

**DATE:** May 28, 2024  
**TO:** Dan Boyd, D.R. Horton  
**FROM:** Alex So, Urban Crossroads, Inc.  
**JOB NO:** 15939-01 VMT

## TRES CERRITOS VEHICLE MILES TRAVELED (VMT) ANALYSIS

Urban Crossroads, Inc. has completed the following Vehicle Miles Traveled (VMT) Analysis for the Tres Cerritos (**Project**) which is located on Rose Drive to the west of the San Diego Aqueduct and east of Old Warren Road in the City of Hemet.

### PROJECT OVERVIEW

The Project consists of the development of 279 single-family dwelling units. A conceptual development plan is provided in Attachment A.

### BACKGROUND

The California Environmental Quality Act (CEQA) requires all lead agencies to adopt VMT as the measure for identifying transportation impacts for land use projects. To comply with CEQA, the City of Hemet adopted their [Traffic Impact Analysis Guidelines for CEQA & VMT](#) (May 2021) (1) (**City Guidelines**). This VMT analysis has been developed based on the adopted City Guidelines.

### VMT SCREENING

City Guidelines describe three types of screening that the City of Hemet will apply to effectively screen projects from the need to prepare a project-level VMT assessment. Consistent with screening thresholds identified in the City Guidelines, the Western Riverside Council of Governments (WRCOG) VMT Screening Tool (Screening Tool) was used to aid in the screening process. The City's adopted VMT screening steps are described in Table 1 along with a determination of the Project's eligibility for each screening step.

**TABLE 1: PROJECT SCREENING SUMMARY**

Screening Steps	Description	Result
1. Transit Priority Area (TPA) Screening	Projects located within a TPA (i.e., within a half mile of an existing major transit stop or an existing stop along a high-quality transit corridor) are presumed to have a less than significant impact on VMT.	Does not meet.
2. Low VMT Area Screening	Land use projects located within a low VMT-generating zone that can reasonably be expected to generate VMT per resident, per worker, or per service population that is similar to the existing land uses in the low VMT area are presumed to have a less than significant VMT impact.	Does not meet.
3. Project Type Screening	Local-Serving Retail under 50,000 square feet, Local Essential Services, and projects generating less than 110 daily vehicle trips are presumed to have a less than significant impact on VMT.	Does not meet.

The Project is not eligible for VMT screening and consistent with City Guidelines, a VMT analysis is required.

## **TRAFFIC MODELING METHODOLOGY**

City Guidelines identifies the Riverside County Model (RIVCOM), as the appropriate tool for conducting VMT analysis for land use projects in the City of Hemet. RIVCOM was developed by the Western Riverside Council of Governments (WRCOG) and initially released in June 2021. The most current release of RIVCOM is version 4.0.1, released in February 2024, representing the most current sub-regional transportation modeling tool for Western Riverside County. RIVCOM 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.

## **VMT ANALYSIS METHODOLOGY**

Consistent with City Guidelines, VMT has been estimated using the Origin/Destination method and Boundary method. For both methods, VMT is presented as total VMT and VMT per Service Population (SP). Total VMT is an estimate of total vehicle travel and considers all vehicle trips and trip purposes; whereas VMT per SP is an efficiency metric that represents VMT generated on a typical weekday per person who lives and/or works in the City of Hemet or in the case of the Project, per person who lives within the Project. Total VMT provides an estimate of the total vehicle travel, while VMT per SP measures the efficiency of travel. Consistent with City Guidelines, the efficiency metric VMT per SP has been adopted by the City of Hemet for transportation impact analysis.

### **ORIGIN/DESTINATION VMT**

The Origin/Destination (OD) method for calculating VMT sums all weekday VMT generated by trips with at least one trip end in the study area (i.e., Project boundary) and tracks those trips to their estimated origins/destinations. Origins are all vehicle trips that start in a specific traffic

analysis zone (TAZ) and destinations are all trips that end in a specific TAZ.

### **BOUNDARY VMT**

City Guidelines also acknowledge that the VMT analysis should also contain an evaluation of a project’s effect on VMT, which can be performed using the boundary method of calculating VMT. The boundary method is the sum of all weekday VMT on the roadway network within a designated boundary (i.e., City boundary). The boundary method estimates VMT by multiplying vehicle trips on each roadway segment within the boundary by that segment’s length. This approach consists of all trips, including those trips that do not begin or end in the designated boundary. Consistent with City Guidelines, the City of Hemet boundary was used as the boundary for this assessment.

### **VMT METRIC AND SIGNIFICANCE THRESHOLD**

City Guidelines state that for purposes of determining a potentially significant impact to transportation pursuant to CEQA:

A project would result in a significant project-generated impact if either of the following conditions are satisfied:

1. The baseline project-generated VMT per SP exceeds the City of Hemet baseline VMT per SP, or
2. The cumulative project-generated VMT per SP exceeds the City of Hemet baseline VMT per SP.

The project’s effect on VMT would be considered significant if it resulted in either of the following conditions to be satisfied:

1. The baseline link-level boundary citywide VMT per SP increases under the plus project condition compared to the no project condition, or
2. The cumulative link-level boundary citywide VMT per SP increases under the plus project condition compared to the no project condition.

To make a project-generated impact determination, the City of Hemet’s baseline VMT per SP was calculated using the RIVCOM model. As shown in Table 2, the City of Hemet’s baseline VMT per SP has been calculated as 24.4.

**TABLE 2: CITY OF HEMET BASELINE VMT PER SP**

	Baseline
Total VMT	2,846,491
SP	116,185
VMT per SP	24.4

### **VMT ESTIMATES**

To estimate Project-generated VMT, land use information such as number of dwelling units (DU) must first be converted into a RIVCOM compatible dataset. The RIVCOM model utilizes socio-economic data (SED) (e.g., households, population and employment) for the purposes of vehicle

trip estimation. The Project’s SED is then isolated within the Project’s TAZ. The population conversion factor was derived from the latest census information consistent with the dataset used in the City of Hemet General Plan Housing Element. Table 3 summarizes the SED inputs used to represent the Project.

**TABLE 3: LAND USE DATA SUMMARY**

Land Use	Quantity	Population Density Factor	Population
Residential	279 DU	2.87 person per household <sup>1</sup>	801

<sup>1</sup> <https://www.census.gov/quickfacts/fact/table/hemetcitycalifornia/RHI825222>

**PROJECT-GENERATED VMT**

VMT estimates for the Project were extracted from RIVCOM using the OD trip matrices, which includes project-generated VMT for all vehicle trips and trip purposes. The VMT estimates calculated for both baseline and cumulative conditions along with a comparison to the City’s adopted impact threshold are presented in Table 4. RIVCOM outputs for each scenario can be found in Attachment B.

**TABLE 4: PROJECT-GENERATED VMT**

	Baseline	Cumulative
Service Population (SP)	801	801
Total OD VMT	5,469	5,375
OD VMT per SP	6.8	6.7
City Threshold	24.4	24.4
Potentially Significant?	No	No

As shown in Table 4, the Project is not forecast to exceed the City’s adopted impact threshold under either baseline or cumulative conditions.

**PROJECT EFFECT ON VMT**

Table 5 presents an assessment of the Project’s effect on VMT using the boundary method. The Project’s effect on VMT is measured by comparing Citywide VMT per service population without and with the proposed Project for both baseline and cumulative conditions. As presented in Table 5, the Project is not forecast to cause Citywide VMT per SP to increase for either baseline or cumulative conditions.

**TABLE 5: BOUNDARY VMT**

Scenario	Baseline		Cumulative	
	No Project	With Project	No Project	With Project
SP	116,188	116,989	159,537	160,338
Boundary VMT	803,599	804,528	1,094,144	1,094,706
VMT per SP	6.9	6.9	6.9	6.8
Change in VMT per SP		0.0		-0.1
Potentially Significant?		No		No

As shown in Table 5, the boundary VMT per SP was found to remain unchanged or decrease under “with Project” conditions.

## CONCLUSION

Based on the results of this analysis, the following findings are made:

- The Project was evaluated against adopted screening criteria as outlined in the City Guidelines. The Project was not found to meet any available screening criteria, and a project-level VMT analysis was performed.
- Project-generated VMT estimates were calculated using RIVCOM and were found to not exceed the City’s VMT per SP threshold and would result in a **less significant VMT impact**.
- The Project’s effect on VMT was found to remain unchanged or decrease in the With Project scenario as compared to the No Project scenario. The Project’s effect on VMT was found to be **less than significant**.

If you have any questions, please contact me directly at [aso@urbanxroads.com](mailto:aso@urbanxroads.com).

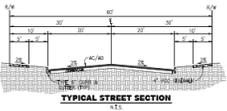
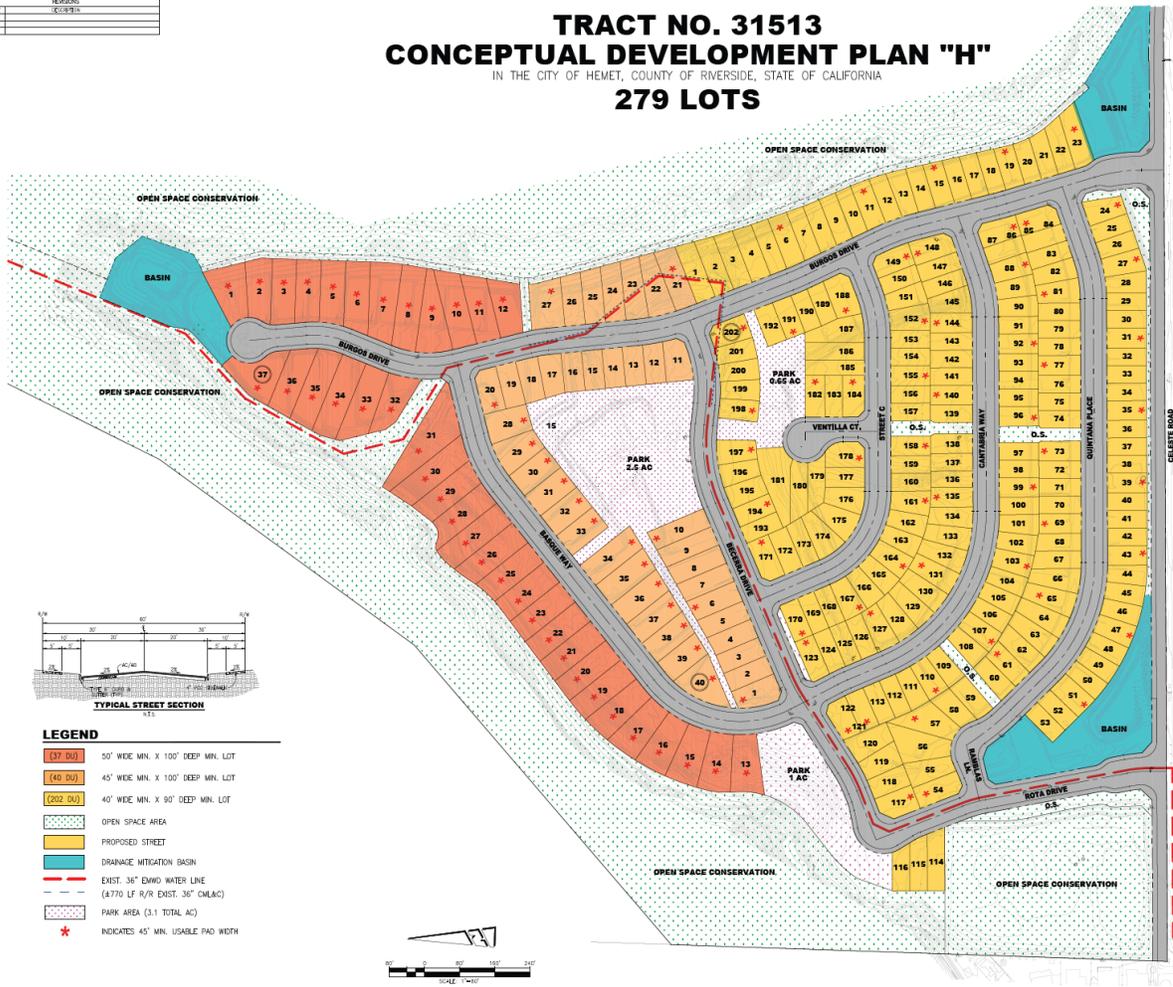
## REFERENCES

1. **City of Hemet.** *Traffic Impact Analysis Guidelines for CEQA & VMT.* May 2021.

**ATTACHMENT A**  
**CONCEPTUAL DEVELOPMENT PLAN**

NO.	REVISION

## TRACT NO. 31513 CONCEPTUAL DEVELOPMENT PLAN "H" IN THE CITY OF HEMET, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA 279 LOTS



- LEGEND**
- 50' WIDE MIN. X 100' DEEP MIN. LOT
  - 45' WIDE MIN. X 100' DEEP MIN. LOT
  - 40' WIDE MIN. X 90' DEEP MIN. LOT
  - OPEN SPACE AREA
  - PROPOSED STREET
  - DRAINAGE MITIGATION BASIN
  - EXIST. 36" EXHD WATER LINE (4.770 LF R/R EXIST. 36" CML&C)
  - PARK AREA (3.1 TOTAL AC)
  - \* INDICATES 45' MIN. USABLE PAD WIDTH

**ATTACHMENT B**  
**RIVCOM OUTUPTS**

**TABLE B-1: 2018 RIVCOM OUTPUTS**

TAZ	
Daily_Home-Based (incl. IEHB) Prod VMT	823.667358
Daily_HBW (incl. EIHBW) Attr VMT	0
Daily_Total Auto OD From VMT	2392.218262
Daily_Total Auto OD To VMT	2909.271973
Daily_Total Auto OD Intra VMT	1.469304
Daily_Total Truck OD From VMT	97.199036
Daily_Total Truck OD To VMT	97.549309
Daily_Total Truck OD Intra VMT	0.032875
Daily_Total OD From VMT	2489.41748
Daily_Total OD To VMT	3006.821289
Daily_Total OD Intra VMT	1.502179
Daily_Total_TripLen	11.189564
Population	801
Employment	0
Enrollment	0

**TABLE B-2: 2045 RIVCOM OUTPUTS**

TAZ	
Daily_Home-Based (incl. IEHB) Prod VMT	538.742249
Daily_HBW (incl. EIHBW) Attr VMT	0
Daily_Total Auto OD From VMT	2310.851563
Daily_Total Auto OD To VMT	2899.48999
Daily_Total Auto OD Intra VMT	0.683831
Daily_Total Truck OD From VMT	82.648674
Daily_Total Truck OD To VMT	82.418015
Daily_Total Truck OD Intra VMT	0.015953
Daily_Total OD From VMT	2393.500244
Daily_Total OD To VMT	2981.908203
Daily_Total OD Intra VMT	0.699784
Daily_Total_TripLen	9.688842
Population	801
Employment	0
Enrollment	0