ALVARADO SPECIFIC PLAN

Transportation Report Part I:

CEQA Transportation Impact Analysis (VMT-Based)

MARCH 2020

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EXECUTIVE SUMMARY

This transportation impact study has been prepared to evaluate the project-related transportation impacts and effects associated with the proposed development of the Alvarado Specific Plan (Project) in anticipation of the City of La Mesa's (City's) adoption of new guidelines that comply with SB 743 requirements. The City is responsible for developing or adopting guidelines by July 1, 2020.

Two documents have been developed to assist agencies with implementing guidelines in compliance with SB 743. At the date of this report, the City has not formally adopted either of the following documents:

1. **OPR Technical Advisory** – The Governor's Office of Planning and Research (OPR) prepared a Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR Technical Advisory), which was published in December 2018, and provides recommendations for preparation of transportation impact analyses under SB 743. The technical advisory provides statewide guidance that can be modified by local agencies with justification and evidence.

2. **Institute of Transportation Engineers (ITE) Draft Guidelines** – A draft technical paper was also produced by the ITE San Diego Section, Transportation Capacity and Mobility Task Force, SB 743 Subcommittee, but has not been formally adopted by ITE. The ITE Guidelines for Transportation Impact Studies in the San Diego Region (ITE Draft Guidelines) support OPR's methodology for VMT-based analysis, with regard to CEQA compliance, but in addition recommends the continued use of delay and LOS traffic standards and analysis for local land use decisions to determine "when roadway improvements should be considered" (page 7-5). Therefore, the ITE Draft Guidelines have supplemented the VMT-based analysis with the ITE-recommended local transportation analysis (LTA).

Part I of this report documents the VMT analysis and results in accordance with the OPR Technical Advisory, while Part II documents the results of the LOS-based local transportation analysis in accordance with the ITE Draft Guidelines. Part II of this report may not be required if the City were to adopt or implement just the OPR guidelines, however, with direction from the City of La Mesa staff for this project, Part II has been provided to inform decision-makers during this transition period from LOS-based to VMT-based analysis. Both transportation analysis methodologies are provided to assist in a comprehensive evaluation of the proposed Alvarado Specific Plan.

At the time this report was written the City of La Mesa has not updated their TIA guidelines, this report considers all possibilities for the City either adopting a published technical document or developing City of La Mesa-specific guidelines.

<u>Part I Analysis Process and Results</u>

Part I of this study is focused on a VMT-based analysis. This study provides methodologies and significance thresholds in compliance with SB 743 based on the OPR Technical Advisory.

The Part I CEQA analysis concludes the project will be exempt from detailed VMT analysis or may be presumed to have a less-than-significant impact on VMT based on the proximity to a major transit station.

In the case that the City adopts guidelines that does not exempt a project for proximity to transit, a modeling approach would be used to determine the VMT per Capita and VMT per Employee. This process was investigated in case it is required for the City's adopted guidelines, as well as to provide a more comprehensive perspective on the project. The model output indicates the TAZ where the project is located will result in VMT per Capita of approximately 88% of the regional average, exceeding the 85% threshold, as shown below in **Table E-1**. However, various project features are anticipated to reduce the project VMT below the regional average, deeming the project less-than-significant.

Table E-1 SANDAG Regional Model VMT Output Results

VMT per Resident				
Scenario	**Residents**	**Total Trips**	**VMT**	**VMT per Capita**
Regionwide	3,855,696	13,756,249	58,989,617	15.3
City of La Mesa	72,248	264,684	1,011,045	14.0
Alvarado Specific Plan	2,112	7,766	28,418	13.5
Source: San Diego Association of Governments (SANDAG) – October 2019				

Project Information

The Project is located south of Interstate 8 (I-8) along Alvarado Road between 70th Street and Comanche Drive, adjacent to the 70th Street Trolley Station. The Project is proposing to construct four multi-family housing buildings with an upper estimate of approximately 950 total dwelling units (du) in place of the existing San Diego RV Resort in the City of La Mesa. The housing is anticipated to attract off-site student and faculty housing for San Diego State University (SDSU) due to proximity and ease of access to the Green Line Trolley. The Trolley stops at the heart of SDSU's campus and adjacent to the Project site with only one stop in between, making transit an enticing commute option over finding and paying for parking on campus.

As part of the Project, 15,000 sf of commercial space will be provided within the buildings for residential amenities. The Project will provide three general access points via Alvarado Road, and one emergency access which would provide connection to the parking garage entrances along an internal roadway on the south side of the development.

The Project will also provide multi-modal transportation improvements to enhance access to and from the major transit station and to downtown La Mesa to discourage single-occupancy vehicle trips. A shared-use path will be constructed along the south side of Alvarado Road in front of the project site, and connect to the transit station, providing a seamless connection for pedestrians and bicycles between the project site and the 70th Street Trolley Station. The shared-use path will continue to the east side of the project site, with a bridge structure over the creek, and connect to the future Class II and III bike facilities planned by the City.

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1 INTRODUCTION

Senate Bill (SB) 743 was approved by the California legislature in September 2013. SB 743 requires changes to California Environmental Quality Act (CEQA), specifically directing the Governor's Office of Planning and Research (OPR) to develop alternative metrics to the use of vehicular "level of service" (LOS) for evaluating transportation projects. OPR has updated guidelines for CEQA and written a technical advisory for evaluating transportation impacts in CEQA and has set a deadline of July 1, 2020 for local agencies to update their CEQA transportation procedures. OPR has recommended that Vehicle Miles Travelled (VMT) replace LOS as the primary measure of transportation impacts.

- ***CEQA Guidelines Revisions[1]:*** Revisions to the CEQA Guidelines are made through a formal process conducted by the Natural Resources Agency. Changes can only be made through a future CEQA update process.

- ***Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR Technical Advisory)[2]:*** The technical advisory provides recommendations for the preparation of transportation impact analyses under SB 743. Updates to the document are expected to be issued by OPR as new information becomes available and as California agencies gain experience in applying SB 743. The technical advisory provides statewide guidance based on evidence collected by OPR that can be refined or modified.

Part I of the report has been developed in accordance with the OPR Technical Advisory.

[1] California Environmental Quality Act (CEQA) Guidelines are found at the California Code of Regulations, Title 14, Section 150000.

[2] State of California Governor's Office of Planning and Research, *Technical Advisory on Evaluating Transportation Impacts in CEQA,* December 2018.

2 METHODOLOGY

This section of the report outlines the recommended process for developing CEQA documents in accordance with SB 743 based on the OPR Technical Advisory. The Technical Advisory provides agencies with recommendations on screening thresholds, VMT analysis methodologies, project VMT thresholds, and mitigation strategies. At the date of this report, the City of La Mesa had not implemented VMT-based guidance.

2.1 SCREENING THRESHOLDS FOR LAND DEVELOPMENT PROJECTS

Screening thresholds are used to identify projects that are anticipated to result in less-than-significant impact without requiring a detailed transportation study. OPR recommends agencies develop thresholds to screen out projects based on project size, maps, transit availability, and provision of affordable housing.

2.1.1 PROJECT SIZE

Projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact.

2.1.2 SCREENING MAPS

Maps created with VMT data, for example from a travel survey or a travel demand model, can illustrate areas that are currently below threshold VMT, and would likely result in similar levels of VMT with new development can be used to screen residential and office projects.

2.1.3 PROXIMITY TO TRANSIT

Lead agencies generally should presume that certain projects (including residential, retail, and office projects, as well as projects that are a mix of these uses) proposed within ½ mile of an existing major transit stop or an existing stop along a high-quality transit corridor will have a less-than-significant impact on VMT.

2.1.4 AFFORDABLE RESIDENTIAL DEVELOPMENT

A 100 percent affordable residential development (or the residential component of a mixed-use development) in infill locations may be presumed to cause a less-than significant transportation impact.

2.2 VMT ANALYSIS THRESHOLDS

CEQA leaves it to the discretion of the lead agency to determine the VMT analysis methodology and thresholds, and the OPR Technical Advisory provides suggested methodologies to analyze VMT associated with a project. For residential and office projects, tour- and trip-based approaches are recommended for assessing project VMT and comparing to the VMT thresholds.

The OPR Technical Advisory provides recommended numeric thresholds for residential, office, and retail land use projects, as summarized below:

Table 2-1 OPR VMT Thresholds

Land Use	Threshold
Residential	VMT/capita or VMT/employee exceeding 85% of city or regional average → significant transportation impact
Office	VMT/employee exceeding 85% of regional average → significant transportation impact
Retail	Net increase in total VMT → significant transportation impact

2.3 PROJECT MITIGATION

If a project is expected to generate significant impacts as a result of exceeding the identified thresholds, improvement measures must be identified to reduce the project's impact. Lead agencies are given discretion to identify improvement strategies and the level of impact reduction to be anticipated by each strategy. Improvements can be physical improvements to the transportation network, or non-infrastructure strategies such as incentive programs to reduce vehicle miles.

The SANDAG Mobility Management VMT Reduction Calculator Tool[3] and the California Air Pollution Control Officers Association's (CAPCOA) Quantifying Greenhouse Gas Mitigation Measures[4] report are two tools that can be used to quantify the percent reduction in VMT resulting from the application of mobility management strategies. These tools are intended to act as a resource for identifying and evaluating the impacts of mobility management strategies as part of the development review and transportation analyses process. At the request of the City, the SANDAG Mobility Management VMT Reduction Calculator Tool was used to assess VMT reductions for this projec.t

[3] The San Diego Association of Governments (SANDAG) Vehicle Miles Traveled (VMT)Reduction Calculator Tool, 2019.

[4] California Air Pollution Control Officers Association (CAPCOA) Quantifying Greenhouse Gas Mitigation Measures, August 2010.

3 SB 743 ASSESSMENT

A VMT analysis was conducted for the Alvarado Specific Plan in anticipation of the SB 743-compliant guidelines to be adopted by July 1, 2020. It is assumed that the environmental documentation will still be ongoing by this time, and a VMT analysis will be required. This document follows the methodology laid out in the OPR Technical Advisory.

3.1 VMT SCREENING

Based on the OPR Technical Advisory, if a project is located within a ½ mile of an existing major transit stop, or along a high-quality transit corridor, it is presumed to have a less-than-significant impact on VMT. A 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.

A detailed discussion of the project's existing transit network can be found in Part II-Section 3.2.1 of this document. The Alvarado Specific Plan is located adjacent to a major transit station, the 70th Street Trolley Station, which serves the MTS Green Line Trolley. **Based on the project's proximity to a major transit station, the project is exempt from detailed VMT analysis or may be presumed to have a less-than-significant impact on VMT.**

Currently, the project is well served by public transit, but the transit station is not easily accessible from the project site. Transit access in this land use area is a critical consideration in the Specific Plan due to the location of the project. The proposed project improvements will improve the access to and from a major transit station for pedestrians and bicyclists, and the location will be marketable to students and faculty of SDSU. These improvements will provide all project residents living in the area alternatives to single occupancy vehicular transportation. The potential for the project to incorporate a student housing component within the mix of residential units will likely reduce the number of single-occupancy vehicle trips to and from the site.

3.2 VMT ANALYSIS

At the request of the City, the Series 13 regional SANDAG model was run under 2035 Horizon Year conditions for TAZ 3168 where the existing San Diego RV Park is currently located. This was the regional model available by SANDAG at the time of the request. Results of the regional model are summarized in **Table 3-1**, and the output report is provided in **Appendix I-A**.

The resulting VMT for the Alvarado Specific Plan is 88% of the regional average, which is above the threshold of 85% for residential projects. The project would still be considered exempt due to proximity to a major transit station. However, the regional model results provide additional information for further project understanding.

Table 3-1 Vehicle Miles of Travel Report

VMT per Resident				
Scenario	**Residents**	**Total Trips**	**VMT**	**VMT per Capita**
Regionwide	3,855,696	13,756,249	58,989,617	15.3
City of La Mesa	72,248	264,684	1,011,045	14.0
Alvarado Specific Plan	2,112	7,766	28,418	13.5
Source: San Diego Association of Governments (SANDAG) – October 2019				

3.3 SENSITIVITY ANALYSIS

A sensitivity analysis was performed to understand the level of VMT reduction that would be required for the project TAZ to fall under the threshold of 85% of the regional average VMT. Using the population and average trip length from SANDAG's ABM[5] output, the number of trips were reduced until the VMT per resident was less than 85% of the regional average.

Table 3-2 summarizes the daily and peak commute mode choice for the existing land use resulting from SANDAG's ABM model that was used to perform the sensitivity analysis. The output report for the ABM model is provided in **Appendix I-B**. As shown in Table 3-2 most of the existing peak hour trips are SOV trips. Currently the project site does not have adequate pedestrian and bicycle facilities to accommodate those who do not drive, which is likely the cause of the low walk, bike, and transit use.

Table 3-2 Mode Choice Report

Existing Mode Choice		
Mode	**Peak Mode Split**	**Daily Mode Split**
SOV	83.2%	47.0%
HOV2	10.1%	29.9%
HOV3	0.8%	10.1%
Walk	1.0%	10.6%
Bike	0.7%	1.3%
Transit	4.2%	1.9%
Other	–	1.1%
Source: San Diego Association of Governments (SANDAG) – October 2019		

[5] San Diego Association of Government's (SANDAG) Activity Based Model (ABM), 2019.

The calculations for VMT reduction using the ABM model outputs are summarized in **Table 3-3**. As shown in Table 3-3, the target VMT per resident for the project was calculated to be 13.0. This indicates a 3.4% reduction in total vehicle trips in the TAZ is required to achieve less than 85% of the regional average VMT.

This 3.4% reduction can be achieved through the TDM measures and project features discussed in the following section.

Table 3-3 Vehicle Miles of Travel - Reduction Analysis

VMT per Resident							
Scenario	**Residents**	**Total Trips**	**Person Miles of Travel**	**Average Trip Length**	**VMT**	**VMT per Capita**	**% of Regional VMT Average (15.3)**
Alvarado Specific Plan	2,112	7,766	37,528	4.83	28,418	13.5	88%
Sensitivity Analysis	2,112	7,506	36,272	4.83	26,252	13.0	85%

4 VMT REDUCTIONS

The Alvarado Specific Plan Project proposes various TDM strategies and multi-modal improvement measures that are covered in the SANDAG Mobility Management VMT Reduction Calculator Tool. **Table 4-2** summarizes the project-specific strategies and the anticipated VMT reductions associated with each strategy. Each of the strategies is discussed in more detail below. **Table 4-3** summarizes the total project-level change in VMT and the total community-level change in VMT based on the SANDAG tool. The SANDAG tool output reports are provided in **Appendix I-C**.

Table 4-2 SANDAG VMT Reduction Strategies

Measure Number	Strategy	Type of Strategy	% VMT Reduction Range	% VMT Reduction Calculation	% VMT Reduction
Project Level Strategies					
1D	Employer Transit Pass Subsidy	Project Idea*	0% – 10.9%	= % employees eligible *%change in commute VMT	0.3%
2A	Transit Oriented Development	Project Feature	0% – 14.4%	= difference in transit mode share with strategy * mode shift factor	5.2%
3A	Parking Pricing	Project Idea*	0 – 7.5%	= % change in parking price * elasticity	7.5%
Community Level Strategies					
4B	Pedestrian Facility Improvement	Project Feature	0 – 1.4%	= % change in ratio of sidewalk length to street length * elasticity	1.4%
4D	Bike Facility Improvement	Project Feature	0 – 0.3%	= -1* auto trips reduced by strategy * (bike trip length)/ (existing auto trips on roadway)*(auto trip length)	0.1%
Source: ***SANDAG Mobility Management VMT Reduction Calculator Tool (2019)***					

* The Project Ideas will likely be implemented by the developer, however, they were not included in the total VMT reduction calculation, as they are not permanent features that will carry over if the site is redeveloped.

Table 4-3 SANDAG VMT Reduction for the Alvarado Specific Plan

Results Category	Change in VMT
Employee Commute Trips	0.0%
Project-Generated Trips	-5.2%
All City/CPA Trips	-1.4%
Trips on Roadway Affected by Bikeway Addition	-0.1%

Measure 2A for a Transit Oriented Development will alone reduce the project VMT by 5.2%, to be less than 85% of the regional average. The VMT reduction for TOD was added directly to the VMT per capita produced by the SANDAG model to achieve a project VMT less than 85% of the regional average as shown in **Table 4-4**.

Table 4-4 Alvarado Specific Plan VMT with TOD Reduction

Scenario	VMT
Alvarado Specific Plan (SANDAG Regional Model Output)	88%
SANDAG TOD Reduction (Measure 2A)	-5.2%
Alvarado Specific Plan	**83%**

4.1.1 IMPLEMENT SUBSIDIZED OR DISCOUNTED TRANSIT PROGRAM (1D)

The project plans to provide some level of subsidized / discounted daily public transit passes to residents from at least one building of the four proposed residential buildings. The daily passes may be partially or wholly subsidized by the development. The SANDAG tool reports up to to 10.9% reduction in commute VMT as a result of this strategy depending on the percent of the transit pass that is subsidized as well as the number of residents the subsidy is offered.

For the Alvarado Specific Plan Project, the level of subsidy and number of residents has not been decided, so conservative assumptions were made for this VMT reduction calculation. Assuming a low-level range of transit subsidy ($1) offered to 25% of residents (approximately 1 building), the anticipated VMT reduction would be 0.3%.

This feature is currently a Project Idea, not a Project Feature that has been included in the Alvarado Specific Plan. As such, this strategy was not included in the total change in VMT calculation in Table 4-3.

4.1.2 TRANSIT ORIENTED DEVELOPMENT (TOD) (2A)

As stated in the SANDAG tool, “TOD refers to projects built in compact walkable areas that have easy access to public transit” and are “places within a 10-minute walk of high-frequency rail transit station (e.g.

SPRINTER, COASTER, Trolley)." The project is required to include bike and pedestrian access to the transit station to encourage transit use and reduce vehicle travel.

The tool provides a VMT reduction if the project is within a ½ mile of a rail transit station, and provides the required access to the station. **The project's proximity to the 70th Street Trolley Station is anticipated to result in a VMT reduction of 5.2%.**

4.1.3 PARKING PRICING (3A)

The project plans to unbundle parking costs from property costs so that parking is an additional cost per month and not a guarantee associated with renting a unit. This incentivizes not having a car and using alternative modes of transportation, in turn reducing VMT. It is unknown at this stage in the planning process how much monthly parking will cost, but a conservative cost of $75 per month was assumed based on knowledge on residential properties in the area that have unbundled parking. This is anticipated to result in a VMT reduction of 7.5% using the SANDAG tool.

This feature is currently a Project Idea, not a Project Feature that has been included in the Alvarado Specific Plan. As such, this strategy was not included in the total change in VMT calculation in Table 4-3.

4.1.4 PEDESTRIAN FACILITY IMPROVEMENT (4B)

As part of the project improvements, a shared-use path will be provided along the south side of Alvarado Road on the project's frontage. This will provide an accessible path for all residents directly to the 70th Street Trolley Station by walking or biking.

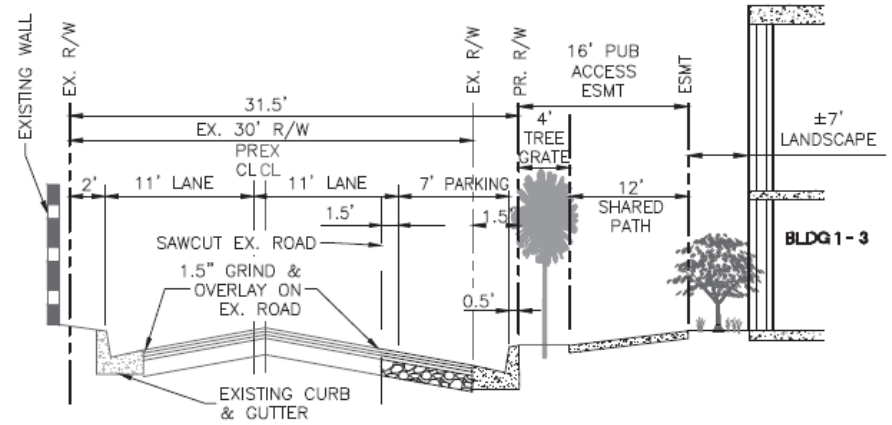
The SANDAG tool provides a table for determining the VMT reduction based on the length of the pedestrian accommodations and the context of the site. The project will provide pedestrian accommodations within the project site as well as connections for pedestrians off-site to the transit station and destinations east of the site. **The resulting estimated VMT reduction for this scenario is 1.4%.**

4.1.5 BIKE FACILITY IMPROVEMENT (4D)

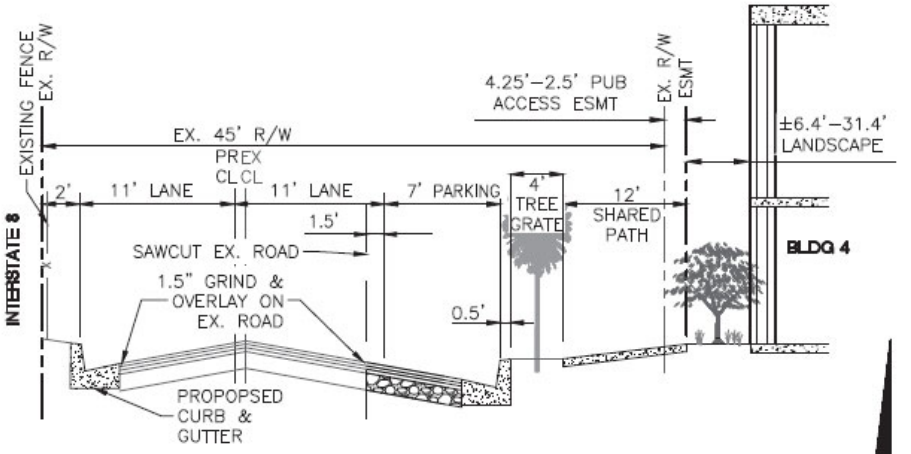
The project will provide a shared-use path along the south side of Alvarado Road in front of the project site, and connect to the 70th Street Trolley Station, providing a seamless connection for pedestrians and bicycles between the project site and the station. The shared-use path will continue to the east side of the project site, with a bridge structure over the creek, and connect to the City-planned bike facilities east of the project. **The resulting estimated VMT reduction for this scenario is 0.1%.**

The proposed cross-sections for Alvarado Road along the project frontage are shown in **Figure 4.1**.

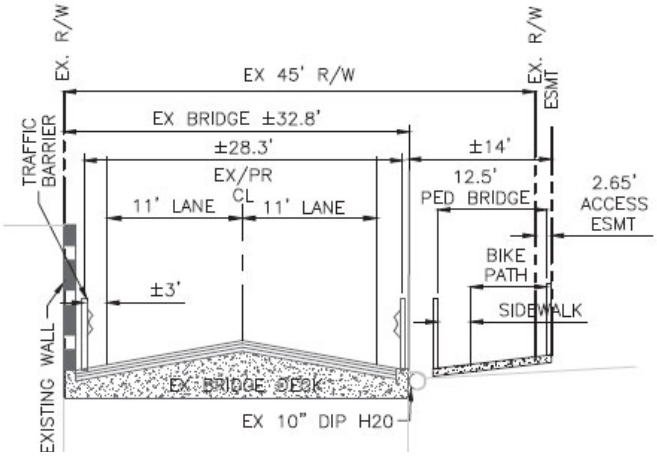
Figure 4-1 Alvarado Road Typical Sections



ALVARADO ROAD - WEST OF BRIDGE



ALVARADO ROAD - EAST OF BRIDGE



ALVARADO ROAD - AT BRIDGE

5 FINDINGS AND CONCLUSIONS

A VMT analysis was conducted for the Alvarado Specific Plan in anticipation of the SB 743-compliant guidelines to be adopted by July 1, 2020. It is assumed that the environmental documentation will still be ongoing by this time, and a VMT analysis will be required. At the time this report was written the City of La Mesa has not updated their TIA guidelines. Part I of this report documents the VMT analysis and results in accordance with the OPR Technical Advisory.

Based on OPR Technical Advisory methodology, this project would be exempt from detailed VMT analysis or may be presumed to have a less-than-significant impact on VMT due to the proximity to a major transit station.

The SANDAG regional model was also run at the request of the City, and indicated the project would result in VMT per Capita of approximately 88% of the regional average. In the case that the City adopts guidelines that does not exempt a project for proximity to transit, this would exceed the 85% of the regional average threshold recommended by OPR documents. In order to reduce the VMT under the threshold, a VMT reduction of 3.4% would be required.

Various project features are anticipated to reduce the project VMT below 85% of the regional average based on the SANDAG VMT reduction calculator tool, including:

- Transit Oriented Development – 5.2% VMT reduction
- Pedestrian Facility Improvement – 1.4% VMT reduction
- Bike Facility Improvement – 0.1% reduction

Other project ideas would further reduce the project VMT, including:

- Parking Pricing – 7.5% VMT reduction
- Transit Fare Reduction – 0.2% VMT reduction

The anticipated VMT reductions from project features will reduce the project VMT to under 85% of the regional average.