MEMORANDUM

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DATE: August 21, 2024
TO: Jake Sowder, Diversified Pacific
FROM: Alex So, Urban Crossroads, Inc.
JOB NO: 15974-01 VMT

EAST HIGHLAND RANCH (TENTATIVE TRACT MAP NO. 20721) VEHICLE MILES TRAVELED (VMT) ANALYSIS

Urban Crossroads, Inc. has completed the following Vehicle Miles Traveled (VMT) Analysis for East Highland Ranch (**Project**), which is located between Santa Ana Canyon Road and Greenspot Road on either side of Alta Vista in the City of Highland.

PROJECT OVERVIEW

It is our understanding that the Project is to consist of the development of 113 single-family residential dwelling units. A site plan for the Project 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. At the time of this analysis, the City of Highland has yet to formally adopt City VMT guidelines and impact thresholds. However, based on consultation with City planning and engineering staff, this analysis has been prepared utilizing recommendations outlined by the San Bernardino County Transportation Authority (SBCTA) Recommended Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (**SBCTA Guidelines**) (1). The SBCTA Guidelines have been used to prepare this analysis.

VMT SCREENING

SBCTA Guidelines identifies that a project may be determined to have a non-significant transportation impact if it meets one or more VMT screening criteria. Each of the screening criteria listed in the City Guidelines are described in Table 1 along with a determination of the Project's eligibility to meet each criterion.

TABLE 1: SCREENING FOR LAND USE PROJECTS EXEMPT FROM VMT ANALYSIS

Screening	Description	Result
1. Transit Priority (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	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 impact on VMT. A low VMT area is defined as an individual traffic analysis zone (TAZ) where total daily Origin/Destination VMT per service population is lower than the City General Plan total daily Origin/Destination VMT per service population.	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.

As shown in Table 1, the Project was not found to meet eligible screening criteria and, consistent with the SBCTA Guidelines, a project-level VMT analysis has been prepared.

VMT ANALYSIS

TRAFFIC MODELING METHODOLOGY

SBCTA Guidelines identifies the San Bernardino Transportation Analysis Model (SBTAM) as the appropriate tool for conducting VMT forecasting and analysis for land use projects in San Bernardino County area, as it considers interaction between different land uses based on socio-economic data (SED), such as population, households, and employment. The current version of SBTAM 3.2 was last released in June of 2024 and represents the most current sub-regional transportation model for San Bernardino County.

VMT ANALYSIS METHODOLOGY

Consistent with SBCTA Guidelines, VMT has been estimated using the Origin/Destination method and is presented as total VMT and VMT per Service Population.[1] Total VMT is an estimate of total vehicle travel and considers all vehicle trips and trip purposes; whereas VMT per service population is an efficiency metric that represents VMT generated on a typical weekday per person who lives and/or works in the City of Highland or in the case of the Project, per person who resides within the Project. Total VMT provides an estimate of the total vehicle travel, while VMT per service population measures the efficiency of travel. Consistent with SBCTA Guidelines, the efficiency metric VMT per service population has been recommended by the SBCTA for transportation impact analysis.

[1] Service Population refers to population and employment.

ORIGIN/DESTINATION METHOD

The Origin/Destination (OD) method for calculating VMT sums all weekday VMT generated by trips with at least one trip end in a project's traffic analysis zone (TAZ) and tracks those trips to their estimated origins/destinations. Origins are all vehicle trips that start in a specific TAZ and destinations are all trips that end in a specific TAZ.

VMT SIGNIFICANCE THRESHOLD

The City of Highland utilizes the following threshold to determine if a land use project would result in a significant VMT impact:

- The baseline and cumulative project-generated VMT per service population exceeds the City of Highland future General Plan buildout VMT per service population.

CITY OF HIGHLAND BUILDOUT VMT PER SERVICE POPULATION

The City of Highland General Plan buildout VMT per service population value has been calculated using SBTAM. Table 2 presents the resulting City of Highland General Plan Buildout VMT per service population value of **33.5 VMT per service population**.

TABLE 2: CITY OF HIGHLAND BUILDOUT VMT PER SERVICE POPULATION

	City of Highland
Service Population	78,248
VMT	2,618,828
VMT per Service Population	33.5

PROJECT VMT ESTIMATES

In order to evaluate project-generated VMT, standard land use information such as dwelling units is converted into a SBTAM compatible dataset (e.g., households and population). The SBTAM model estimates population values using TAZ-specific distributions of households by size. These assumptions are provided by Southern California Association of Governments' (SCAG) growth forecasting models.

Table 3 presents the Project's service population (i.e., population), project-generated VMT and the resulting VMT per service population for baseline and cumulative conditions. SBTAM outputs can be found in Attachment B.

TABLE 3: PROJECT-GENERATED VMT

	Baseline	Cumulative
Households	113	113
Service Population	362	309
VMT	10,956	9,807
VMT per Service Population	30.3	31.7
City Threshold	33.5	33.5
Does Project Exceed Threshold?	No	No

As shown in Table 3, the Project is estimated to generate OD VMT per service population below the City's threshold of 33.5 VMT per service population under baseline and cumulative conditions.

SUMMARY

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

- The Project was evaluated against VMT screening criteria as outlined in the SBCTA Guidelines. The Project was not found to meet any available screening criteria, and a VMT analysis was performed.
- Project-generated VMT was estimated for baseline and cumulative conditions and was found to be below the City's impact threshold.

If you have any questions, please contact me directly at aso@urbanxroads.com.

REFERENCES

1. **San Bernardino County Transportation Authority (SBCTA).** *Recommended Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment.* February 2020.

ATTACHMENT A
PROJECT SITE PLAN

PROJECT SUMMARY

Gross Site Area	12.5 ac
Total Units	113 du
Density	9.0 du/ac

ATTACHMENT B
SBTAM OUTPUTS

TABLE B-1: SBTAM 2019 & 2050 OUTPUTS

	2019	2050
TAZ	53842403	53842403
Auto VMT From	26803.86328	36365.30469
Auto VMT To	26993.18555	36754.65234
Auto VMT Intra	44.735645	53.720371
Auto VT From	2657.755615	3584.284424
Auto VT To	2628.583496	3550.355469
Auto VT Intra	64.474693	77.42382
Auto TripLen From	10.08515	10.145764
Auto TripLen To	10.2691	10.352387
Auto TripLen Intra	0.693848	0.693848
Auto TripLen All	10.293701	10.353408
Truck VMT From	693.682556	912.196594
Truck VMT To	693.044312	916.039612
Truck VMT Intra	0.258767	0.449105
Truck VT From	26.184809	34.620148
Truck VT To	26.184809	34.620148
Truck VT Intra	0.372944	0.647266
Truck TripLen From	26.491794	26.34872
Truck TripLen To	26.467419	26.459726
Truck TripLen Intra	0.693848	0.693848
Truck TripLen All	26.664554	26.646835
All VMT From	27497.54688	37277.5
All VMT To	27686.23047	37670.69141
All VMT Intra	44.994408	54.169472
All VT From	2683.94043	3618.904541
All VT To	2654.768311	3584.975586
All VT Intra	64.847641	78.071091
All TripLen From	10.245215	10.300769
All TripLen To	10.428869	10.507935
All TripLen Intra	0.693848	0.693848
All TripLen All	10.455107	10.510248