

APPENDIX I

VEHICLE MILES TRAVELLED ASSESSMENT

Technical Memorandum

Date: June 6, 2023
To: Daniel Serrano, LeSar Development Consultants
From: Sarah Brandenburg
Subject: Palmdale Housing Opportunity Project VMT Assessment

LA22-3407

The purpose of this memorandum is to assess the need for a vehicle miles travel (VMT) analysis for the Palmdale Housing Opportunity Project in the City of Palmdale. The Project is proposing up to 330 units of housing north of E Avenue R12 and adjacent to 27th Street East and 28th Street East on the currently vacant land adjacent to existing residential development. The housing uses would be comprised of up to 152 affordable housing units and 178 market rate units in a variety of product types (multifamily apartments and townhomes and single-family cottages) with approximately 2 acres of open space for recreational use. As part of the CEQA process, an initial study is being prepared for the Project to assess the potential for environmental impacts. To address the potential for transportation impacts, the requirements for analyzing VMT are further explored in this memorandum.

CEQA Tiering Considerations

Section 15152 of the CEQA Guidelines provides considerations for tiering from prior certified Environmental Impact Report (EIR) documents for subsequent projects. Tiering specifically allows the use of analyses previously conducted for broader EIRs, such as a general plan, by *"incorporating by reference the general discussion from the broader EIR; and concentrating the later EIR or negative declaration solely on the issues specific to the later project."*¹

The CEQA Guidelines further describe tiering as being an option when the project is consistent with the general plan and zoning code. Given that the proposed Project is located adjacent to existing residential development and helping to achieve the City's goal of providing more affordable housing options in Palmdale, tiering from other recent EIRs in the City was explored in further detail as discussed below.

¹ Article 10, Section 15152 of the CEQA Guidelines, 2018.

Palmdale General Plan

In September 2022, the City of Palmdale adopted the Palmdale 2045 General Plan Update. The Project's proposed residential uses are consistent with the land uses envisioned as part of the 2045 General Plan Update. The residential land use designation has also been formalized as part of the City's citywide zoning code update to ensure consistency between the General Plan and the zoning code.

As part of the General Plan Update, an EIR was prepared to analyze the potential for environmental impacts, including transportation. The transportation section of the EIR included a comprehensive analysis of potential VMT impacts as required under Section 15064.3 of the CEQA Guidelines. The VMT analysis demonstrated that the 2045 General Plan would reduce the total VMT per service population in comparison to existing conditions by placing growth in optimum locations for smart growth considerations. In addition to reducing the total VMT per service population, the VMT with the General Plan Update was compared to the North County Baseline VMT and was shown to be below the City's VMT impact threshold which requires that the Plan be at least 16.8% below the North County Baseline. Consequently, the General Plan was found to have no VMT impact and did not require any VMT mitigation measures.

Project Design Features

In addition to being consistent with the General Plan, the Project is proposing design features that will encourage walking, biking, and transit and reduce the amount of VMT generated by the residential uses. These design features are summarized below.

- Of the 330 total units being proposed by the Project, 152 are affordable housing units (approximately 46% of the total units). The Office of Planning and Research (OPR) recommends that affordable housing units be screened from VMT analysis because they generate less VMT than standard market rate units².
- Affordable housing units also generate fewer daily vehicle trips than market rate units. In comparing trip generation data published by the Institute of Transportation Engineers³ for multifamily housing and affordable housing, the daily trip generation for affordable housing is 28.6% lower than market rate multifamily housing. The proposed mix of affordable housing (152 units) and market rate housing (178 units) generates 1,931 daily vehicle trips in comparison to a fully market rate development that would generate 2,224

² *Technical Advisory on Evaluating Transportation Impacts in CEQA*, Office of Planning and Research, December 2018.

³ *Trip Generation, 11th Edition*, Institute of Transportation Engineers, 2021.

daily trips, which is a 13.2% reduction in trip generation. Appendix A contains the detailed trip generation table.

- While transit service is not currently provided adjacent to the Project site, providing transit-supportive densities can help to support future transit service in the area. The California Air Resources Board (CARB) states that transit-supportive densities of at least 20 units per acre is a design feature that contributes to reducing GHG and VMT overtime⁴. The Project is proposing 23 dwelling units per acre which exceeds the 20 units per acre recommended for transit-supportive densities. The closest bus transit service to the Project site is currently along E Avenue R with daytime service approximately every 30-minutes⁵ during the morning and afternoon commute periods. The Project site is just under one mile from the bus stops located at the intersection of E Avenue R and 30th Street East.
- To enable future transit service, the Project will provide a designated curb space for a transit stop that could be served by future Antelope Valley Transit Authority (AVTA) service. The AVTA is currently exploring microtransit to serve areas of the community that do not require traditional bus service. For example, microtransit operating between the Project site and the City's Transportation Center would provide access for residents to utilize other local and regional transit service in the area, such as Metrolink Commuter Rail and commuter bus service.
- A commute trip reduction program will be implemented at the Project site. This program will provide information to residents on travel options other than driving alone, such as carpool or vanpool, and encourage residents to walk, bike, and use transit. This program could be overseen by an on-site resident manager serving as the Transportation Demand Management (TDM) coordinator or a staff person at the City. Trip reduction programs result in VMT reduction generated by land use development according to the California Air Pollution Control Officers Associate (CAPCOA) Handbook⁶.
- The Project is providing a public park (1.95 acres). The public park will provide an opportunity for Project residents to walk or bike to recreational uses and will also provide an outdoor recreation opportunity for those already living nearby in the community that may be currently driving to parks or outdoor spaces located further away. Therefore, the

⁴ 2022 *Scoping Plan*, Appendix D, Table 3, California Air Resources Board, November 2022

⁵ Antelope Valley Transit Authority (AVTA) service is provided by Line 2 on E Avenue R.

⁶ *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*, California Air Pollution Control Officers Associate Handbook, December 2021.

public park has the potential to reduce the amount of VMT being generated by the Project and in the surrounding community.

- The Project contains complete streets design features that encourage walking and biking in the area. The residential uses will be connected through sidewalks and pathways, including mid-block crosswalks and crosswalks at the intersections in the Project site. As described in the CAPCOA Handbook, these site design features contribute to reducing VMT generated by new developments⁶.

Conclusions

The following conclusions are based on the land uses being proposed with the Project, the requirement to consider potential VMT impacts per Section 15064.3 of the CEQA Guidelines, and the provision for tiering from other broader EIRs in Section 15152 of the CEQA Guidelines:

- The proposed Project is consistent with the City's recently adopted Palmdale 2045 General Plan Update.
- The EIR prepared for the General Plan analyzed the potential for VMT impacts and found that the General Plan would result in a reduction in total VMT per service population in comparison to existing conditions.
- The EIR also showed that under the General Plan the City would not exceed the City's VMT impact threshold when compared to the North County Baseline VMT.
- The Project contains a variety of design features, such as affordable housing, transit-supportive densities, designated curb space for a future transit stop, a commute trip reduction program, park space, and complete streets, that will reduce the VMT generated by the development site.
- Since the proposed Project is consistent with the General Plan and the VMT that will be generated by the Project was captured in the VMT analysis completed for the General Plan and since the Project contains a variety of design features aimed at reducing VMT, the proposed Project does not require further VMT analysis and is not expected to result in a VMT impact.

Appendix A

Trip Generation Comparison of Market Rate & Affordable Housing

Housing Type	ITE Land Use Type	Daily Trip Rate	Number of Units	Daily Trip Generation
Multifamily Market Rate	ITE 220	6.74	330	2,224

Trip generation assuming all Market Rate Units.

Housing Type	ITE Land Use Type	Daily Trip Rate	Number of Units	Daily Trip Generation
Multifamily Market Rate	ITE 220	6.74	178	1,200
Affordable Housing	ITE 223	4.81	152	731
Total			330	1,931
	Delta	-1.93		-293
% Difference		-28.6%		-13.2%

Trip Generation for proposed Affordable Housing Units
Trip Generation for proposed Market Rate Units
% Difference compared to trip generation for Market Rate Units

Notes:

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

ITE 220: Multifamily Housing (low rise), applied rate for locations not close to rail transit.

ITE 223: Affordable Housing.