

7-11 Mission Avenue and Rock Springs Gas Station Project (APN: 228-220-13-00 & 228-220-43-00) Vehicle Miles Traveled (VMT) Analysis

Prepared for:

The Altum Group

73-710 Fred Waring Drive, Ste. 219
Palm Desert, CA 92260

Prepared by:



INTEGRATED ENGINEERING GROUP
TRANSPORTATION PLANNING & ENGINEERING CONSULTING

23905 Clinton Keith 114-280
Wildomar, CA 92595

EXECUTIVE SUMMARY

The purpose of this report is to evaluate the project's VMT analysis requirements and compliance with Senate Bill 743 (SB 743) and the California Environmental Quality Act (CEQA).

PROJECT DESCRIPTION

The project is located on northwest corner of Rock Spring Road and West Mission Avenue in the City of Escondido. The project is designated as a redevelopment/infill project. The existing land use currently occupying the subject site is a used automobile dealership that consists of a 4,800 square foot building which will be demolished and replaced with a new gas station that consists of 16 fueling positions (8 dispenser pumps) and a 4,000 square foot convenience store including 51 square foot office and 2,615 square foot retail spaces.

SB 743

On September 27, 2013, Senate Bill (SB) 743 was signed into State law and started a process intended to fundamentally change transportation impact analysis as part of the California Environmental Quality Act (CEQA) compliance. The California Natural Resource Agency updated the CEQA transportation analysis guidelines in 2018. In this update automobile delay and level of service (LOS) metrics are no longer to be used in determining transportation impacts. After July 1, 2020, transportation analysis under CEQA must use VMT to determine impacts for land use projects.

VMT ANALYSIS GUIDELINES

The project is within the jurisdiction of the City of Escondido (City). The City currently does not have guidance on evaluating VMT for transportation impacts under CEQA. In absence of direct guidance from the lead agency, statewide guidance¹ and local regional guidance² was used as the basis to evaluate VMT for this project.

SCREENING CRITERIA

As part of CEQA streamlining, certain projects based on type, location, size and other contexts could lead to a *presumption of less than significance* (i.e. the project's VMT would not cause a transportation impact) and does not need additional VMT analysis. For this project, of the screening criteria suggested by available guidelines the potential screening criteria were: 1) Small Project Threshold; 2) Redevelopment; and 3) Local Retail.

SCREENING CRITERIA EVALUATION

Small Project Threshold: If the project sufficiently small enough it is reasonable to assume that the project's effect on VMT is negligible. The threshold for both guidelines is ADT based.

¹ "Technical Advisory On Evaluating Transportation Impacts in CEQA." Office of Planning & Research (OPR).

² "Guidelines for Transportation Impact Studies in the San Diego Region." Institute of Traffic Engineers (ITE), San Diego Section.

The project would exceed all recommended small project thresholds³. This project will not generate or attract fewer than 110 trips per day; therefore, does not qualify for the small project screening criteria and could warrant more analysis if no other screening criteria applies.

Redevelopment: Redevelopment projects that result in a net decrease in overall VMT would lead to a less than significant transportation impact.

This project would not satisfy the requirement for the *Redevelopment Screening Criteria* since it will generate a net increase of 1,650 trips per day and; therefore, could warrant more analysis if no other screening criteria applies.

Local Retail: This type of retail tends to shorten trips and thus reduce VMT. A presumption of less than significance can be applied for this type of development.

Based on the following factors this project can be described as a local retail project:

- *Project Size: Both guidelines recommend that any retail development larger than 50,000 square feet should perform a detailed VMT analysis. The project is proposing a 4,000 square feet convenience store, VMT analysis would not be required based on the size of the proposed retail.*
- *Local Zoning Definition: The project proposes to change the zoning of the project site to CG – General Commercial that is defined in the City of Escondido General Plan as: “A broad range of retail and service activities, including **local-serving** commercial, community shopping/office complexes, automobile sales and service, eating and drinking establishments, entertainment facilities.” (City of Escondido General Plan, Page II-23)*
- *“Expected” Market Capture: Absent a detailed market study/analysis. The proposed project appears to provide a closer alternative of similar services to the residential north of SR-78 and the businesses and industries west of the I-15. Furthermore, as the proposed project is similar to those that already exist in the area, it is unlikely that it would draw in additional trips but would rather redistribute trips in the area as a closer alternative for some customers.*

CONCLUSION

Based on the VMT assessment and technical information provided in this report, it is determined that the proposed project designation is a locally serving land use and any potential project VMT related impacts would be *presumed to be less than significant*. Therefore, it is our recommendation that this project be approved with no additional VMT analysis.

³ See Table 2

Table of Contents

EXECUTIVE SUMMARY.....	2
PROJECT DESCRIPTION	2
SB 743	2
VMT ANALYSIS GUIDELINES	2
SCREENING CRITERIA	2
SCREENING CRITERIA EVALUATION	2
CONCLUSION	3
1.0 PROJECT INTRODUCTION	1
PROJECT DESCRIPTION	1
SENATE BILL 743	1
GUIDENCE DOCUMENTS	1
2.0 ANALYSIS.....	4
SCREENING CRITERIA	4
OFFICE OF PLANNING & RESEARCH GUIDELINES SCREENING CRITERIA	4
REGIONAL GUIDELINES SCREENING CRITERIA	5
SMALL PROJECT/MINIMUM PROJECT SIZE THRESHOLD	5
REDEVELOPMENT.....	7
LOCAL RETAIL	7
<i>Project Size</i>	8
<i>“Expected” Market Capture</i>	9

List of Figures

FIGURE 1-1 – PROJECT SITE PLAN	3
FIGURE 1: GAS STATIONS WITHIN THE VICINITY OF PROJECT SITE	9
FIGURE 2: CONVENIENCE STORES ADJACENT TO PROJECT SITE	10

List of Tables

TABLE 1: SMALL PROJECT/MINIMUM PROJECT SIZE THRESHOLDS	6
TABLE 2: PROJECT TRIP GENERATION	6
TABLE 3: NET VMT FOR REDEVELOPMENT SCREENING CRITERIA.....	7

1.0 PROJECT INTRODUCTION

The purpose of this report is to evaluate the project's VMT analysis requirements and compliance with Senate Bill 743 (SB 743) and The California Environmental Quality Act (CEQA).

PROJECT DESCRIPTION

The project is located on northwest corner of Rock Spring Road and West Mission Avenue in the City of Escondido. The project is designated as a redevelopment/infill project. The existing land use currently occupying the subject site is a used automobile dealership that consists of a 4,800 square foot building which will be demolished and replaced with a new gas station that consists of 16 fueling positions (8 dispenser pumps) and a 4,000 square foot convenience store including 51 square foot office and 2,615 square foot retail spaces.

Figure 1-1 shows the Project site plan.

SENATE BILL 743

On September 27, 2013, SB 743 was signed into State law and started a process intended to fundamentally change transportation impact analysis as part of the CEQA compliance. The California Natural Resource Agency updated the CEQA transportation analysis guidelines in 2018. In this update automobile delay and LOS metrics are no longer to be used in determining transportation impacts. Instead VMT metrics will serve as the basis in determining impacts. Furthermore, the guidelines stated that after July 1, 2020, transportation analysis under CEQA must use VMT to determine impacts for land use projects.

GUIDENCE DOCUMENTS

The project is within the jurisdiction of the City of Escondido. The City currently does not have guidance on evaluating VMT for transportation impacts under CEQA. In absence of direct guidance from the lead agency, there are two guidance documents available for reference:

1. "Technical Advisory on Evaluating Transportation Impacts in CEQA." Office of Planning & Research (OPR). December 2018.⁴
2. "Guidelines for Transportation Impact Studies in the San Diego Region." Institute of Traffic Engineers (ITE), San Diego Section. May 2019.⁵

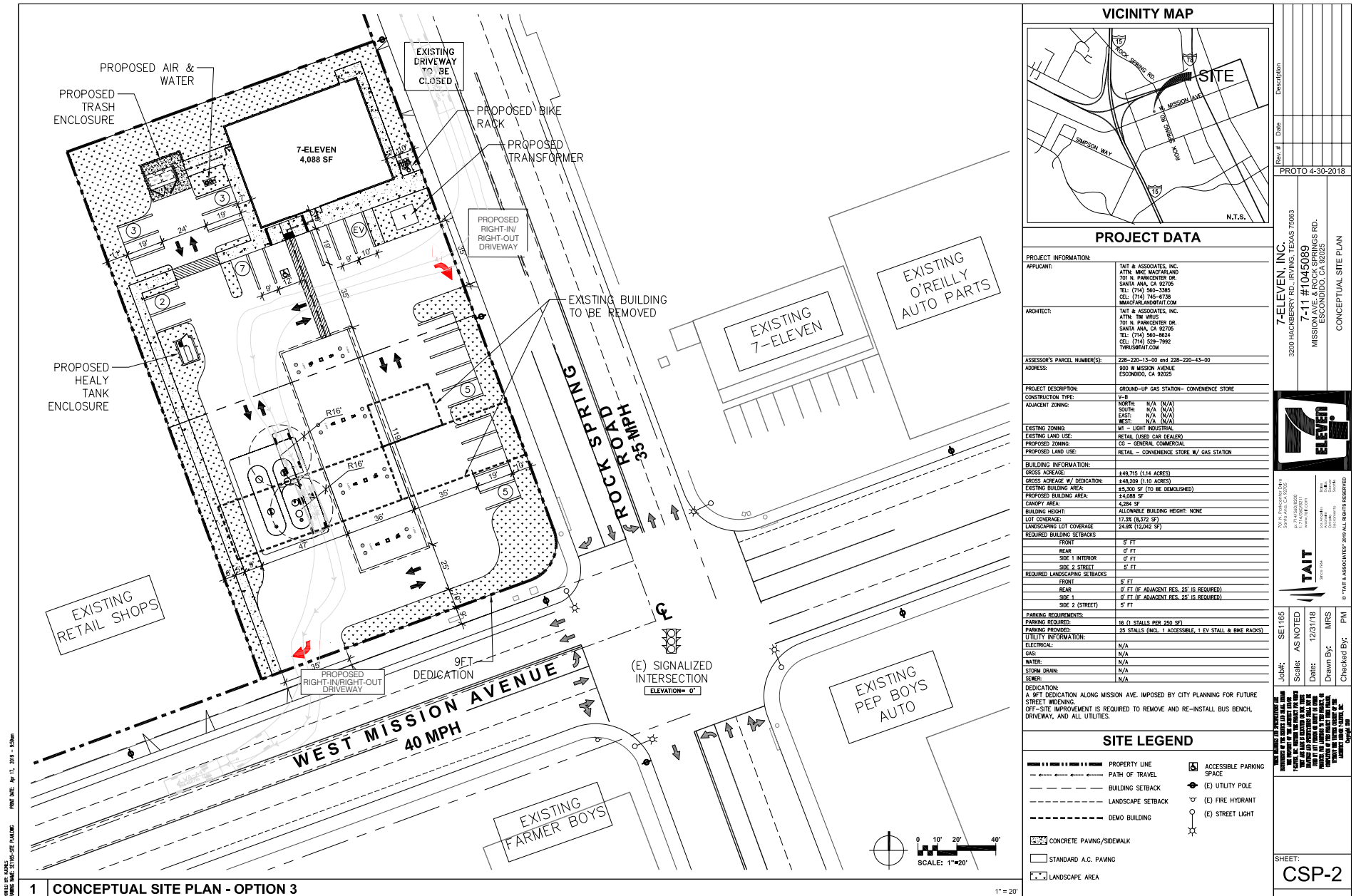
As part of the mandate of SB 743, California Governor's Office of Planning and Research (OPR) was tasked with producing a guidance document for local agencies to use when evaluating transportation

⁴ http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

⁵

<https://static1.squarespace.com/static/5ab6b8a33e2d09b08935bcb1/t/5d0c2f9ce5c55900014494ee/1561079734160/Guidelines+for+TIS+in+the+San+Diego+Region+-+May+2019.pdf>

impacts using VMT, hereafter referred to as the OPR Guidelines. The San Diego Section of the Institute of Transportation Engineers (ITE) then refined and built upon OPR's recommendations incorporating the local context of the San Diego region, hereafter referred to as the Regional Guidelines. These two documents will serve as the basis for the project VMT analysis.



2.0 ANALYSIS

SCREENING CRITERIA

Office of Planning & Research Guidelines Screening Criteria

The OPR Guidelines recognize that certain projects based on type, location, size and other contexts could lead to a *presumption of less than significance* (i.e. the project's VMT would not cause a transportation impact) and would not need additional VMT analysis. The OPR Guidelines recommend the following screening criteria:

1. *Small Project Threshold*: If the project sufficiently small enough it is reasonable to assume that the project's effect on VMT is negligible. OPR recommends a small project threshold of 110 ADT based on CEQA guidelines § 15301, subdivision (e)(2).
2. *Map Based Screening for Residential and Office Projects*: A regional travel demand model could be used map areas that are VMT efficient (i.e. low VMT per Capita). It is assumed that projects in such areas would likely take on similar VMT characteristics of the area and therefore detailed VMT analysis would not be needed.
3. *Proximity to Transit Stations*: OPR recommends that certain projects within ½ mile of an *existing major transit stop*⁶ or stop along a high-quality transit corridor⁷ have a presumption of less than significance for VMT related impacts unless project specific characteristics would invalidate this presumption including but not limited to:
 - a. Floor Area Ratio (FAR) of less than 0.75.
 - b. Includes more parking than is required by the jurisdiction.
 - c. Inconsistent with Sustainable Communities Strategy (SCS).
 - d. Replaces affordable residential units with a smaller number of moderate or high-income residential units.
4. *Affordable Housing*: Studies have shown that affordable housing developments in infill areas tend to generate lower VMT on average by reducing commuting distances.
5. *Redevelopment Projects*: Redevelopment projects that result in a net decrease in overall VMT would lead to a less than significant transportation impact. If the end result is a net increase in VMT, the VMT should be analyzed in more detail. Also, should the redevelopment replace affordable housing (including naturally occurring) with less moderate or high-income housing units, the VMT of the displaced residents should be analyzed.

⁶ 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.").

⁷ 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.")

6. *Local Retail*: This type of retail tends to shorten trips and thus reduce VMT. A presumption of less than significance can be applied for this type of development. OPR leaves the definition of *local retail* to the discretion of the local jurisdictions but generally states that stores greater than 50,000 square feet should not be considered as local retail.

As primarily a retail project (gas station with convenience store), of the six (6) possible screening criteria (as recommended by OPR) only #1 Small Project Threshold, #5 Redevelopment Projects and #6 Local Retail could potentially apply to this project. Screening criteria #2 and #4 would not apply as those specifically apply to residential, affordable housing and office projects. Finally, screening criteria #3 would not apply, as the project location is not within ½ mile of a major transit stop or stop along a high-quality transit corridor.

Regional Guidelines Screening Criteria

As stated previously, the Regional Guidelines use the OPR Guidelines as the basis of it of its recommendations. As a result, the screening criteria recommended by the Regional Guidelines are similar to those recommended OPR Guidelines. However, the Regional Guidelines has a *Minimum Project Size* screening criteria that is analogous to the OPR's *Small Project Threshold*. However, instead of the 110 ADT threshold proposed by OPR the Regional Guidelines propose two (2) alternatives:

1. *Minimum Project Size based on Previous TIS Guidelines*: This uses previous project size thresholds used for decades in the region.

Projects Inconsistent with General Plan or Community Plan	
<u>ADT</u>	<u>Level of Analysis</u>
0 – 500	VMT Analysis Not Needed/VMT Impacts Presumed Less Than Significant
500 and Greater	VMT Analysis Recommended
Projects Consistent with General Plan or Community Plan	
<u>ADT</u>	<u>Level of Analysis</u>
0 – 1,000	VMT Analysis Not Needed/VMT Impacts Presumed Less Than Significant
1,000 and Greater	VMT Analysis Recommended

Source: "Guidelines for Transportation Impact Studies in the San Diego Region." Institute of Traffic Engineers (ITE), San Diego Section. May 2019. Pg. 4-3

2. *Minimum Project Size based on Statewide Guidance*: Using localized trip generation rates; use a method similar to OPR's in developing the 110 ADT threshold. For SANDAG rates the threshold would be 200 ADT.⁸

These alternatives will be considered in determining if this project would be screened out as *small project*.

Small Project/Minimum Project Size Threshold

Projects below a certain size would generate an amount of trips that would produce negligible effects on overall VMT and could be presumed to be less than significant. Although is no set size or amount

⁸ "Guidelines for Transportation Impact Studies in the San Diego Region." Institute of Traffic Engineers (ITE), San Diego Section. May 2019. Pg. 4-3.

of trips universally accepted in California, both the OPR Guidelines and Regional Guidelines put forth their own recommendations for local jurisdictions to consider. A summary of these threshold are shown in Table 1

Table 1: Small Project/Minimum Project Size Thresholds

Small Project/Minimum Project Size Threshold	
OPR Guidelines	110 ADT
Regional Guidelines Alt 1a Consistent with GP	1000 ADT
Regional Guidelines Alt 1b Inconsistent with GP	500 ADT
Regional Guidelines Alt 2 SANDAG Rates	200 ADT

The proposed project is a gas station with a convenience store. Trip generation for this project based on SANDAG's "(Not So) Brief Guide on Vehicular Traffic Generation Rates for the San Diego Region,"⁹ and is shown in Table 2:

Table 2: Project Trip Generation

Land Use	Intensity	Units ¹	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Service Station									
Convenience Market (w/gasoline pumps)	2.615	TSF	67	67	134	78	78	156	2,223
Pass-by Reduction (50% PM, 15% ADT) ²						39	39	78	333
Office	0.051	TSF	0	0	0	0	0	0	1
Subtotal			67	67	134	39	39	78	1890
Existing Automobile Sales (Trip Credit)	4.8	TSF	8	4	12	8	12	19	240
TOTAL			59	63	122	31	28	59	1,650

¹TSF = Thousand Square Feet

² Pass-by reduction percentage is based on SANDAG Trip Generation Brief Guide of Vehicular Traffic Generation Rate

Without taking credit for the existing use and pass by trips, the project's total daily trip generation would be 2,224 ADT. This exceeds all recommended small project/minimum project size thresholds. This project does not qualify for the small project/minimum project size screening criteria and could warrant more analysis if no other screening criteria applies.

⁹ https://www.sandag.org/uploads/publicationid/publicationid_1140_5044.pdf

Redevelopment

As stated previously, the *Redevelopment Screening Criteria* is available to redevelopment projects that can show an overall reduction in VMT (i.e. a net decrease in VMT). Meeting this criterion would imply that proposed project would not have a VMT related impact.

The most direct way to calculate VMT is to multiply the amount of trips by an average trip length.

$$[\# \text{ of Trips}] \times [\text{Average Trip Length}] = \text{Vehicle Miles Traveled}$$

In addition to providing trip rates, SANDAG's "(Not So) Brief Guide on Vehicular Traffic Generation Rates for the San Diego Region" provides trip lengths for the various land use types. The following is the VMT for both the existing and proposed land uses and the overall net VMT:

Table 3: Net VMT For Redevelopment Screening Criteria

	Daily Trips ¹	Average Trip Length ²	VMT ³
Existing Land Use			
Used Car Dealership	240	2.8	672
Proposed Land Use			
Gas Station w/Convenience Store	2223	2.8	6224.4
Office	1	8.8	8.8
Proposed Land Use Total VMT			6233.2
Net VMT (Proposed - Existing)			5561.2

¹Source:Table 2:Project Trip Generation

²Source:(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego

³Formula: Daily Trips x Average Trip Length

As shown in Table 3, the *Net VMT* of this redevelopment project would result in an increase of 5,561.2 VMT, largely due to the fact the *Average Trip Length* for both uses are the same. As a result, this project would not satisfy the requirement for the *Redevelopment Screening Criteria* and could warrant further analysis if no other screening criteria apply

Despite showing an increase in VMT at the site level, it is not indicative that there would be a VMT impact. For retail projects, the recommended threshold is Net VMT over a study area as to capture the effects on trip making decisions in the area due to the proposed land use.

Furthermore, it should be noted that this is a simplistic and direct way to calculate VMT that does not take into the account the effect of introducing a gas station with a convenience store into built urban environment. Most likely, trips would be redistributed on the network, as the proposed land use itself is not generator of traffic.

Local Retail

Both the OPR Guidelines and the Regional Guidelines have screening criteria for *local retail* with the latter largely relying on the former. OPR's guidance on *local retail* is the following:

“By adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT. Thus, lead agencies generally may presume such development creates a less-than-significant transportation impact.” (OPR Guidelines, Page 16)

Although, OPR reserves the actual definition of “local-serving retail” to local jurisdictions it does provide general guidance in determining if a project is a local retail. This includes:

- Project Size
- Local Zoning Definitions
- Expected Market Capture

Project Size

The OPR Guidelines recommend the following in respect to project size and local retail:

“Generally, however, retail development including stores larger than 50,000 square feet might be considered regional-serving, and so lead agencies should undertake an analysis to determine whether the project might increase or decrease VMT.” (OPR Guidelines, Page 17)

As stated, OPR is recommending that any retail development larger than 50,000 square feet should perform a detailed VMT analysis. As the project is proposing a 4,088 square feet convenience store, it is implied further VMT analysis would not be required based on the size of the proposed retail.

Local Zoning Definitions

It should be noted that OPR defers to the local jurisdictions in defining what constitutes “local retail” by stating:

“Many cities and counties define local-serving and regional-serving retail in their zoning codes. Lead agencies may refer to those local definitions when available...” (OPR Guidelines, Page 16)

The project is proposing a zoning change in order to redevelop the existing used car dealership into the proposed gas station with convenience store. Specifically, the project is requesting that existing zoning M1 – Light Industrial be changed to CG – General Commercial. Furthermore, according the City of Escondido General Plan¹⁰ the definition of CG – General Commercial is as follows:

“A broad range of retail and service activities, including local-serving commercial, community shopping/office complexes, automobile sales and service, eating and drinking establishments, entertainment facilities.” (City of Escondido General Plan, Page II-23)

As shown in the above, “local-serving commercial” is included in the definition for the proposed zoning of the project site.

¹⁰ <https://www.escondido.org/Data/Sites/1/media/PDFs/Planning/GPUUpdate/GeneralPlanChapterII.pdf?v=2>

“Expected” Market Capture

The basic description of “local retail” by OPR is simply an establishment that would shorten trips and not attract trips that would otherwise choose a closer alternative.

In absence of detailed market study, a google map search of similar services that would be provided by the proposed project in the vicinity was conducted in order to visualize the potential market capture area.

Figure 1: Gas Stations Within the Vicinity of Project Site



As shown in Figure 1, the blue marker represents the project location and the red markers are gas stations that are located within the vicinity of the project site of which the nearest gas station is 0.6 miles to the east. In terms of location and comparison to other sites that provide similar services in the area, the proposed project will provide a closer alternative to the residential land uses located north of State Route 78 (SR-78) and businesses/industries located west of Interstate 15 (I-15).

Figure 2: Convenience Stores Adjacent to Project Site



As shown in figure 2, the blue marker represents the project location where the red markers represent the nearest convenience store within the vicinity of the project site including the existing 7/11 convenience store that is located just east of the project site along the east side of Rock Spring Road. Similar to the gas stations assessment shown in Figure 1, this project convenience store would also provide a closer alternative to the residential land uses north of SR-78 and the businesses/industries located west of I-15.

Furthermore, since the proposed project is anticipated to provide similar services to those that already exist in the area, it is unlikely that it would draw additional trips but rather redistribute existing trips within the area.

Conclusion

Based on the VMT assessment and technical information provided in this report, it is determined that the proposed project land use designation is a locally serving land use and any potential project related VMT impacts would be *presumed to be less than significant*. Therefore, it is our recommendation that this project be approved with no additional VMT analysis.