

Juniper Beach 21 Homes (SDP 2023-0005)
270 Juniper Ave
City of Carlsbad
September 9, 2024

Vehicle Miles Traveled Analysis

Prepared for:

Rincon Homes
5315 Avenida Encinas, Suite 200
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Prepared by:



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Job #2316

Table of Contents

1.0	Introduction	1
2.0	Vehicle Miles Traveled.....	5
2.1	VMT Screening Thresholds.....	5
2.2	VMT Significance Thresholds.....	5
2.3	VMT Analysis.....	6
3.0	Conclusion.....	7

List of Figures

Figure 1: Project Location	2
Figure 2: Project Parcel Location.....	3
Figure 3: Site Plan	4

List of Tables

Table 1: VMT Screening Criteria.....	5
Table 2: City of Oceanside Project Thresholds for VMT Transportation Impacts	6
Table 3: City of Carlsbad VMT Analysis Map Findings.....	6

Appendices

Appendix A.....	Excerpts from OPR Technical Advisory
Appendix B.....	City of Carlsbad VMT Analysis Map
Appendix C.....	City of Carlsbad VMT Report Template

1.0 Introduction

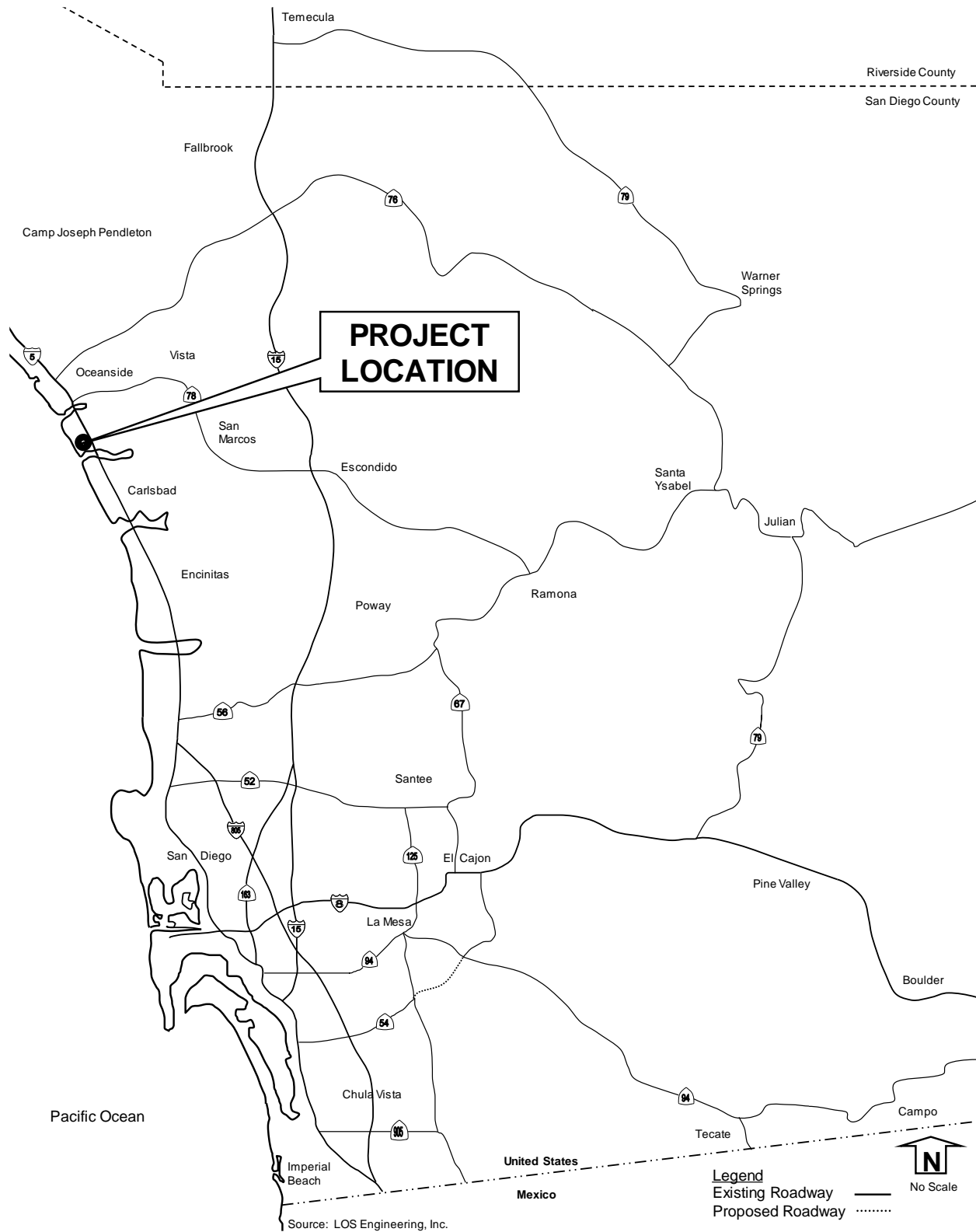
A Vehicle Miles Traveled (VMT) analysis is required to satisfy the California Environmental Quality Act (CEQA) guidelines that utilize VMT as the measure of mobility effectiveness for determining transportation impacts.

The proposed project is the removal of one existing single family dwelling unit and the construction of 21 multi-family dwelling units. The project is located at 270 Juniper Ave Carlsbad, California.

The location of the project is shown in **Figure 1**. The project parcel is shown in **Figure 2** with a site plan shown in **Figure 3**. The format of this study includes the following chapters:

1.0	Introduction
2.0	Vehicle Miles Traveled
3.0	Conclusions

Figure 1: Project Location



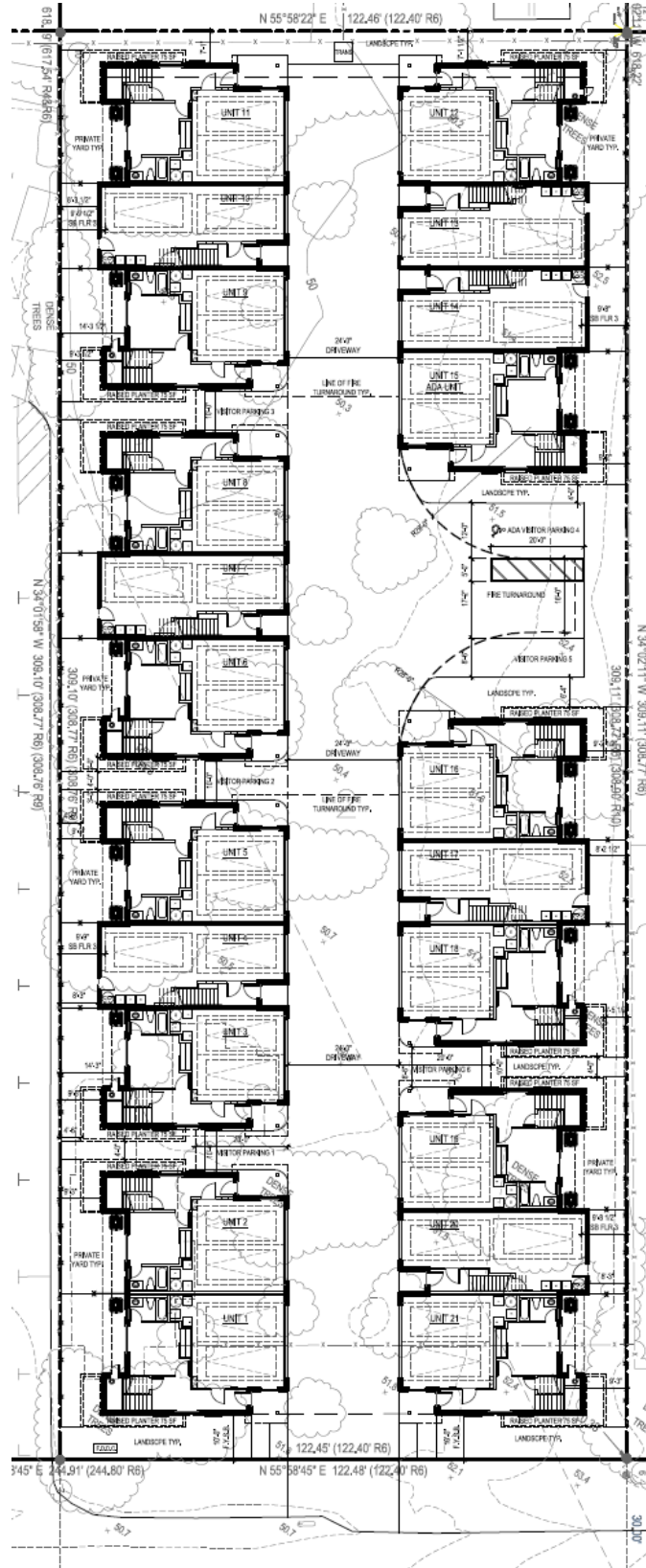
Source: LOS Engineering, Inc.

Figure 2: Project Parcel Location



Source: Google Maps

Figure 3: Site Plan



Source: Kirk Moeller Architects, Inc.

2.0 Vehicle Miles Traveled

A VMT analysis is required to satisfy the CEQA guidelines that utilize VMT as the measure of effectiveness for determining transportation impacts. The California Governor’s Office of Planning and Research (OPR) Technical Advisory developed guidance on implementing Senate Bill 743 (SB 743) that shifts the transportation impact measure of effectiveness from Level of Service (LOS) to VMT. The OPR *Transportation Technical Advisory on Evaluating Transportation Impacts in CEQA*, December 2018 states on page 8 “As noted above, lead agencies have the discretion to set or apply their own thresholds of significance”. Excerpts from the OPR Technical Advisory are included in **Appendix A**.

In compliance with SB 743 and OPR guidance, the City of Carlsbad has adopted the *Vehicle Miles Traveled (VMT) Analysis Guidelines*, May 31, 2023 (“VMT Guidelines”) to evaluate impacts under CEQA using a VMT metric.

2.1 VMT Screening Thresholds

The VMT Guidelines has screening criteria to determine if a detailed transportation VMT analysis is required or if a project can “screen out”. A project that meets at least one of six (6) screening criteria would be presumed to have a less than significant transportation impact due to the project type or location. The screening criteria and relevance for the proposed project are shown in **Table 1**.

TABLE 1: VMT SCREENING CRITERIA

Screening Criteria	Project Relevance
1) Small Project (< 110 ADT)	Not Applicable. Project > 110 ADT(1)
2) Located Near Major Transit Station/Stop	Not Applicable. Project > ½ mile from major transit stop/station.
3) Local-Serving Retail and Similar Land Uses	Not Applicable. Project is not retail.
4) Local-Serving Public Facilities	Not Applicable. Project is not public facility.
5) Affordable Housing Projects	Not Applicable. Project is not housing.
6) Redevelopment Project that result in a net reduction of VMT	Not Applicable. Project does not reduce VMT.

Notes: (1) Project trip generation is 21 multi-family units x 6 ADT/unit (SANDAG trip rate) = 126 ADT.

As noted above, the project does not meet the criteria to screen out and requires further VMT analysis.

2.2 VMT Significance Thresholds

The VMT Guidelines documents significance thresholds for transportation VMT impacts based on the project type. As shown in **Table 2**, the significance threshold for a transportation VMT impact is based on 15% below the city average VMT/Capita.

TABLE 2: CITY OF OCEANSIDE PROJECT THRESHOLDS FOR VMT TRANSPORTATION IMPACTS

Project Type	Metric	Significance Thresholds
Residential Projects	VMT per Capita	A significant transportation impact occurs if the project VMT/capita exceeds a level 15% below the city average VMT/capita

Source: VMT Guidelines.

The VMT Guidelines define the requirements for the VMT analysis under Section 3.5.1 as follows:

“Typical residential or office single land-use projects generating less than 2,400 ADT would use the City of Carlsbad VMT/capita and VMT/employee analysis maps and would determine VMT/capita or VMT/employee for the traffic analysis zone in which the project is located. If the project VMT/capita or VMT/employee exceeds the corresponding threshold of significance, a significant impact would be indicated. Mitigation measures would then be considered.”

2.3 VMT Analysis

The project VMT was calculated using the City of Carlsbad Vehicle Miles Traveled map that is derived from SANDAG’s Series 14 growth forecast Activity Based Model 2 plus (AMB2+) analysis map. The Carlsbad VMT analysis map is included in **Appendix B**.

The project is forecasted to have a VMT/Capita at 75.3% of the city average VMT/Capita, which is below the 85th percentile city average VMT; therefore, the project does not have a significant VMT transportation impact and VMT mitigation is not recommended. The findings are shown in **Table 3**.

TABLE 3: CITY OF CARLSBAD VMT ANALYSIS MAP FINDINGS

City Average VMT/Capita for project location	City-Wide Residential VMT Average	Project % Compared to City Average	Significant Transportation Impact (over 85%)?
18.1	24.0	75.3%	No

Source: Carlsbad VMT Analysis Map.

To ensure compliance with the VMT Guidelines, the City of Carlsbad has VMT report templates. A VMT report template for this project is included in **Appendix C**.

3.0 Conclusion

A VMT analysis is required to satisfy the CEQA guidelines that utilize VMT as the measure of mobility effectiveness for determining transportation impacts.

The proposed project is the removal of one existing single family dwelling unit and the construction of 21 multi-family dwelling units. The project is located at 270 Juniper Ave Carlsbad, California.

A VMT analysis is required to satisfy the CEQA guidelines that utilize VMT as the measure of effectiveness for determining transportation impacts. In compliance with SB 743 and OPR guidance, the City of Carlsbad has adopted VMT Guidelines to evaluate impacts under CEQA using a VMT metric.

The project VMT was calculated using the City of Carlsbad Vehicle Miles Traveled map that is derived from SANDAG's Series 14 growth forecast Activity Based Model 2 plus (AMB2+) analysis map.

The project is forecasted to have a VMT/Capita at 75.3% of the city average VMT/Capita, which is below the 85th percentile city average VMT; therefore, the project does not have a significant VMT transportation impact and VMT mitigation is not recommended.

Appendix A

Excerpts from OPR Technical Advisory

TECHNICAL ADVISORY

ON EVALUATING TRANSPORTATION IMPACTS IN CEQA



December 2018

D. General Principles to Guide Consideration of VMT

SB 743 directs OPR to establish specific “criteria for determining the significance of transportation impacts of projects[.]” (Pub. Resources Code, § 21099, subd. (b)(1).) In establishing this criterion, OPR was guided by the general principles contained within CEQA, the CEQA Guidelines, and applicable case law.

To assist in the determination of significance, many lead agencies rely on “thresholds of significance.” The CEQA Guidelines define a “threshold of significance” to mean “an identifiable **quantitative, qualitative¹² or performance level** of a particular environmental effect, non-compliance with which means the effect will **normally** be determined to be significant by the agency and compliance with which means the effect **normally** will be determined to be less than significant.” (CEQA Guidelines, § 15064.7, subd. (a) (emphasis added).) Lead agencies have discretion to develop and adopt their own, or rely on thresholds recommended by other agencies, “provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence.” (*Id.* at subd. (c); *Save Cuyama Valley v. County of Santa Barbara* (2013) 213 Cal.App.4th 1059, 1068.) Substantial evidence means “enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached.” (*Id.* at § 15384 (emphasis added); *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1108-1109.)

Additionally, the analysis leading to the determination of significance need not be perfect. The CEQA Guidelines describe the standard for adequacy of environmental analyses:

An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to **make a decision which intelligently takes account of environmental consequences**. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is **reasonably feasible**. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The **courts have looked not for perfection** but for **adequacy, completeness**, and a **good faith effort** at full disclosure.

(CEQA Guidelines, § 15151 (emphasis added).)

These general principles guide OPR’s recommendations regarding thresholds of significance for VMT set forth below.

¹² Generally, qualitative analyses should only be conducted when methods do not exist for undertaking a quantitative analysis.

E. Recommendations Regarding Significance Thresholds

As noted above, lead agencies have the discretion to set or apply their own thresholds of significance.

(*Center for Biological Diversity v. California Dept. of Fish & Wildlife* (2015) 62 Cal.4th 204, 218-223 [lead agency had discretion to use compliance with AB 32's emissions goals as a significance threshold]; *Save Cuyama Valley v. County of Santa Barbara* (2013) 213 Cal.App.4th at p. 1068.) However, Section 21099 of the Public Resources Code states that the criteria for determining the significance of transportation impacts must promote: (1) reduction of greenhouse gas emissions; (2) development of multimodal transportation networks; and (3) a diversity of land uses. It further directed OPR to prepare and develop criteria for determining significance. (Pub. Resources Code, § 21099, subd. (b)(1).) This section provides OPR's suggested thresholds, as well as considerations for lead agencies that choose to adopt their own

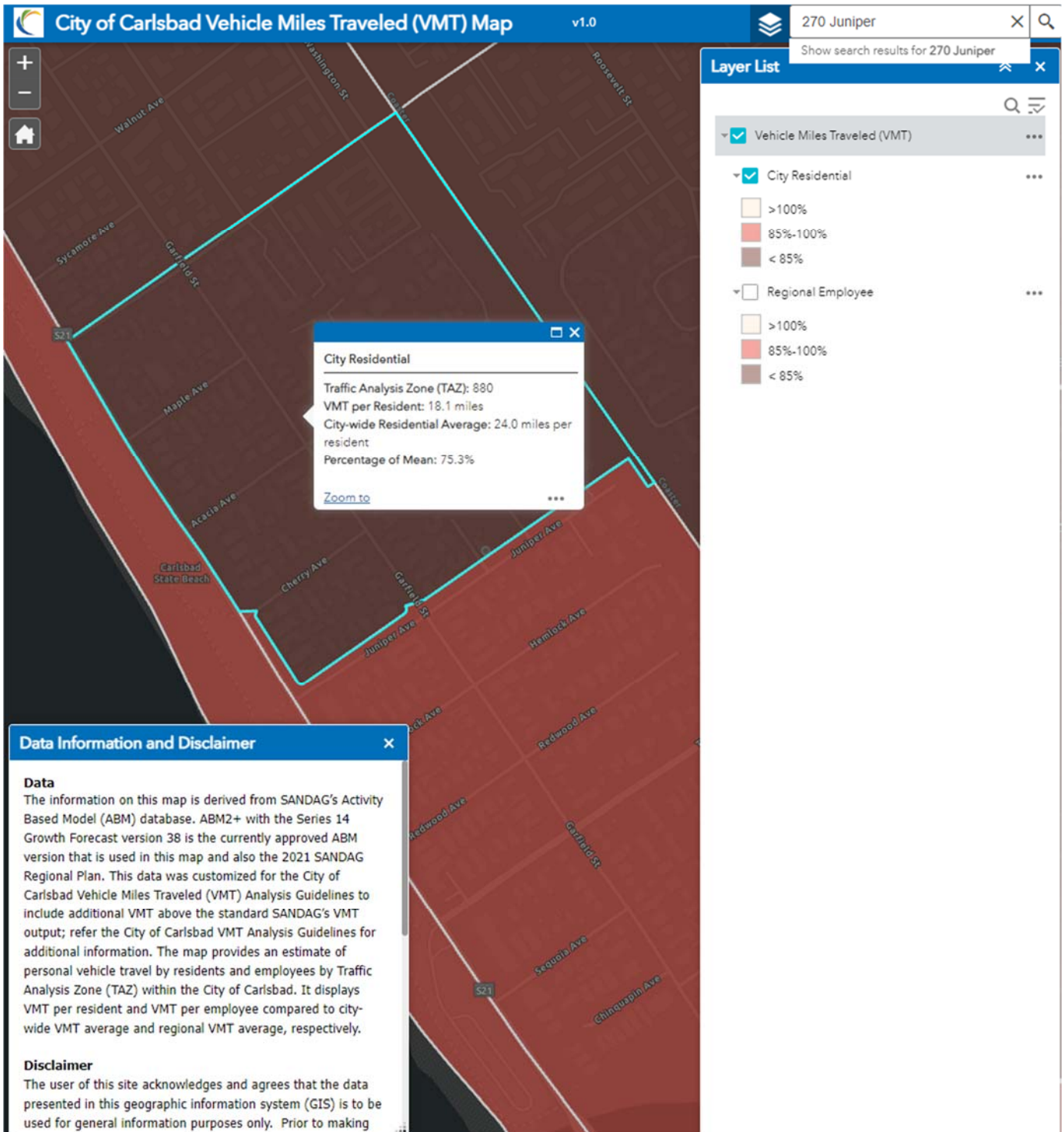
The VMT metric can support the three statutory goals: “the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” (Pub. Resources Code, § 21099, subd. (b)(1), emphasis added.) However, in order for it to promote and support all three, lead agencies should select a significance threshold that aligns with state law on all three. State law concerning the development of multimodal transportation networks and diversity of land uses requires planning for and prioritizing increases in complete streets and infill development, but does not mandate a particular depth of implementation that could translate into a particular threshold of significance. Meanwhile, the State has clear quantitative targets for GHG emissions reduction set forth in law and based on scientific consensus, and the depth of VMT reduction needed to achieve those targets has been quantified. Tying VMT thresholds to GHG reduction also supports the two other statutory goals. Therefore, to ensure adequate analysis of transportation impacts, OPR recommends using quantitative VMT thresholds linked to GHG reduction targets when methods exist to do so.

Various legislative mandates and state policies establish quantitative greenhouse gas emissions reduction targets. For example:

- Assembly Bill 32 (2006) requires statewide GHG emissions reductions to 1990 levels by 2020 and continued reductions beyond 2020.
- Senate Bill 32 (2016) requires at least a 40 percent reduction in GHG emissions from 1990 levels by 2030.
- Pursuant to Senate Bill 375 (2008), the California Air Resources Board GHG emissions reduction targets for metropolitan planning organizations (MPOs) to achieve based on land use patterns and transportation systems specified in Regional Transportation Plans and Sustainable Community Strategies (RTP/SCS). Current targets for the State's largest MPOs call for a 19 percent reduction in GHG emissions from cars and light trucks from 2005 emissions levels by 2035.
- Executive Order B-30-15 (2015) sets a GHG emissions reduction target of 40 percent below 1990 levels by 2030.

Appendix B

City of Carlsbad VMT Analysis Map



Appendix C

City of Carlsbad VMT Report Template



**VMT Report Template for
Land Development Projects –
VMT Analysis Using VMT Maps**

City of Carlsbad
1200 Carlsbad Village Dr.
Carlsbad, CA 92008

VMT Analysis Using VMT Maps Requirements

Submission Date: 10/13/23

SECTION I: Developer Profile

Developer Name: Rincon Homes
Property Manager Name: Mr. Tom St.Clair
Developer Mailing Address: 5315 Avenida Encinas, Suite 200 Carlsbad, CA 92008

Primary Contact Name: Mr. Tom St.Clair
Primary Contact Phone/Email: 714-724-5647 tstclair@rincongrp.com
Developer Mailing Address: 5315 Avenida Encinas, Suite 200 Carlsbad, CA 92008

Transportation Consultant Firm: LOS Engineering, Inc.
Transportation Consultant Representative: Mr. Justin Rasas, P.E.
Transportation Consultant Contact Phone/Email: 619-890-1253 justin@losengineering.com
Transportation Consultant Address: 11622 El Camino Real, Suite 100 San Diego, CA 92130

SECTION II: Project Information

Project Name: Juniper Beach Homes
Permit Number: SDP 2023-0005
Project Address: 270 Juniper Ave, Carlsbad CA 92008

VMT Report Template for Land Development Projects – VMT Analysis Using VMT Maps

SECTION III: Compliance Overview Checklist

Complete the appropriate sections of the checklist below to ensure compliance with the City of Carlsbad’s VMT Analysis Guidelines.

CEQA VMT Analysis Using VMT Maps Compliance Checklist	Satisfactory? <i>(completed by City)</i>	
	YES	NO
VMT Report documenting VMT screening and VMT analysis	<input type="checkbox"/>	<input type="checkbox"/>
VMT Analysis performed using VMT maps	<input type="checkbox"/>	<input type="checkbox"/>
VMT Impact Conclusion (significant or less than significant impact)	<input type="checkbox"/>	<input type="checkbox"/>
Mitigation Measure Identification and Analysis (for significant impacts)	<input type="checkbox"/>	<input type="checkbox"/>

SECTION IV: VMT Report Contents

The following provides the required contents of a VMT Analysis Using VMT Maps Report.

Page # or Appendix: <i>(completed by preparer)</i>	CEQA VMT Analysis Using VMT Maps Required Content	Satisfactory? <i>(completed by City)</i>	
		YES	NO
1-7	Executive Summary/Introduction: <ul style="list-style-type: none"> • Purpose of VMT analysis and identification of type of VMT report being prepared • Regional vicinity map with project location • Project screening results • VMT analysis method (Carlsbad VMT maps) • Significance of CEQA impacts • Mitigation measures and significance after mitigation 	<input type="checkbox"/>	<input type="checkbox"/>
1, 4-7	Project Description, including: <ul style="list-style-type: none"> • Proposed project description (land use type, intensity, etc.) 	<input type="checkbox"/>	<input type="checkbox"/>

VMT Report Template for Land Development Projects – VMT Analysis Using VMT Maps

	<ul style="list-style-type: none"> VMT reduction measures that are part of the project description Site plan 		
5-7	<p>VMT Screening Assessment</p> <ul style="list-style-type: none"> Table that displays all screening criteria and demonstrates that the project does not meet the criteria and a brief statement of why. To demonstrate why a project doesn't meet any of the screening criteria, the following information may be necessary: <ul style="list-style-type: none"> Daily project trip generation (total, without adjustments for existing land uses on the site). A map showing the project's lack of proximity to a major transit stop, planned major transit stop, or a stop/transit center along a high-quality transit corridor. Statements that locally serving, affordable housing, and redevelopment criteria are not applicable. For projects with multiple land uses, perform a screening assessment and create a screening assessment table for each land use. Document the conclusion of the screening assessment by land use. If one land use meets the screening criteria and one does not, only complete a VMT analysis for the component that does not meet the screening criteria. 	<input type="checkbox"/>	<input type="checkbox"/>
4-7 Appendix B	<p>Identify VMT Calculation Methodology and VMT Metric</p> <ul style="list-style-type: none"> Provide screenshot(s) of Carlsbad VMT maps with project TAZ(s) highlighted and VMT data displayed (for each metric that is applicable). For residential projects, VMT/Capita is applicable. For employment projects, VMT/Employee is applicable. The VMT Analysis Using VMT Maps Report type is only applicable to residential and employment projects. 	<input type="checkbox"/>	<input type="checkbox"/>

VMT Report Template for Land Development Projects – VMT Analysis Using VMT Maps

6	<p>Identify VMT Thresholds and Perform VMT Impact Analysis</p> <ul style="list-style-type: none"> • Refer to the Carlsbad VMT Analysis Guidelines to determine the appropriate impact threshold to apply to the analysis. Document the threshold and the numerical value that represents the threshold. For example, the threshold for residential projects is 15% below the city-wide average VMT/capita, or currently 20.4 miles per resident. • Determine the project’s VMT using the Carlsbad VMT maps, and if applicable, apply any VMT reduction measures that are part of the project description (refer to VMT Analysis Guidelines Appendix F for guidance on performing reduction calculations). • Compare the project’s VMT to the City threshold and document if the project has a significant or less than significant impact. 		
NA	<p>Identify and Analyze Mitigation Measures (if the Impact is Significant)</p> <ul style="list-style-type: none"> • If a significant impact is identified, refer to VMT Analysis Guidelines Appendix F to identify potential mitigation measures and analysis guidance. • Analyze how much VMT reduction is associated with the mitigation measures and determine if mitigation reduces the impact to less than significant. • If the impact is still significant after mitigation is applied, document that the project has a significant and unavoidable impact. 		