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**PATTERSON AND CAJALCO WAREHOUSE VEHICLE MILES TRAVELED (VMT) SCREENING EVALUATION**

Ms. Connie Anderson,

Urban Crossroads, Inc. is pleased to provide the following Vehicle Miles Traveled (VMT) Screening Evaluation for the Patterson and Cajalco Warehouse development (**Project**) which is located on the west of Patterson Avenue and south of Cajalco Road in the County of Riverside.

**PROJECT OVERVIEW**

The Project consists of the development of a 106,931 square foot warehouse building (general warehousing). Preliminary site plan can be found on Exhibit 1.

**EXHIBIT 1: PRELIMINARY SITE PLAN**



## 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 County of Riverside has recently adopted their Transportation Analysis Guidelines for Level of Service Vehicle Miles Traveled (December of 2020) (**County Guidelines**) (1). The adopted County Guidelines have been utilized to prepare this VMT analysis.

## VMT SCREENING

Consistent with County Guidelines, projects should evaluate available screening criteria based on their location and project type to determine if a presumption of a less than significant transportation impact can be made. The following project screening thresholds were selected for review based on their applicability to the proposed Project:

- Small Projects Screening
- High Quality Transit Areas (HQTAs) Screening
- Map-Based Screening

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

## **SMALL PROJECTS SCREENING**

The County Guidelines identify projects that generate fewer than 110 daily vehicle trips are presumed to have a less than significant impact absent substantial evidence to the contrary. 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) Trip Generation Manual, 11<sup>th</sup> Edition, 2021 (2). The proposed Project is anticipated to generate 198 daily vehicle trips, exceeding 110 daily vehicle trips threshold (See Attachment A).

County Guidelines also identify those projects forecasted to generate greenhouse gas (GHG) emissions below 3,000 Metric Tons of Carbon Dioxide Equivalent (MTCO<sub>2e</sub>) per year are also presumed to cause a less than significant VMT impact.<sup>1</sup> The County Guidelines provides a list of land use types based on quantity (i.e., dwelling units or square footage) and provides a typical development potential to be below the 3,000 MTCO<sub>2e</sub> per year. For a warehouse that is 208,000 square feet and below, and a general light industrial building 179,000 square feet and below has also been identified to meet the County threshold.<sup>2</sup> The proposed Project intends to develop a 106,931 square foot building and would therefore be below the 3,000 MTCO<sub>2e</sub> threshold for a warehouse or a general light industrial building.

**Small Projects screening criteria is met.**

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<sup>1</sup> County Guidelines; Page 19.

<sup>2</sup> County Guidelines; Page 42, Table 1

## **HIGH QUALITY TRANSIT AREAS (HQTA) SCREENING**

Projects located within a Transit Priority Area (TPA) (i.e., within ½ mile of an existing “major transit stop”<sup>3</sup> or an existing stop along a “high-quality transit corridor”<sup>4</sup>) 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:

- 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.

The Project is not located within ½ mile of an existing major transit stop, or along a high-quality transit corridor (See Attachment B).

**HQTA screening criteria is not met.**

## **MAP-BASED SCREENING**

The Technical Advisory consistent with the County Guidelines note that “residential and office projects that locate in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT.”<sup>5</sup> County Guidelines also state that the use of map-based screening for low VMT generating areas is also applicable for other employment uses such as the Project’s industrial development. Urban Crossroads has obtained a VMT data table from County Staff for all TAZs within Riverside County that identifies VMT per capita and VMT per employee for the purposes of identifying of low VMT areas. The data utilizes the sub-regional Riverside Transportation Analysis Model (RIVTAM) to measure baseline VMT performance for individual TAZ’s and a comparison was made to the applicable impact threshold (e.g., VMT per employee for office or industrial land uses and VMT per capita for residential land uses). Utilizing the Western Riverside Council of Governments (WRCOG) Screening tool, the parcel of the Project was identified. Once identified, the Project’s TAZ was derived from the WRCOG screening tool, the Project resides in TAZ 3,707. The County’s data table identifies the Project’s TAZ 3,711 to generate 15.14 VMT per employee. Whereas the County regional threshold is 14.2 VMT per employee<sup>6</sup>. The Project is not located in a low VMT area.

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<sup>3</sup> 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.”).

<sup>4</sup> 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.”).

<sup>5</sup> Technical Advisory; Page 12

<sup>6</sup> County Guidelines; Page 22

**Map-Based screening criteria is not met.**

## **CONCLUSION**

In summary, the Project was found to meet the Small Projects screening criteria. The project is found to have a less than significant impact on VMT; no further VMT analysis is required.

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

## REFERENCES

1. **County of Riverside.** *Transportation Analysis Guidelines for Level of Service Vehicle Miles Traveled.* County of Riverside : s.n., December 2020.
2. **Institute of Transportation Engineers.** *Trip Generation Manual.* 11th Edition. 2021.
3. **Office of Planning and Research.** *Technical Advisory on Evaluating Transportation Impacts in CEQA.* State of California : s.n., December 2018.

**ATTACHMENT A**  
**PROJECT TRIP GENERATION**

**TABLE A-1: TRIP GENERATION RATES**

Land Use <sup>1</sup>	Units <sup>2</sup>	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
<b>Actual Vehicle Trip Generation Rates</b>									
Warehousing <sup>3</sup>	TSF	150	0.131	0.039	0.170	0.050	0.130	0.180	1.710
Passenger Cars (AM=88.2%, PM=83.3%, Daily=64.9%)			0.120	0.030	0.150	0.034	0.116	0.150	1.110
2-Axle Trucks (AM=1.97%, PM=2.79%, Daily=5.86%)			0.002	0.001	0.003	0.003	0.002	0.005	0.100
3-Axle Trucks (AM=2.44%, PM=3.46%, Daily=7.27%)			0.002	0.002	0.004	0.003	0.003	0.006	0.124
4+-Axle Trucks (AM=7.39%, PM=10.45%, Daily=21.97%)			0.007	0.006	0.013	0.010	0.009	0.019	0.376

<sup>1</sup> Trip Generation & Vehicle Mix Source: Institute of Transportation Engineers (ITE), [Trip Generation Manual](#), Eleventh Edition (2021).

<sup>2</sup> TSF = thousand square feet

<sup>3</sup> Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.  
Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.

**TABLE A-2: PROPOSED PROJECT TRIP GENERATION SUMMARY**

Land Use	Quantity Units <sup>1</sup>	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
<b>Actual Vehicles:</b>								
Warehousing	106.931 TSF							
Passenger Cars:		13	3	16	4	12	16	120
2-axle Trucks:		0	0	0	0	0	0	12
3-axle Trucks:		0	0	0	0	0	0	14
4+-axle Trucks:		1	1	2	1	1	2	40
Total Truck Trips (Actual Vehicles):		1	1	2	1	1	2	66
<b>Total Trips (Actual Vehicles)<sup>2</sup></b>		<b>14</b>	<b>4</b>	<b>18</b>	<b>5</b>	<b>13</b>	<b>18</b>	<b>186</b>

<sup>1</sup> TSF = thousand square feet

<sup>2</sup> Total Trips = Passenger Cars + Truck Trips.

**ATTACHMENT B**  
**HQTA MAP**

**WRCOG VMT Screening Tool**

Patterson Ave & Cajalco Rd, Per X  
 Show search results for Patterson Ave...

**VMT Impact Screening**

Input      Output

Zoom in to your project location close enough that the blue parcel layer appears. Select Western Riverside County Parcels in the drop-down below, then use the black square to select your project parcels. When ready, click on the Execute button. To clear the selection or start over, click on the "X" on the output tab once the tool has run. All results based on RIVTAM Model\*

Western Riverside County Parcels...      [Black Square]      [Red X]

[Help](#)      **Execute**

**Layer List**

All results based on RIVTAM Model.

- Output Layer
- Western Riverside County Parcels (Zoom in to view)
- Transit Priority Area
- RIVTAM TAZs with total VMT per service population below jurisdictional average under 2012 base year model
- RIVTAM TAZs with Home-based VMT per resident below jurisdictional average under 2012 base year model
- RIVTAM TAZs with Home-based work VMT per worker below jurisdictional average under 2012 base year model
- RIVTAM TAZs with total VMT per service population below WRCOG subregional average under 2012 base year model
- RIVTAM TAZs with Home-based VMT per resident below WRCOG subregional average under 2012 base year model
- RIVTAM TAZs with Home-based work VMT per worker below WRCOG subregional average under 2012 base year model
- City Boundaries
- TUMF Zone Boundaries

**(1 of 2)**

APN:317110050; TAZ:3,707

Within a Transit Priority Area (TPA)?  
No (Fail)

Within a low VMT generating TAZ based on Total VMT?  
No (Fail)  
Jurisdictional average 2012 daily total VMT per service population = 37.87  
Project TAZ 2012 daily total VMT per service population = 52.74

Within a low VMT generating TAZ based on Residential Home-Based VMT?  
Yes (Pass)  
Jurisdictional average 2012 daily residential home-based VMT per capita = 19.04  
Project TAZ 2012 daily residential home-based VMT per capita = 8.58

Within a low VMT generating TAZ based on Zoom to

000ft  
 -117.265 33.850 Degrees  
 Oak Grove At The Ranch  
 WRCOG VMT Screening Tool | ASA, NGA, USGS, FEMA | Eari Community