
INTEROFFICE MEMORANDUM

TO: PLANNING DEPARTMENT
FROM: ROB OLSON, TRAFFIC ANALYST
SUBJECT: INDUSTRIAL OUTDOOR VENTURES SITE – RIVERSIDE DRIVE; FOCUSED TRAFFIC AND VEHICLE MILES TRAVELED REVIEW AND RECOMMENDATIONS
DATE: MARCH 8, 2023
CC: FILE

Staff has completed a review of the proposed site plan, reviewed the data provided by the applicant's engineer, Urban Crossroads, regarding trip data from other equipment rental sites in the area, reviewed the projected site trip generation and trip assignment, prepared a fair share analysis, and conducted a vehicle miles traveled (VMT) analysis and prepared mitigation.

Proposed Site Plan

Overall the total site is listed to be 299,718 square feet (6.88 acres). The proposed site plan has a 25,000 square foot building listed as warehouse area along with a 5,616 square foot area shown and retail/office space, for a total of 30,616 square feet of building area and an FAR of 0.10. There are loading areas defined along the building defined as loading, but do not appear to be loading docks for large trucks. There is also a large portion of the site that is identified as uncovered outdoor sales area, but no dimensions appears to be listed for the overall size of those areas.

It is important to note a portion of that 'sales area' appears to be designed so that it would be relatively easy to convert the perimeter of the site into additional parking spaces and add over 100 parking spaces to the site and still have a substantial portion for other development. In addition, a lot line adjustment being requested so that the property could be sold as multiple development parcels.

Based on the potential for a second industrial development on the overall site and the unique nature of the proposed use, staff felt that it would be prudent to clear the overall site for potential traffic-related impact by assuming a full development of the site with a land use that would be allowed under the current zoning and at a density that would be consistent with the proposed development on the western portion of the property. The staff-proposed development is a light industrial land use with a floor area ratio (FAR) of 0.25. This FAR is consistent with many other area light industrial developments and is also consistent with two the four sample trip generation survey sites presented by the applicant in their February 6, 2023 memorandum.

Trip Generation Survey Data for Equipment Rental Use

Due to the unique proposed use for the site (equipment rental), the applicant and their engineer were asked to provide trip generation information from other similar sites either in the area or operated by Industrial Outdoor Ventures (IOV) as a surrogate for other-source readily available trip rate information, such as those that might be available from the Institute of Transportation Engineers.

The applicant selected a total of four local sites located in Norco, Chino, Ontario, and San Jacinto as their sample sites and collected two days of hourly in/out trip data at each. Most of the site data were collected on a weekday and Saturday, while one that was not open on weekends was surveyed on two successive weekdays.

The surveyed sites ranged in overall size from about 37,150 square feet to about 58,100 square feet. Note that these are about 5 to 8.5 times smaller than the proposed site on Riverside Drive. The FARs at the four sites varied from between about 0.19 to 0.38. All of these are higher than what is being proposed at the IOV site.

The surveyed sites varied in services provided. All rented equipment. However, some had on-site sales and service of equipment, some handled larger construction equipment, and one appeared to service primarily contractors and municipalities with more public works offerings.

The trip generation information showed two distinct trip generation rates at the four sites. Two of the sites had lower trip generation, while the other two were substantially higher. **Table 1** below summarizes the trip generation information for the four surveyed sites.

Table 1 – Sample Rental Site Trip Generation Data

Survey Sites	Site				Daily Trips							
					Day 1				Day 2			
	S.F.	Acres	FAR	Bldg SF	Total	Auto	Truck Lt	Truck Hvy	Total	Auto	Truck Lt	Truck Hvy
1 Norco	58,100	1.33	0.19	10,900	72	70	2	0	41	39	2	0
				Rate	6.61	6.42	0.18	0	3.76	3.58	0.18	0
2 Chino	37,150	0.85	0.38	14,300	41	25	10	6	30	28	2	0
				Rate	2.87	1.75	0.70	0.42	2.10	1.96	0.14	0
3 Vineyard	49,150	1.13	0.23	11,550	153	124	14	15	143	134	3	6
				Rate	13.25	10.74	1.21	1.30	12.38	11.60	0.26	0.52
4 San Jacinto	35,000	0.8	0.23	8,000	135	115	20	0	84	69	15	0
				Rate	16.88	14.38	2.5	0	10.5	8.63	1.88	0

Key features obtained from a review the various location websites included the following:

Site #1 – Had some medium-sized equipment for rent. Had on-site concrete sales. Did not advertise general sales or service. Lowest FAR of the four sites.

Site #2 – Mostly indoors with little outdoor display or storage area on-site. Highest FAR of the sites surveyed. Not open on Weekends. Advertised mostly construction and public-type equipment.

Site #3 – Rents larger equipment that may not be allowed at the proposed site and had sales and service advertised. Advertised multiple ‘homeowner-type’ items in addition to the larger equipment. Same FAR as Site #4 at 0.23.

Site #4 – Most similar with small tool rental sites. Sales and service available. Open 7 days a week indicating more homeowner-oriented services. Same FAR as Site #3 at 0.23.

Because the proposed Riverside Drive site is substantially larger than any of the four surveyed sites and with the amount of area within the site that could be used to expand the operations into multiple buildings within the proposed property or be sold off as a second parcel it appear that the direct comparison of a small equipment rental business for the entire site may underestimate what could be developed on this site in the future. In addition, an expanded development might be developed without any follow-up environmental or traffic review. With the ability to easily add 100 parking spaces to the proposed site, the proposed site layout could accommodate another 50,000 square feet of industrial development on the site based on the city’s on-site parking requirements. That would increase the developed site area to over 75,000 square feet.

Traffic Assessment

Project Trip Generation and Assignment

Based on the above findings staff requested that the applicant prepare a trip generation summary for the suggested light industrial land use and prepare an assignment of that traffic at the site driveways and at the Riverside Drive and Wineville Road intersection. No traffic analysis of any intersection was required as the city has recently completed a traffic signal warrant analysis for the Wineville/Riverside intersection and the project is not expected to have a significant traffic-related impact, either project-specific or cumulative, at any other proximate locations.

Staff reviewed the applicant’s traffic assessment memorandum dated March 2, 2033 and accepts the data provided in that assessment.

Signal Warrant Study

The City conducted a signal warrant study for the intersection of Wineville Road and Riverside Drive in October 2022. That analysis reviewed both existing Year 2022 conditions and projected Year 2040 conditions to determine if intersection traffic volumes exceeded the warrant thresholds for a traffic signal at the intersection. The existing Year 2022 and projected Year 2040 total intersection volumes from that analysis are listed in **Table 2**. In both years the analysis determined that the traffic volumes exceeded the volume warrant levels for a traffic signal.

Fair Share Analysis

Since the Wineville/Riverside intersection traffic volumes exceeded the warrant thresholds under the existing conditions, the cost to provide that signal would be spread over all vehicles approaching the intersection and not just new growth above the existing volumes. As shown in **Table 2**, the site is projected to generate about 1,200 vehicles per day through the Wineville/Riverside intersection. The projected Year 2040 daily volumes were project to be approximately 14,730 vehicles per day. Based on those values, the site would generate just over

8% of the daily traffic through the intersection by Year 2040. The projected future cost of a new traffic signal and associated geometric modifications at the intersection are estimated to be \$350,000. An 8.148% share of that values would be a rounded value of \$28,500.

Table 2 – Average Daily Traffic Volumes and Project Fair Share

Survey	Daily Traffic Volume			Growth Factor
	2022 ADT	Projected 2040 ADT	Volume Change	
Day 1	12,732	14,263	1,531	
Day 2	13,447	15,193	1,746	
Average	13,090	14,728	1,639	1.125
	Project ADT >		1,200	
	Fair Share Percentage >		(1,200 / 14,728)	8.148%
	Traffic Signal Cost >			\$ 350,000
	Fair Share Amount >		(rounded)	\$ 28,500

Source: City of Jurupa Valley Engineering Department, 2023.

Vehicle Miles Traveled Analysis

Based on vehicle miles traveled (VMT) data provided in the Western Riverside County Council of Governments (WRCOG) Riverside County Model (Rivcom), the total site with the suggested light industrial development would be expected to generate VMT at a rate that is higher than the city’s existing baseline average value.

The projected site-generated VMT rate is projected to be 17.1 miles per employee versus the city’s existing baseline average of 16.9 miles per employee, or 1.9% above the baseline. That higher-than-baseline value would be considered a significant project-specific impact. Since a light industrial development would be consistent with the General Plan land-use category for the property, there would be no cumulative VMT impact.

Mitigation

To mitigate the projected VMT impact the city is requesting the extension of curb, gutter, and sidewalk easterly from the southeast corner of the site along the north side of Riverside Drive connecting to the intersection improvements being installed by the city at the Wineville/Riverside intersection. Guidance for this mitigation is based on information provided in the *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (CAPCOA, 2021)* under their mitigation measure category T-18. The approximately 460-feet of off-site sidewalk would be an extension of the areawide pedestrian circulation system by connecting the site frontage improvements to the existing sidewalk that

extends north, south, and east from the Wineville/Riverside intersection. With the off-site sidewalk extension the project's significant VMT impact would be considered fully mitigated.

Please feel free to let me know if you have any question on or need any further discussion regarding the above information.