

August 17, 2023

Mr. Matt Englhard Proficiency Rubidoux, LLC 11777 San Vicente Boulevard, Suite 780 Los Angeles, CA 90049

RUBIDOUX COMMERCE CENTER VEHICLE MILES TRAVELED (VMT) ANALYSIS

Mr. Matt Englhard,

Urban Crossroads, Inc. is pleased to provide the following Vehicle Miles Traveled (VMT) Analysis for the Rubidoux Commerce Center development (**Project**), which is located which is located northwest of Avalon Street and 26th Street in the City of Jurupa Valley.

PROJECT OVERVIEW

It is our understanding that the project is to consist of five (5) industrial buildings totaling 1,188,715 square feet on approximately 80.8 acres (see Exhibit 1).



EXHIBIT 1: PRELIMINARY SITE PLAN

BACKGROUND

Changes to California Environmental Quality Act (CEQA) Guidelines were adopted in December 2018, requiring 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 went into effect July 1, 2020. To aid in this transition, the Governor's Office of Planning and Research (OPR) released a <u>Technical Advisory on Evaluating Transportation Impacts in CEQA</u> (December of 2018) (**Technical Advisory**) (1). Based on the Technical Advisory, the City of Jurupa Valley adopted their <u>Traffic Impact Analysis Guidelines – Methodologies and Requirements for General Plan Compliance Analysis and CEQA VMT Analysis</u> (November 2020) (2) (**City Guidelines**), which documents the City's adopted VMT analysis methods and impact thresholds. These adopted City Guidelines have been utilized to prepare this VMT analysis.

VMT SCREENING

The City Guidelines list screening steps that can be used to identify when a proposed land use development project is anticipated to result in a less than significant impact, thereby eliminating the need to conduct a project-level VMT analysis. To aid in the screening process, the City of Jurupa Valley utilizes the Western Riverside Council of Governments (WRCOG) VMT Screening Tool (Screening Tool). The web-based Screening Tool allows a user to select an assessor's parcel number (APN) to determine if a project's physical location meets one or more of the land use screening methods documented in the City Guidelines. The City of Jurupa Valley VMT screening steps, as described within the City Guidelines, are listed below:

- Step 1: Transit Priority Area (TPA) Screening
- Step 2: Low VMT Area Screening
- Step 3: Project Type Screening

A land use project only needs to meet one of the above screening criteria to result in a less than significant impact.

TPA SCREENING

Consistent with guidance identified in the City Guidelines, projects located within a Transit Priority Area (TPA) (i.e., within ½ mile of an existing "major transit stop" or an existing stop along a "high-quality transit corridor" may be presumed to have a less than significant impact absent substantial evidence to the contrary. However, the presumption may not be appropriate if a project:

¹ Pub. Resources Code, § 21064.3 ("'Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.").

² Pub. Resources Code, § 21155 ("For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.").

- Has a Floor Area Ratio (FAR) of less than 0.75;
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

Based on the Screening Tool, the Project is not located within a TPA. (See Attachment A).

TPA screening criteria is not met.

LOW VMT AREA SCREENING

The City Guidelines state that, "residential and office projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, other employment-related and mixed-use land use projects may qualify for the use of screening if the project 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." The Project's physical location was selected in the Screening Tool to determine project generated VMT as compared to the City's impact threshold. Based on the Screening Tool results, The Project is not located in a low VMT area (See Attachment A).

Low VMT Area screening criteria is not met.

PROJECT TYPE SCREENING

The City Guidelines identify that local serving retail less than 50,000 square feet or other local serving essential services (e.g., local parks, day care centers, public schools, medical/dental office buildings, etc.) are presumed to have a less than significant impact absent substantial evidence to the contrary. The Project does not intend to develop any local serving retail uses.

Additionally, the City Guidelines also indicate that projects generating fewer than 250 daily vehicle trips may be presumed to have a less than significant impact. Trips generated by the Project's proposed land uses have been estimated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) <u>Trip Generation Manual</u>, 11th Edition, 2021 (3). The proposed Project exceeds 250 daily vehicle trips (See Attachment B).

Project Type screening criteria is not met.

Based on a more detailed review of the applicable VMT screening methods, it was determined that the Project is not eligible for screening and therefore, VMT analysis should be performed.

³ City Guidelines; page 16.

VMT ANALYSIS

VMT MODELING

The City Guidelines identify RIVCOM as the appropriate tool for conducting VMT analysis for land development projects in the City of Jurupa Valley. 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. RIVCOM is a travel forecasting model that represents a sub-area (Riverside County) of the Southern California Association of Governments (SCAG) regional traffic model. RIVCOM was designed to provide a greater level of detail and sensitivity in the Riverside County area as compared to the regional SCAG model.

VMT METRIC AND SIGNIFICANCE THRESHOLD

Based on the City Guidelines, a land use project in the City of Jurupa Valley shall use the efficiency metric VMT per employee as the appropriate measure of VMT for purposes of determining a potential transportation impact.

More specifically, the City has adopted the following impact threshold for land use projects:

• For office and industrial projects, its net VMT per employee exceeds the City's average VMT per employee.

For projects not consistent with the RTP/SCS the City Guidelines identify cumulative impact threshold as follows:

• For office and industrial projects its cumulative project-generated VMT per employee exceeds the average VMT per employee for Jurupa Valley in the RTP/SCS horizon year.

To make an impact determination for the previously described impact criteria, the City of Jurupa Valley's average VMT per employee must be calculated for Baseline (2022) and Cumulative (2045) conditions using the RIVCOM model. Baseline 2021 year as noted by City Guidelines will be the year consistent with the Notice of Preparation year. The Citywide averages were derived by using the base year and cumulative year unmodified model results. All the City of Jurupa Valley TAZs in RIVCOM (61 in total) were isolated and combined and divided by their respective denominator. Then a straight-line interpolation was calculated to obtain Baseline 2021 values. Table 2 presents the resulting impact thresholds used for this analysis.

TABLE 2: CITYWIDE AVERAGES

| | Baseline (2022) | Cumulative (2045) |
|------------------|-----------------|-------------------|
| Employees | 28,267 | 31,890 |
| VMT | 1,355,141 | 1,510,852 |
| VMT per Employee | 48.0 | 47.4 |

As shown in Table 2, the City of Jurupa Valley's Baseline average VMT per employee is 48.0 and, while Cumulative average VMT per employee is 47.4.

PROJECT LAND USE CONVERSION

In order to measure Project VMT per employee, land use information must first be converted into a RIVCOM compatible dataset. The RIVCOM model utilizes socio-economic data (**SED**) (e.g., population, households, employment, etc.) instead of land use information to estimate vehicle trips. SED information in the form of Project employees was included in the relevant traffic analysis zone (**TAZ**) to represent the Project. Table 1 illustrates the number of employees used to represent the Project in RIVCOM.

TABLE 1: EMPLOYMENT DENSITY FACTORS

| Land Use | Quantity | Employment Factor ⁴ | Project Employees |
|------------|--------------|--------------------------------|-------------------|
| Industrial | 1,188,715 SF | 1 employee per 1,030 SF | 1,154 |

PROJECT'S WORK VMT CALCULATION AND COMPARISON TO IMPACT THRESHOLD

As stated previously, for industrial land uses in the City of Jurupa Valley the efficiency metric VMT per employee is used to evaluate project generated VMT. VMT per employee is obtained by dividing project generated home-based work VMT by the number of Project employees. Home-based work VMT is obtained from the RIVCOM model using the Production/Attraction (**PA**) method for calculating VMT, which sums all weekday VMT generated by trips with at least one trip end in the study area (i.e., Project's TAZ). Productions are land use types that generate trips (residences), and attractions are land use types that attract trips (employment). Productions and attractions are converted from person trips to vehicle trips for the purposes of calculating VMT and are then multiplied by the distance skims to calculate VMT. A summary of RIVCOM's output data can be found in Attachment C. Table 2 presents Project generated PA home-based work VMT for RIVCOM base year (2018), cumulative year (2045), and baseline year (2022) scenarios, the estimated number of Project employees, and the resulting VMT per employee.

TABLE 2: PROJECT HBW VMT PER EMPLOYEE

| | Base Year | Cumulative Year | Baseline | |
|---------------------|-----------|-----------------|----------|--|
| Home-Based Work VMT | 42,121 | 42,236 | 42,121 | |
| Employment | 1,154 | 1,154 | 1,154 | |
| VMT per Employee | 36.5 | 36.6 | 36.5 | |

Table 3 provides a comparison between Project VMT per employee to the City's significance threshold for both baseline and cumulative conditions. As shown in Table 3, Project generated VMT per employee is below the City's adopted thresholds by 24.0% in the baseline condition and 22.8% in the cumulative condition.

⁴ County of Riverside General Plan; Appendix E-2, Table E-5

TABLE 3: PROJECT VMT PER EMPLOYEE COMPARISON

| | Baseline | Cumulative |
|--------------------------|----------|------------|
| City Threshold | 48.0 | 47.4 |
| Project | 36.5 | 36.6 |
| Percent Below Threshold | -24.0% | -22.8% |
| Potentially Significant? | No | No |

PROJECT'S CUMULATIVE EFFECT ON VMT

The Project effect on VMT was performed using boundary VMT within Jurupa Valley City limits boundary. Table 4 presents for No Project and With Project boundary VMT for horizon-year.

TABLE 4: BOUNDARY VMT SUMMARY

City Boundary Horizon-Year No Project With Project Service Population 148,779 149,933 **Boundary VMT** 5,157,444 5,157,695 Change in Boundary VMT 251 VMT per Service Population 34.7 34.4 Change in VMT per SP -0.3

As shown in Table 4, the Project does not increase the VMT per service population. Therefore, the cumulative effect on VMT is considered less than significant.

CONCLUSION

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

- The Project was evaluated against screening criteria as outlined in the City Guidelines. The Project was not found to meet any available screening criteria, and a VMT analysis was performed.
- The Project's VMT analysis found the Project to be below the City's VMT per employee threshold by 24.0% for baseline (2022) conditions and 22.8% for cumulative (2045) conditions.
- The Project's cumulative effect on VMT as measured by comparing Citywide VMT per service Population for Cumulative (2045) No Project and With Project conditions were evaluated. The Project was not found to increase Citywide VMT per service population as compared to the No Project conditions.
- The Project's impact on VMT is considered less than significant.

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

Respectfully submitted,

URBAN CROSSROADS, INC.

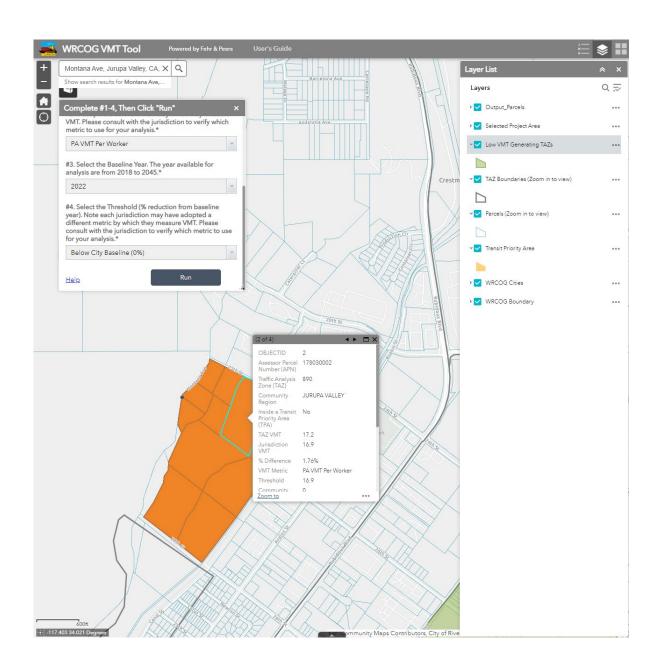
Alexander So

Senior Associate

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 Jurupa Valley. Traffic Impact Analysis Guidelines. November 2020.
- 3. **Institute of Transportation Engineers.** *Trip Generation Manual.* 11th Edition. 2021.

ATTACHMENT A WRCOG SCREENING TOOL



ATTACHMENT B PROJECT TRIP GENERATION

TABLE B-1: PROJECT TRIP GENERATION

| | | AM Peak Hour | | PM Peak Hour | | | | |
|--|-----------------------------|--------------|-----|--------------|-----|-----|-------|-------|
| Land Use | Quantity Units ¹ | In | Out | Total | In | Out | Total | Daily |
| Actual Vehicles: | | | | | | | | |
| General Light Industrial | 594.358 TSF | | | | | | | |
| Passenger Cars: | | 383 | 50 | 433 | 51 | 329 | 380 | 2,746 |
| 2-axle Trucks: | | 1 | 0 | 1 | 1 | 0 | 1 | 26 |
| 3-axle Trucks: | | 1 | 1 | 2 | 1 | 1 | 2 | 32 |
| 4+-axle Trucks: | | 2 | 1 | 3 | 2 | 2 | 4 | 94 |
| Total Truck Trips (Actual Vehicles): | | 4 | 2 | 6 | 4 | 3 | 7 | 152 |
| Total Trips (Actual Vehicles) ² | | 387 | 52 | 439 | 55 | 332 | 387 | 2,898 |
| Manufacturing | 594.357 TSF | | | | | | | |
| Passenger Cars: | | 297 | 89 | 386 | 129 | 293 | 422 | 2,556 |
| 2-axle Trucks: | | 2 | 1 | 3 | 1 | 2 | 3 | 46 |
| 3-axle Trucks: | | 2 | 2 | 4 | 2 | 2 | 4 | 56 |
| 4+-axle Trucks: | | 7 | 5 | 12 | 5 | 7 | 12 | 168 |
| Total Truck Trips (Actual Vehicles): | | 11 | 8 | 19 | 8 | 11 | 19 | 270 |
| Total Trips (Actual Vehicles) ² | | 308 | 97 | 405 | 137 | 304 | 441 | 2,826 |
| | | | | | | | | |
| Passenger Cars | | 680 | 139 | 819 | 180 | 622 | 802 | 5,302 |
| Trucks | | 15 | 10 | 25 | 12 | 14 | 26 | 422 |
| Total Trips (Actual Vehicles) ² | | 695 | 149 | 844 | 192 | 636 | 828 | 5,724 |

 $^{^{1}\,}$ TSF = thousand square feet

² Total Trips = Passenger Cars + Truck Trips.

ATTACHEMENT C RIVCOM VMT OUTPUT DATA

TABLE 1: 2018 RIVCOM OUTPUT

| TAZ | 890 |
|--|-------------|
| Daily_Home-Based (incl. IEHB) Prod VMT | 51394.26563 |
| Daily_HBW (incl. EIHBW) Attr VMT | 39713.18359 |
| Daily_Total Auto OD From VMT | 53126.38281 |
| Daily_Total Auto OD To VMT | 47386.83594 |
| Daily_Total Auto OD Intra VMT | 10.223686 |
| Daily_Total Truck OD From VMT | 12028.77148 |
| Daily_Total Truck OD To VMT | 12047.63281 |
| Daily_Total Truck OD Intra VMT | 17.683519 |
| Daily_Total OD From VMT | 65155.14844 |
| Daily_Total OD To VMT | 59434.46875 |
| Daily_Total OD Intra VMT | 27.907206 |
| Daily_Total_TripLen | 14.835389 |
| Population | 0 |
| Employment | 1087 |
| Enrollment | 0 |

TABLE 2: 2045 RIVCOM OUTPUT

| TAZ | 890 |
|--|-------------|
| Daily_Home-Based (incl. IEHB) Prod VMT | 74436.53906 |
| Daily_HBW (incl. EIHBW) Attr VMT | 39754.33594 |
| Daily_Total Auto OD From VMT | 66153.78125 |
| Daily_Total Auto OD To VMT | 57508.32031 |
| Daily_Total Auto OD Intra VMT | 12.609428 |
| Daily_Total Truck OD From VMT | 10465.19336 |
| Daily_Total Truck OD To VMT | 10540.93262 |
| Daily_Total Truck OD Intra VMT | 15.386827 |
| Daily_Total OD From VMT | 76618.97656 |
| Daily_Total OD To VMT | 68049.25781 |
| Daily_Total OD Intra VMT | 27.996258 |
| Daily_Total_TripLen | 13.308115 |
| Population | 0 |
| Employment | 1087 |
| Enrollment | 0 |
| | |

It should be noted that the number of employees input into the model is lower than the estimated employees of the proposed Project. However, the nominal increase in employment does not alter the trip lengths and travel patterns of the Project's TAZ that would affect the analysis findings.