCOG) Total VMT/SP threshold of 30.81 and HB VMT/Capita threshold of 14.58 VMT/Capita.

Mr. Tom Dodson  
Tom Dodson & Associates  
May 8, 2020  
Page 4 of 5

recommends that projects consistent with the regional RTP/SCS result in a less-than-significant impact on transportation.<sup>4</sup>

## CONCLUSION

In summary, the Project's Total VMT per SP and HB VMT per capita is below the regional (WRCOG) threshold of 15% below existing Total VMT per SP and HB VMT per capita. As such, the Project VMT impact is therefore considered ***less-than-significant***.

If you have any questions, please contact me directly at (949) 336-5978.

Respectfully submitted,

URBAN CROSSROADS, INC.



Aric Evatt, PTP  
President



Robert Vu, PE  
Transportation Engineer

---

<sup>4</sup> Page 18 of the OPR's Technical Advisory.

## REFERENCES

1. **Institute of Transportation Engineers.** Trip Generation Manual. 10th Edition. 2017.
2. **Office of Planning and Research.** Technical Advisory on Evaluating Transportation Impacts in CEQA. State of California :s.n. December 2018.
3. **Western Riverside Council of Governments (WRCOG).** Recommended Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment. February 13, 2020.