



Appendix E

VMT Assessment

Memorandum

To: Steve Quintanilla, Moreno Valley City Attorney

CC: Angelica Frausto-Lupo, City of Moreno Valley Community Development Director

From: Atticus Washington, EIT
Mehul Champaneri, PTP, RSP₁
Heidi Rous, CPP

Re: Vehicle Miles Traveled Assessment
MoVal 2040 Revised Draft Program Environmental Impact Report

Date: April 8, 2025

This memorandum documents Senate Bill (SB) 743 compliant analysis completed as part of the Revised Draft Program Environmental Impact Report (EIR) for the City of Moreno Valley 2040 General Plan Update (GPU), Municipal Code and Zoning Amendments, and Climate Action Plan (“MoVal 2040 Project” or “Project”). The MoVal 2040 Project focuses on physical development and growth of the City within its current boundaries and its sphere of influence. With the passage of SB 743, Vehicle Miles Travelled (VMT) has become an important indicator for determining if new development will result in a “significant transportation impact” under the California Environmental Quality Act (CEQA). This memorandum summarizes the VMT analysis and resultant findings for the proposed land use development as part of MoVal 2040.

Methodology and Assumptions

In June 2021, the City Council of the City of Moreno Valley approved and adopted the City’s 2040 General Plan Update (2040 General Plan), a Change of Zone and Municipal Code Update, and its Climate Action Plan (CAP) and certified an EIR (2021 EIR). The Riverside County Transportation Analysis Model (RIVTAM) was utilized to estimate VMT for the analysis Scenarios for the 2021 EIR traffic analysis. RIVTAM was updated to be consistent with the 2016 Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) for the 2021 EIR effort. This version of RIVTAM had a 2012 base year and 2040 future year.

The RIVTAM model was replaced by the RIVCOM model after the 2021 EIR was approved. The RIVCOM model has a more focused area with detailed network and zone system compared to RIVTAM. The latest version of the RIVCOM (Version 4.0.1) was released in January 2024 and is utilized to estimate VMT for the analysis Scenarios (2024 Baseline and 2040 Proposed General Plan) for the Revised Draft Program EIR. This version of RIVCOM has a 2018 base year and 2045 future year, which were updated to 2024 baseline and 2040 future year, respectively.

To update RIVCOM’s base year conditions (2018) to align more closely with the Project’s Existing Baseline (2024), Kimley-Horn collected data on development projects constructed and operational between 2018 and 2024. The City identified these projects based on records of project approvals. The initial list included projects at various stages: pending approval, approved but not built, under construction, or fully built and occupied. The full list included 218 records and was consolidated to include projects that were determined

to be constructed and operational at the time of the records review. A total of 34 projects were determined to be constructed and occupied; however, 5 of these projects were not considered as part of the baseline due to the following factors: the added square footage was so small it contributed negligible employment or households, or the nature of the project did not contribute to additional employment or households. Only 29 were considered as fully constructed and occupied and were used to define the baseline for the non-industrial projects. Six industrial projects were identified by the city as built and occupied. Additionally, for the industrial projects, Kimley-Horn utilized Near Map satellite images (dated to August 2024) to identify areas throughout the City that were developed with industrial uses. The compilation of Near Map images is compiled and included in Appendix B of the Revised Draft Program EIR. Please note that the base year and future year RIVCOM model roadway networks were also modified to reflect the completion of the Clinton Keith Extension Project. The Clinton Keith Extension Project was added to the existing baseline and was accounted for in the model as part of the future network.

For the revised General Plan scenario traffic model update, Kimley-Horn worked with the City to develop buildout land use assumptions for MoVal 2040. As previously mentioned, the RIVCOM future year scenario represents 2045 conditions; however, the General Plan future scenario represents 2040 conditions. Therefore, the model was updated to reflect 2040 conditions by adding the projected Citywide growth (2040 vs 2024 delta) to the 2024 baseline conditions. The land use scenarios analyzed for this study are summarized in **Table 1**. As shown in **Table 1**, the anticipated growth in the number of households is 33,812 and the growth in the number of jobs in the City is 38,993.

Table 1 – RIVCOM Model Inputs for General Plan Scenarios

Land Use	2018 Base Year ¹	2024 Baseline ²	2040 Proposed GP ^{3,4}	2040 PGP - 2024 BY Delta ⁵
Population	205,183	205,620	298,440	92,820
Household	52,920	53,048	86,860	33,812
Commercial/Retail Employment	23,365	47,020	59,621	12,601
Office Employment	5,825	1,410	7,233	5,823
Industrial Employment	13,875	16,873	37,442	20,569
Total Employment ⁶	43,140	65,378	104,371	38,993

Note:

1. Household and Population estimates for the 2018 Base Year are based on the latest version of RIVCOM Model

2. Household and Population estimates for the 2024 Baseline Year

3. Households for proposed GP reflects a 94% occupancy rate of available housing units

4. Proposed GP = MoVal 2040

5. MoVal 2040 and 2024 Baseline Year delta

6. Total employment is the sum of Commercial/Retail, Office, Industrial, and Agriculture (not presented in table)

VMT Impact Criteria

The City of Moreno Valley Traffic Impact Preparation Guide (June 2020) outlines the methodology for VMT assessment for land use projects and defines adopted thresholds of significance for impact assessment and are defined below. This transportation impact assessment compares VMT generated by the Proposed General Plan (2040) to VMT generated by the Existing Baseline (2024) at a total and per capita level to provide a comprehensive assessment.

CEQA VMT Impact Threshold

The following are the City's thresholds of significance for use as part of the environmental review process under CEQA:

1. A project would have a significant VMT impact if, in the Existing Plus Project scenario¹, its net VMT per capita (for residential projects) or per employee (for office and industrial projects) exceeds the per capita VMT for Moreno Valley. For all other uses, a net increase in VMT would be considered a significant impact.
2. If a project is consistent with the regional RTP/SCS, then the cumulative impacts shall be considered less than significant subject to consideration of other substantial evidence. If it is not consistent with the RTP/SCS, then it would have a significant VMT impact if:
 - a. For residential projects its net VMT per capita exceeds the average VMT per capita for Moreno Valley in the RTP/SCS horizon-year.
 - b. For office and industrial projects its net VMT per employee exceeds the average VMT per employee for Moreno Valley in the RTP/SCS horizon year
 - c. For all other land development project types, a net increase in VMT in the RTP/SCS horizon year would be considered a significant impact.

Note that the Cumulative No Project scenario shall reflect the adopted RTP/SCS; as such, if a project is consistent with the regional RTP/SCS, then the cumulative impacts shall be considered less than significant subject to consideration of other substantial evidence.

As these thresholds were not intended to specifically address the appropriate methodology and metrics for a general plan, the following threshold of significance is proposed to evaluate the Proposed MoVal 2040 Project:

Any increase in the VMT per Service Population/Resident/Employee calculated using the Boundary Method, Production/Attraction Method, or Origin/Destination method compared to the Existing Baseline would be considered a significant impact.

These methodologies and metrics are detailed below.

VMT Analysis Methodology

For all methodologies outlined, VMT can be presented as total VMT or as VMT per Service Population, Resident, or Employee. Total VMT represents all VMT generated in the City on a typical day. VMT per Service Population, Resident, or Employee is an efficiency metric which represents VMT generated on a typical day per person who lives and/or works in the City. VMT per person can be measured as VMT per Resident for residential only projects, VMT per Employee for employment only projects, and VMT per Service Population for projects and land use plans which include both residential and employment uses. Total VMT gives an estimate of the total travel, while VMT per person measures the efficiency of travel.

¹ It is not a reasonable assessment to add General Plan buildout onto the existing scenario as the General Plan is anticipated to take decades to develop. As such, as part of General Plan assessment, a more appropriate approach is to focus the project-generated VMT assessment on the 2040 horizon, consistent with a horizon that would be more appropriate with the absorption of the General Plan.

Total VMT and per person estimates were calculated using the three methodologies outlined below. Please note that there are multiple methods to estimate VMT, and there are limitations in the available VMT assessment tool, RIVCOM, which is a typical four-step travel demand forecasting model. The model steps, which convert person trips to vehicle trips, limit the ability to separate trips by trip purpose while also accounting for all trip modes (e.g., personal vehicle, public transit, walking, biking), as noted further below.

Production/Attraction VMT

The Production/Attraction (PA) method for calculating VMT sums all weekday VMT generated by trips with at least one trip end in the study area while trips are still tracked by trip purpose. The PA method tracks trips with at least one trip end to/from their ultimate destination unless that destination is outside of the model boundary area (e.g. outside of the RIVCOM region). Productions are land use types that generate trips (residences) and attractions are land use types that attract trips (employment). Productions and attractions are converted from person trips to vehicle trips for the purposes of calculating VMT.

The PA method allows project VMT to be evaluated based on trip purpose which is consistent with Office of Planning and Research (OPR), now known as the Office of Land Use and Climate Innovation, recommendations in the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (April 2018) and the City's guidelines. For example, a single-use project such as an office building could be analyzed based only on the commute VMT, or home-based-work (HBW) attraction VMT per employee; and a residential project could be analyzed based on the home-based (HB) production VMT per resident. PA matrices do not include external trips that have one trip end outside of the model boundary (IX-XI trips) or truck trips, and therefore do not include those trips in the VMT estimates. This is not consistent with the OPR recommendations that suggest full accounting of VMT should be completed.

Origin/Destination VMT

The Origin/Destination (OD) method for calculating VMT sums all weekday VMT generated by trips with at least one trip end in the study area and tracks those trips to their estimated origins/destinations. The OD method is completed after the final loops of assignment in the travel demand model after person trips are converted to total vehicle trips. Origins are all vehicle trips that start in a specific traffic analysis zone, and destinations are all vehicle trips that end in a specific traffic analysis zone.

The OD method accounts for external and truck trips and therefore provides a more complete estimate of all VMT within the study area. This methodology also estimates VMT consistent with VMT estimates in Air Quality, Noise, and Energy sections of an EIR. Unfortunately, OD trip matrices do not separate trips by trip purpose, and therefore VMT cannot be calculated by home-based-work (HBW) attraction VMT per employee or home-based (HB) production VMT per resident, but only by total VMT. It should also be noted that, although VMT includes trips to/from the City that originate or are destined to locations outside of the model area, those trip lengths are artificially truncated at the model boundary.

Boundary Method VMT

The boundary method is the total daily VMT within a specific area calculated by multiplying the daily vehicle traffic volume on all the roadway segment by the length of each of the roadway segment within that specific study area. This method includes all trips, including those trips that do not begin or end in the designated boundary. This method also captures the effect of cut-through and/or displaced traffic within the Moreno Valley City boundary and Western Riverside Council of Governments (WRCOG) boundary. The two boundaries provide a focused assessment specific to Moreno Valley while also reviewing the effect of uses

at the edge of the City that may not be captured by the City Boundary. Land use assumptions for WRCOG are provided in **Attachment B**.

VMT Results

The VMT estimates performed for each scenario are presented in **Table 2**. The following notes summarize the VMT results:

- Home-Based-Work Attraction (HBW-A) VMT/Employee and Origin Destination (OD) VMT/Service Population are forecasted to decrease under the 2040 Proposed General Plan as compared to the Existing Baseline.
- City Boundary VMT per service population and Home-Based Production (HB-P) VMT/Resident for the Proposed General Plan are higher than the Existing Baselines within the Moreno Valley City boundary and lower within the WRCOG boundary.

Table 2 – VMT Summary

Metric	2024 Baseline	2040 Proposed GP
Population	205,620	298,440
Employment	65,378	104,371
Service Population (SP) ¹	270,998	402,811
Total Origin-Destination (OD) VMT ²	8,846,399	12,669,735
OD VMT/SP	32.64	31.45
HB-P VMT ³	2,903,419	4,439,163
HB-P VMT/Resident	14.12	14.87
HBW-A VMT ⁴	1,719,510	2,477,198
HBW-A VMT/Employee	26.30	23.73
City Boundary VMT	2,759,935	4,270,239
City Boundary VMT/SP	10.18	10.60
WRCOG SP	2,483,117	3,597,414
WRCOG Boundary VMT	46,453,742	64,805,367
WRCOG Boundary VMT/SP ⁵	18.71	18.01

Notes:

1. SP = Service Population; the sum of population and employment.
2. OD = Origin/Destination; a method for calculating VMT that sums all weekday VMT generate by trips with at least one trip end in the study area and tracks those trips to their estimated origins/destinations.
3. HB-P VMT = Home-based production VMT; VMT generated by trips originating or ending at homes in Moreno Valley.
4. HBW-A = Home-based-work attraction VMT; VMT generated by trips originating or ending at employment centers in Moreno Valley.
5. Land use assumptions for WRCOG are provided in **Attachment B**.

The VMT estimates for 2040 future year conditions without any modifications to the model land use were also performed for comparison purposes and provided in **Attachment B**.

VTM Impact Assessment

Based on the VMT metrics presented in **Table 2**, the following are considered significant impacts under the Proposed General Plan:

- OD VMT/SP increases from the Existing Baseline in 2024 to buildout under the Proposed General Plan in 2040
- The City Boundary VMT and Boundary VMT/SP are higher at buildout of the Proposed General Plan in 2040 than the Existing Baseline in 2024

Goals, policies and actions from the Moreno Valley General Plan Circulation Element that are anticipated to reduce VMT are provided as **Attachment A**. However, it is not anticipated that VMT reductions associated with transportation demand management (TDM) measures would be large enough to guarantee that significant impacts could be fully mitigated.

Therefore, the Proposed General Plan is anticipated to result in a **significant and unavoidable transportation impact related to VMT**.

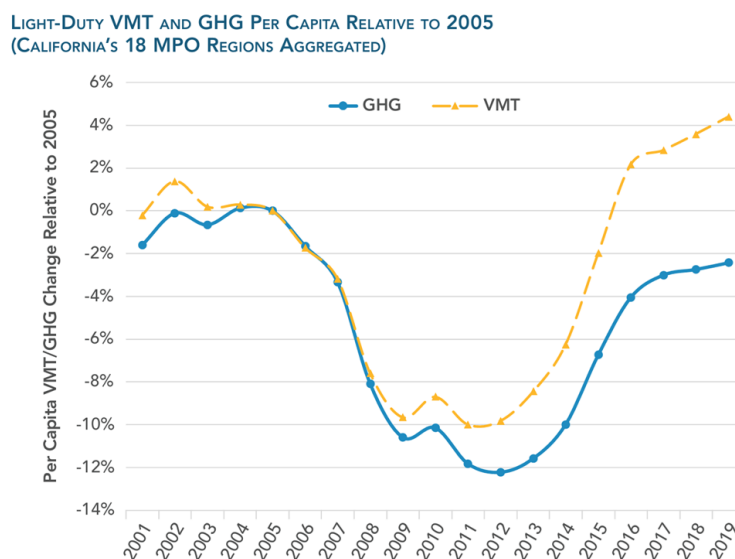
Other Impact Analysis Evidence

When making a final VMT impact determination, other available evidence related to VMT trends should be considered. This study identified the following two relevant studies.

- 2022 Progress Report: California's Sustainable Communities and Climate Protection Act, California Air Resources Board (CARB), November 2022 (referred to as the Progress Report in the remainder of this document).
- CARB Improved Program Measurement Would Help California Work More Strategically to Meet Its Climate Change Goals, Auditor of the State of California, February 2021 (referred to as the Audit Report in the remainder of this document).

The Progress Report measures the effect of SB 375 revealing that VMT and Greenhouse Gas (GHG) per capita increased in California between 2012 and 2019 and are trending upward, as shown in **Figure 1**.

Figure 1 – VMT/Capita Trends



Source: 2022 Progress Report, California's Sustainable Communities and Climate Protection Act

The Audit Report is a more recent assessment of CARB's GHG reduction programs, which also found that VMT and its associated GHG emissions were trending upward through 2018. Per the audit, the state is not on track to achieve 2030 GHG reduction goals, and emissions from transportation have not been declining.

The evidence from these two reports does not refute the Project's VMT impact finding but does suggest greater action on the part of the State may be needed to achieve the State's GHG reduction goals. The project contributes to the basic objectives of SB 743 for local agencies such as adding development in a land use efficient area where the short-trip lengths to destinations allows for more multi-modal choices and low VMT generation. The monitoring of State performance indicates that the State may need to take further action to discourage vehicle travel (i.e., increasing the cost of driving) while reducing the barriers or constraints that prevent more efficient use of vehicles and greater use of transit, walking, and bicycling. If these types of actions are taken, residents and employees in Moreno Valley would have multiple travel options to further reduce their vehicle use because of the proximity to existing destinations.

Analysis Limitations

This analysis was performed during the post-COVID-19 pandemic conditions while using the base year and future year models developed during pre-COVID-19 conditions. The COVID-19 response has dramatically changed human activities and associated travel patterns. Performing more activities from home was already a trend due to the internet, but COVID-19 accelerated transitions to working and shopping from home. In addition, other disruptive trends related to demographic changes, new travel choices such as Uber and Lyft, and the potential for autonomous vehicle (AV) travel make predicting future travel demand and outcomes less certain. Given these limitations of modeling and forecasting, the general consistency of the Project with the broader SB 743 objectives and the legislative intent of CEQA noted below may warrant greater emphasis in the VMT impact assessment.

Public Resources Code 21001. ADDITIONAL LEGISLATIVE INTENT

The Legislature further finds and declares that it is the policy of the state to:

(d) Ensure that the long-term protection of the environment, consistent with the provision of a decent home and suitable living environment for every Californian, shall be the guiding criterion in public decisions.

VMT Estimates for Greenhouse Gas Assessment

VMT estimates were performed for the Project using the *Recommendations of the Regional Targets Advisory Committee (RTAC) Pursuant to Senate Bill 375* methodology to utilize in the GHG Assessment.² The estimates were performed using the Origin-Destination approach. The RTAC Methodology specifies to apply 100% of internal to internal trips (ii trips) and 50% of internal to external or external to internal trips (ix & xi trips). These estimates for each scenario and by vehicle type (passenger car, light truck, medium truck and heavy truck) are provided as **Attachment C**. Please note that these estimates differ from **Table 2** as those estimates applied 100% of ix & xi trips, consistent with transportation impact analysis.

² Regional Targets Advisory Committee, Recommendations of the RTAC Pursuant to Senate Bill 375, <https://www.fresnocog.org/wp-content/uploads/files/SB375/finalreport.pdf>. Accessed March 28, 2025.

Attachment A – Moreno Valley Goals, Policies and Actions related to VMT Reduction

Policy C.2-1 Design, plan, maintain, and operate streets using complete streets principles for all types of transportation projects including design, planning, construction, maintenance, and operations of new and existing streets and facilities. Encourage street connectivity that aims to create a comprehensive, integrated, connected network for all modes.

Policy C.2-2 Implement a layered network approach by prioritizing conflicting modes, such as trucks and bicyclists, on alternative parallel routes to provide safe facilities for each mode.

Policy C.2-9 Require connectivity and accessibility to a mix of land uses that meets residents' daily needs within walking distance. Typically, this means creating walkable neighborhoods with block lengths between 330 feet and 660 feet in length, based on divisions of the square mile grid on which the city is laid out.

Policy C.2-10 Ensure that complete streets applications integrate the neighborhood and community identity into the street design and retrofits. This can include special provisions for pedestrians and bicycles that complement the context of each community.

Action C.2-B Continue to implement the Bicycle Master Plan to provide low-stress bicycle network improvements citywide.

Action C.2-C Develop curb space management guidelines that incorporate best practices and strategies for deliveries and drop-offs in commercial and mixed-use areas.

Action C.2-F As new transportation technologies and mobility services, including connected and autonomous vehicles, electric vehicles, electric bicycles and scooters, and transportation network companies (e.g., Uber and Lyft) are used by the public, review and update City policies and plans to maximize the benefit to the public of such technologies and services without adversely affecting the City's transportation network. Updates to the City's policies and plans may cover topics such as electric vehicle charging stations, curb space management, changes in parking supply requirements, shared parking, electric scooter use policies, etc.

Action C.2-H Evaluate opportunities to implement roundabouts as traffic control as new development projects are proposed, considering safety, traffic calming, cost, maintenance and greenhouse gas reduction related to idling.

Policy C.3-4 Require development projects to complete traffic impact studies that conduct vehicle miles traveled analysis and level of service assessment as appropriate per traffic impact study guidelines.

Policy C.3-7 Support regional efforts in the development of a VMT mitigation impact fee program.

Policy C.3-10 Employ parking management strategies, such as shared parking in mixed use areas, on-street residential parking, and spill-over parking to avoid construction of unnecessary parking.

Policy C.4-1 Support the development of highspeed transit linkages or express routes connecting major destinations within the city and beyond, including the Metrolink Station, that would benefit the residents and employers in Moreno Valley.

Policy C.4-3 Support the establishment of a Transit Center/Mobility Hub in the Downtown Center.

Policy C.4-4 All new developments shall provide sidewalks in conformance with the City's streets cross-section standards, and applicable policies for designated urban and rural areas.

Policy C.4-5 Recognize that high-speed streets, high-volume streets and truck routes can increase pedestrian and bicycle stress levels and decrease comfortability. Provide increased buffers and protected bicycle lanes in high-stress areas, where feasible. Provide landscaped buffers where feasible to separate pedestrian environments from the travel way adjacent to motor vehicles. Provide convenient and high-visibility crossings for pedestrians.

Action C.4-A Prepare and maintain a Pedestrian Access Plan supporting a safer and more convenient network of identified pedestrian routes with access to major employment centers, shopping districts, regional transit centers, schools, and residential neighborhoods; the plan should address safer routes to schools, safer routes for seniors, and increase accessibility for persons with disabilities.

Action C.4-B The City shall actively pursue funding for the infill of sidewalks in developed areas. The highest priority shall be to provide sidewalks on designated school routes.

Action C.4-C Continue on-going coordination with transit authorities toward the expansion of transit facilities into newly developed areas.

Action C.4-D Work with major employers, the hospital complexes, and Moreno Valley College to study alternatives to conventional bus systems, such as smaller shuttle buses (micro-transit), on-demand transit services, or transportation networking company services that connect neighborhood centers to local activity centers with greater cost efficiency.

Action C.4-E Pursue regional, state and federal grant opportunities to fund design and construction of the City bikeway system.

Policy C.5-1 Work to reduce VMT through land use planning, enhanced transit access, localized attractions, and access to non-automotive modes.

Policy C.5-2 Encourage public transportation that addresses the particular needs of transit-dependent individuals, including senior citizens, the disabled, and low -income residents.

Policy C.5-3 Encourage bicycling as an alternative to single occupant vehicle travel for the purpose of reducing fuel consumption, traffic congestion, and air pollution.

Policy C.5-4 Particularly in corridors and centers, work with transit service providers to provide first-rate amenities to support pedestrian, bicycle and transit usage, such as bus shelters and benches, bike racks on buses, high-visibility crossings, and modern bike storage.

Policy C.5-5 Encourage local employers to implement TDM strategies, including shared ride programs, parking cash out, transit benefits, allowing telecommuting and alternative work schedules.C.5-A Maintain a list of recommended Transportation Demand Management (TDM) strategies for employers and new developments.

Action C.5-A Keep the City's traffic impact study guidelines current and revise the CEQA threshold of significance for VMT as appropriate.

Action C.5-B Maintain a list of recommended Transportation Demand Management (TDM) strategies for employers and new developments.

Action C.5-C Remain flexible in the pursuit and adoption of transportation funding mechanisms that fund innovative transportation solutions.

Action C.5-D Work with RTA and Metrolink to increase transit service frequency, speed, and reliability and increase ridership. Strengthen linkages and access to the Metrolink Station.

Action C.5-E Integrate transit access and information systems into employment centers, major destinations and new multi-family residential development.

Action C.5-F Develop a Park Once strategy to promote walkability in mixed use centers and corridors.

Action C.5-G Study the feasibility of implementing car-sharing program, working with established providers.

Policy C.6-2 Support implementation of new technologies and best practices that make logistics operations cleaner, greener, and more efficient, including electric truck charging stations, autonomous vehicle sensors and communications.

Table B1 – WRCOG Land Use Assumptions & VMT Estimates

Metric	2024 Baseline	2040 Proposed GP	2040 Original RIVCOM Model ₁
Population	1,890,022	1,890,459	2,535,036
Employment	570,420	592,658	795,327
Service Population ²	2,460,442	2,483,117	3,330,363
WRCOG Boundary VMT ³	45,897,023	46,453,742	60,690,067
WRCOG Boundary VMT/SP	18.65	18.71	18.22

Notes:

1. RIVCOM Model Horizon Year interpolated between 2018 and 2045
2. SP = Service Population; the sum of population and employment.
3. WRCOG = Western Riverside Council of Governments, which contains the following member agencies – 18 cities within Riverside County, Riverside County, two water districts, March Joint Powers, and the Riverside County Superintendent of Schools.

Table B2 – VMT Summary by Scenario

Metric	2024 Baseline	Proposed MoVal 2040 Project GP
Population	205,620	298,440
Employment	65,378	104,371
Service Population (SP) ¹	270,998	402,811
Total OD VMT	8,846,399	12,669,735
OD VMT/SP	32.64	31.45
HB-P VMT ²	2,903,419	4,439,163
HB-P VMT/Resident	14.12	14.87
HBW-A VMT ³	1,719,510	2,477,198
HBW-A VMT/Employee	26.30	23.73
City Boundary VMT	2,759,935	4,270,239
City Boundary VMT/SP	10.18	10.60
WRCOG SP	2,483,117	3,597,414
WRCOG Boundary VMT	46,453,742	64,805,367
WRCOG Boundary VMT/SP ⁴	18.71	18.01

Notes:

1. SP = Service Population; the sum of population and employment.
2. HB-P VMT = Home-based production VMT; VMT generated by trips originating or ending at homes in Moreno Valley.
3. HBW-A = Home-based-work attraction VMT; VMT generated by trips originating or ending at employment centers in Moreno Valley.
4. Land use assumptions for WRCOG are provided in Table B1.

Attachment C – Daily VMT Summary (RTAC Methodology)

City of Moreno Valley Auto Daily VMT

VMT Type	Analysis Year	
	2024 Baseline	2040 GP
Internal-Internal	1,625,838	2,192,289
Internal-External*	1,652,260	2,372,084
External-Internal*	1,708,516	2,442,015
Total	4,986,614	7,006,388

* Only 50% of I-E and E-I VMT is included in this summary table

City of Moreno Valley Light Truck Daily VMT

VMT Type	Analysis Year	
	2024 Baseline	2040 GP
Internal-Internal	15,002	34,888
Internal-External*	63,932	97,478
External-Internal*	64,474	97,680
Total	143,408	230,046

* Only 50% of I-E and E-I VMT is included in this summary table

City of Moreno Valley Medium Truck Daily VMT

VMT Type	Analysis Year	
	2024 Baseline	2040 GP
Internal-Internal	13,286	34,004
Internal-External*	16,060	26,885
External-Internal*	16,061	26,883
Total	45,407	87,772

* Only 50% of I-E and E-I VMT is included in this summary table

City of Moreno Valley Heavy Truck Daily VMT

VMT Type	Analysis Year	
	2024 Baseline	2040 GP
Internal-Internal	14,147	47,331
Internal-External*	46,674	80,990
External-Internal*	46,653	80,939
Total	107,473	209,260

* Only 50% of I-E and E-I VMT is included in this summary table

City of Moreno Valley Total Daily VMT

VMT Type	Analysis Year	
	2024 Baseline	2040 GP
Internal-Internal	1,668,273	2,308,512
Internal-External*	1,765,201	2,555,053
External-Internal*	1,821,994	2,625,147
Total	5,255,468	7,488,713

* Only 50% of I-E and E-I VMT is included in this summary table