

Appendix H Trip Generation and VMT Screening Analysis

Appendix

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ENVIRONMENT | PLANNING | DEVELOPMENT SOLUTIONS, INC.

Date: December 3, 2021
Prepared by: Meghan Macias, TE
To: City of Colton Engineering Department
Site: Giant RV White Glove Facility
Subject: Trip Generation and Vehicle Miles Traveled (VMT) Screening Analysis

This technical memorandum evaluates the trip generation and need to prepare a traffic impact analysis (TIA) or vehicle miles traveled (VMT) analysis for the proposed Giant RV White Glove Facility. The project is located on the northeast corner of Mt. Vernon Avenue and Santo Antonio Drive in the City of Colton. The project proposes to construct a 25,287 Square Foot commercial building for recreational vehicle (RV) preparation and repair for Giant RV. The facility will operate as a “white-glove service” facility only, with no RV sales. New RVs would be delivered to the facility directly from the manufacturer, which would drive or tow the RVs to the facility. Once at the facility, Giant RV staff would provide “white glove service”, with full inspection of the delivered RVs, possibly some minor body work (e.g., touch-up painting, dent removal) if needed, any other minor repairs, and preparation of the RV to be shipped off to a Giant RV dealership in the region. Hours of operation are anticipated to be from 9:00 am to 7:00 pm, Monday through Thursday. It is anticipated that there will be 5 to 7 office workers and 8 to 10 service staff on-site each day. During operation, the facility would not be open to the public; it would be for employees only. Between 5 and 10 RVs would be delivered to the facility each day. Once the RV is completely serviced, it would be stored on-site until being shipped off to a Giant RV dealership. The project location is shown in Figure 1 and the project site plan is shown in Figure 2.

The City of Colton has adopted *Vehicle Miles Traveled Guidelines* (June 2, 2020) which provide methodology and thresholds for Vehicle Miles Traveled (VMT) analysis. For Level of Service (LOS) analysis, the City utilizes the County of San Bernardino *Transportation Impact Study Guidelines* (July 9, 2019). This memo will evaluate whether a VMT or LOS analysis is required utilizing the City and County guidelines, as applicable.

Project Trip Generation and TIA Screening

The project trip generation was evaluated using two different methods. First, the trip generation was estimated using the anticipated number of employee and RV/truck trips from the project description. The project was also evaluated using trip rates for General Light Industrial (Land Use Code 110) from the Institute of Transportation Engineers (ITE)¹. Table 1 presents the trip generation estimate using the operations data from the project description and Table 2 presents the trip generation using ITE trip rates. As shown in the tables, the worst-case trip generation is found using the ITE trip rates, which would result in a trip generation of 428 daily PCE trips including 65 trips during the AM peak hour and 57 trips during the PM peak hour. The County's Guidelines do not require projects to prepare a LOS analysis if they generate fewer than 100 peak hour trips. Based on the peak hour trip generation of 65 trips during the AM peak hour and 57 trips during the PM peak hour, the project would not meet the threshold for preparation of a LOS TIA. It should be noted that the project will pay all applicable traffic impact fees, which would be used to fund the local

¹ *Trip Generation*, 11th Edition, Institute of Transportation Engineers (ITE). 2021.

and regional transportation system. These fees are intended to mitigate the cumulative traffic effects of land development projects.

VMT Screening Analysis

Senate Bill (SB) 743 was signed by Governor Brown in 2013 and required the Governor's Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to LOS for evaluating Transportation impacts. SB743 specified that the new criteria should promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks and a diversity of land uses. The bill also specified that delay-based level of service could no longer be considered an indicator of a significant impact on the environment. In response, Section 15064.3 was added to the CEQA Guidelines beginning January 1, 2019. Section 15064.3 - Determining the Significance of Transportation Impacts states that Vehicle Miles Traveled (VMT) is the most appropriate measure of transportation impacts and provides lead agencies with the discretion to choose the most appropriate methodology and thresholds for evaluating VMT.

City of Colton VMT Screening

The City of Colton Vehicle Miles Traveled Guidelines (June 2, 2020) provide criteria for projects that would be considered to have a less-than significant impact on VMT and therefore could be screened out from further analysis. If a project meets one of the following criteria, then the VMT impact of the project is considered less-than significant and no further analysis of VMT would be required:

1. The project generates fewer than 110 daily vehicle trips.
2. The project is a local-serving land use.
3. The project is located within a High Quality Transit Area (HQTA).
4. The project is located in a low VMT area.

The applicability of each criterion to the proposed project is discussed below.

Screening Criteria 1 – Project Trip Generation Screening: The City's guidelines state that projects generating fewer than 110 daily vehicle trips would not be required to complete a VMT assessment. The City's guidelines specify that VMT is defined as the distance attributable to cars and light trucks. The guidelines also cite the December 2018 *Technical Advisory on Evaluating Transportation Impacts in CEQA* by the California Governor's Office of Planning and Research (OPR) which indicates that heavy duty trucks do not need to be included in the VMT analysis. This approach is consistent with CEQA Guidelines Section 15064.3(a) which states "For the purpose of this section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project". Based on these guidance documents, truck trips have not been included in this VMT screening analysis.

As discussed previously the project trip generation was evaluated using both the anticipated number of employee and RV/truck trips from the project description and using trip rates for General Light Industrial (Land Use Code 110) from the ITE. As shown in Tables 1 and 2, the project would generate 31 daily passenger car trips when evaluated using the project description and would generate 89 daily passenger car trips when evaluate using ITE trip rates. Even with the worst-case scenario of 89 daily passenger car trips, the project would generate fewer than 110 daily passenger car trips, and therefore the project is presumed to have a less than significant impact on VMT. Because the project would generate fewer than 110 daily passenger car trips, the project would meet Screening Criteria 2 and a VMT analysis would not be required.

Screening Criteria 2 – Local Serving Land Use: According to the City's guidelines, projects which serve the local community would be assumed to have a negligible impact upon the City's VMT and therefore would not be required to complete a VMT assessment. These types of projects include K-12 schools, local serving retail, day care centers, gas station, banks, and student housing. The project does not propose a local-serving use, as defined in the guidelines, and therefore would not be considered a local serving land use. Criteria 2 would not apply.

Screening Criteria 3 – High Quality Transit Area (HQTA) Screening: According to the City’s guidelines, projects located in a HQTA, defined as within one half mile of an existing major transit stop or from an existing stop along a high-quality transit corridor, may be presumed to have a less than significant impact. The project is not located in a HQTA, therefore the project would not satisfy the requirements of Screening Criteria 3 – TPA screening.

Screening Criteria 4 - Low VMT Area Screening: The City’s guidelines include a screening threshold for projects located in a low VMT generating area. A low-VMT generating area is defined as 15% below the City of Colton’s average VMT from the 2016 Baseline. The guidelines provide a map showing the low-VMT generating zones within the City (see attached Figure 3). As shown in Figure 3, the project is not located in a low VMT area. Therefore, the project would not satisfy the requirements of Screening Criteria 4 – Low VMT Area Screening.

Summary

As shown in Tables 1 and 2, the worst-case trip generation for the project is found using the ITE trip rates, which would result in a trip generation of 428 daily PCE trips including 65 trips during the AM peak hour and 57 trips during the PM peak hour. The County’s Guidelines do not require projects to prepare a LOS analysis if they generate fewer than 100 peak hour trips. Based on the peak hour trip generation of 65 PCE trips (inclusive of both cars and trucks) during the AM peak hour and 57 PCE trips during the PM peak hour, the project would not meet the County threshold for preparation of a LOS TIA.

The project was evaluated using the VMT screening thresholds in the City of Colton Vehicle Miles Traveled Guidelines (June 2, 2020) to determine if the project would require a vehicle miles traveled (VMT) analysis. The project would meet the City’s screening criteria for projects generating fewer than 110 daily automobile trips. Therefore, the project VMT impacts would be considered less than significant and further analysis of VMT would not be required.

If you have any questions about this information, please contact me at (949) 794-1186 or meghan@epdsolutions.com.

Figure 1: Project Location



Figure 2: Project Site Plan

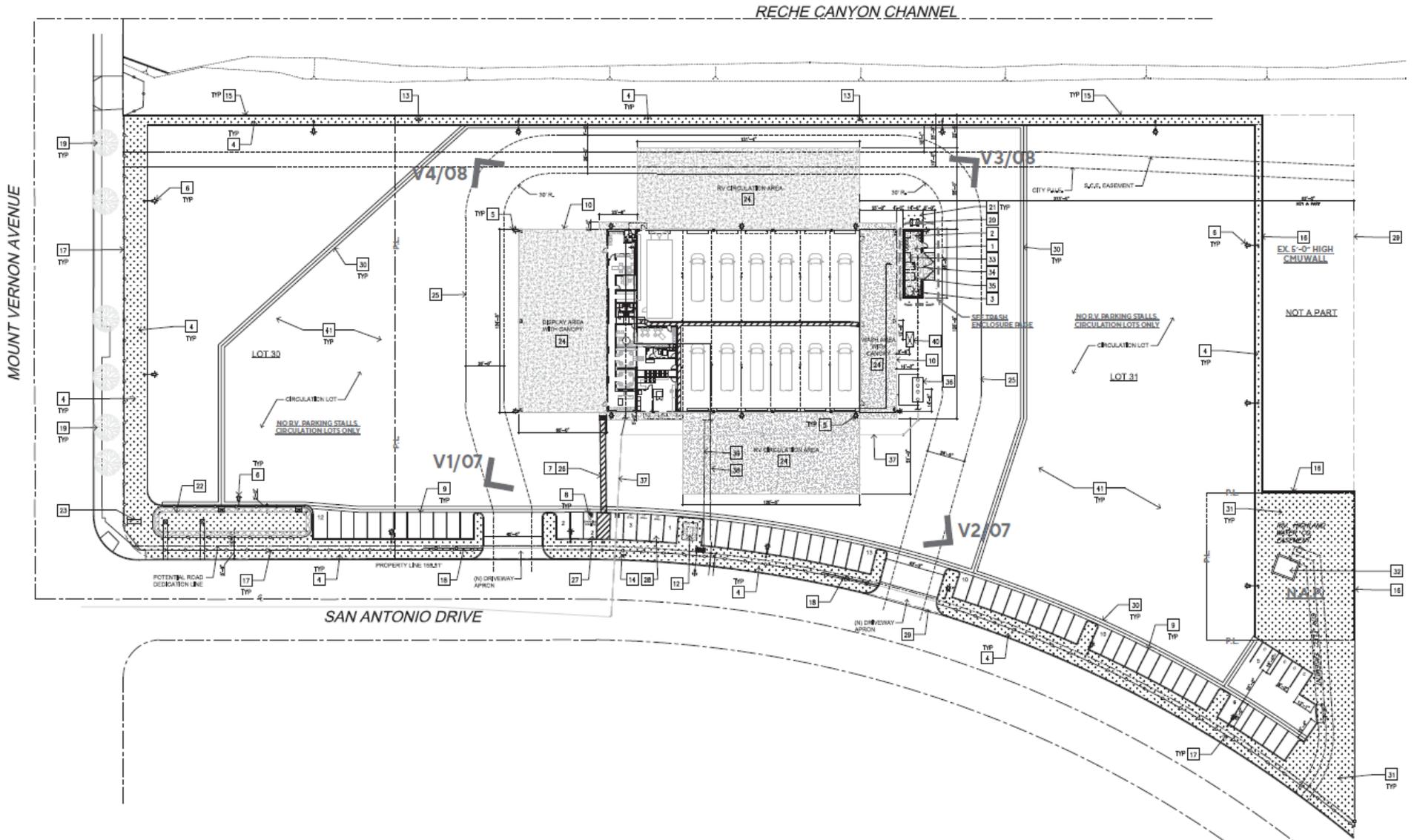


Table 1: Project Trip Generation using Project Operation

Land Use	AM Peak Hour			PM Peak Hour			
	Daily	In	Out	Total	In	Out	Total
<i>Project Trip Generation (Total Trips)</i>							
<i>Passenger Car Trips</i>							
Office (7 Employees) ¹	21	7	0	7	0	7	7
Service (10 Employees) ¹	10	10	0	10	0	10	10
Total Passenger Car Trips	31	17	0	17	0	17	17
<i>Truck Trips</i>							
RV Delivery (10 per day) ²	40	2	2	4	2	2	4
<i>PCE Trip Generation⁴</i>							
	<i>PCE Factor</i>						
Passenger Vehicles	1.0	31	17	0	17	0	17
4+-Axle Trucks	3.0	120	6	6	12	6	12
Total Project PCE Trip Generation		151	23	6	29	6	23

PCE = Passenger Car Equivalent

¹ Daily employee trips assume that up to half of employees will leave work during the day for lunch or other personal reasons. Some employees may arrive and depart during off-peak hours. However for a conservative estimate, all employees are assumed to arrive or depart during peak hours.

² RVs may be towed or driven to the facility. For the most conservative analysis, it is assumed that all RVs are towed to and from the site.

⁴ Passenger Car Equivalent (PCE) factors from San Bernardino County CMP, Appendix B - Guidelines for CMP Traffic Impact Analysis Reports in San Bernardino County, 2016

Table 2: Project Trip Generation using ITE Trip Rates

Land Use		Daily	AM Peak Hour			PM Peak Hour			
			In	Out	Total	In	Out	Total	
<u>Trip Rates</u>									
	<u>Units</u>								
	General Light Industrial ¹	TSF	4.87	0.65	0.09	0.74	0.09	0.56	0.65
<u>Project Trip Generation (Total Trips)</u>									
	Proposed Commercial Building	25.287 TSF	123	16	2	19	2	14	16
<u>Vehicle Mix</u> ²		<u>Percent</u>							
	Passenger Vehicles	72.50%	89	12	2	14	2	10	12
	2-Axle Trucks	4.60%	6	1	0	1	0	1	1
	3-Axle Trucks	5.70%	7	1	0	1	0	1	1
	4+-Axle Trucks	17.20%	21	3	0	3	0	2	3
Total PCE Trip Generation		100%	123	16	2	19	2	14	16
<u>PCE Trip Generation</u> ³		<u>PCE Factor</u>							
	Passenger Vehicles	1.0	6	1	0	1	0	1	1
	2-Axle Trucks	1.5	11	1	0	2	0	1	1
	3-Axle Trucks	2.0	42	6	1	6	1	5	6
	4+-Axle Trucks	3.0	369	49	7	56	7	42	49
Total PCE Trip Generation			428	57	8	65	8	49	57

TSF = Thousand Square Feet, PCE = Passenger Car Equivalent

¹ Trip rates from the Institute of Transportation Engineers, Trip Generation, 11th Edition, 2021. Land Use Code 140 - General Light Industrial.

² Truck splits from the SCAQMD Warehouse Truck Trip Study. July 17, 2014.

³ Passenger Car Equivalent (PCE) factors from San Bernardino County CMP, Appendix B - Guidelines for CMP Traffic Impact Analysis Reports in San Bernardino County, 2016

Figure 3: Low VMT Area Screening

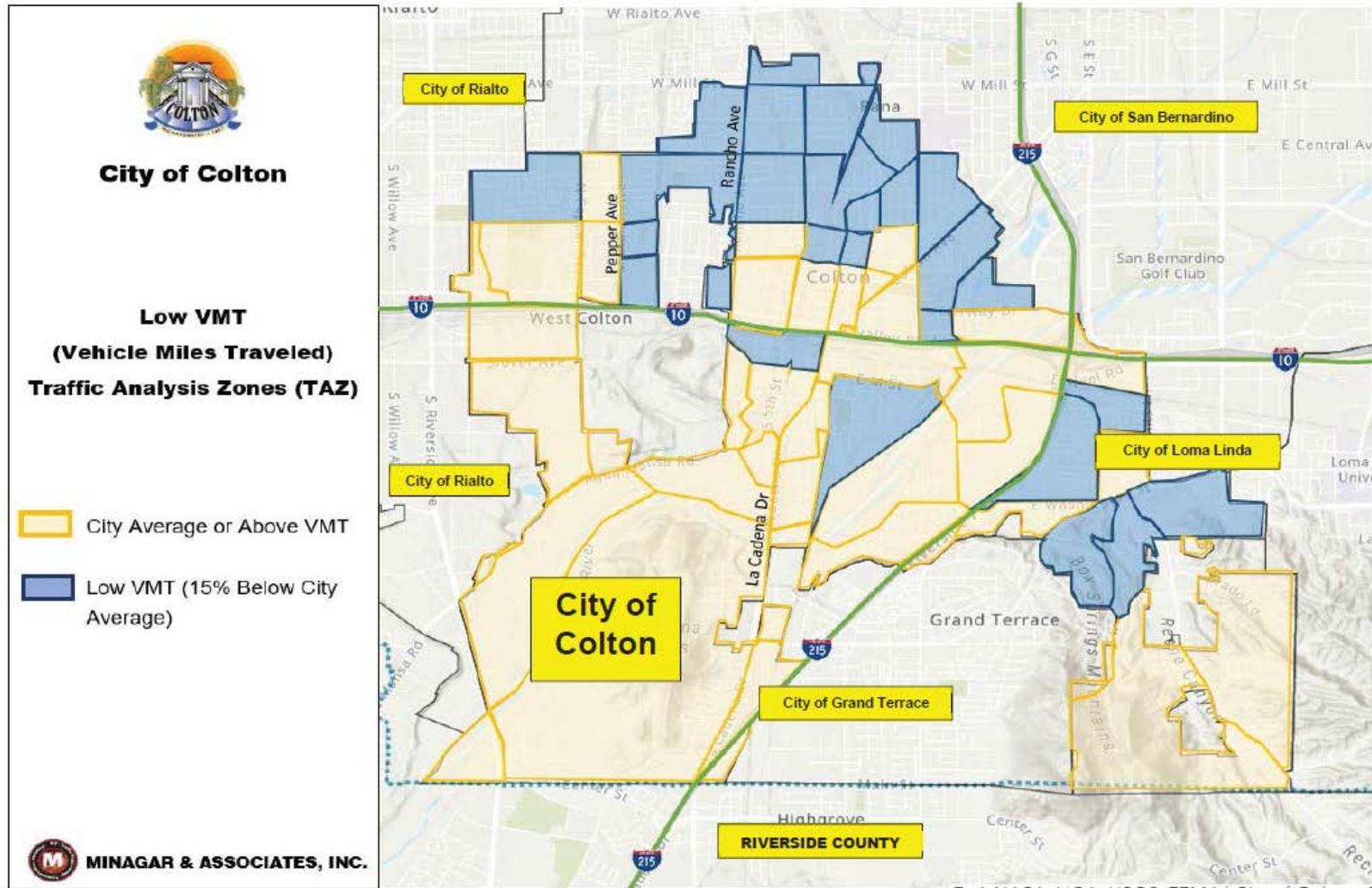


Figure 12: City of Colton Low Vehicle Miles Traveled, Traffic Analysis Zone