

Land Conservation & VMT Reduction Analysis

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1. Introduction

This study explores the feasibility of land conservation as a means of mitigating the vehicle miles traveled (VMT) impact of development projects across Western Riverside County. The passage of California Senate Bill 743 (SB743) established VMT as the metric for evaluating the transportation impact of development or transportation infrastructure projects under the California Environmental Quality Act (CEQA).¹ Previously, transportation impacts were measured in terms of the amount of delay experienced by vehicles along a roadway, which largely resulted in expanding vehicular capacity in most places and failed to address the problem of traffic growth. The shift toward measuring impacts in terms of added vehicle travel represents a statewide priority to decrease greenhouse gas emissions, which are directly correlated with VMT, from the transportation sector. Projects which are estimated to generate a VMT per capita above a threshold set by the local jurisdiction would have a significant impact under CEQA and may need to identify VMT mitigation measures and undergo additional environmental review.

¹ CEQA Guidelines, Cal. Code Regs., Title 14, Div. 6, Ch. 3, § 15000 et seq.



Since the implementation of SB743, agencies are aligning their efforts to decrease greenhouse gas emissions through a variety of transportation and land use-related strategies. The relationship between land use and VMT is well-established: increasing the density of land use development is one of the quantified measures for reducing VMT in CAPCOA's *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (2021) ("GHG Handbook"). Identifying and conserving developable land in low-density, high-VMT areas could shift the demand for that development to denser areas, achieving the goal of increasing development density (and reducing VMT) while conserving land that is important for protection of biodiversity, habitat conservation, and nature-based climate mitigation.

Through this effort, the Western Riverside County Conservation Authority (RCA) is exploring ways to take advantage of these integrated policy goals, responding to development/transportation project needs for VMT mitigation in the form of credits that can be sold to fund purchase of parcels that achieve the agency's conservation goals. Their goal of habitat conservation to preserve biodiversity within the region is compatible with efforts to limit sprawl and growth in VMT by concentrating development in places that allow for shorter, more efficient trips. The RCA is housed within the Riverside County Transportation Commission (RCTC), the agency responsible for funding and implementing transportation projects which may require VMT mitigation, further strengthening the opportunity to directly link these goals through a VMT mitigation program.

In parallel with this work, the Western Riverside Council of Governments (WRCOG) is working on establishing a VMT Exchange which would serve as the "storefront" to connect VMT credit generators such as the RCA, with VMT credit buyers, such as housing developers or public agencies, in need of securing mitigation to offset significant VMT impacts. The existing relationships between RCA and RCTC, along with WRCOG's ongoing work in this area helped to facilitate this study's exploration of land conservation as VMT mitigation.

As a VMT mitigation measure, land conservation has several benefits that differentiate it from other potential VMT mitigation measures, contributing to the motivation to explore it further as a formal mitigation measure. Some of these benefits are intrinsic to conservation; others are specific to the way in which a conservation-as-mitigation approach could be implemented.

- 1) Conservation as VMT mitigation achieves multiple state goals related to natural resource conservation, smart growth principles, climate mitigation and adaptation, housing production (implementation-dependent), and VMT reduction.
- 2) Conservation provides a permanent VMT mitigation strategy. Once purchased for conservation, its development rights are extinguished in perpetuity.
- 3) Conservation through a habitat agency like the RCA provides the organizational structure to administer the VMT mitigation program, manage and maintain conserved lands, aligns conservation with a formal regional-scale plan such as the Multiple Species Habitat



Conservation Plan (MSHCP), and serves as a replicable approach for other habitat agencies across California.

Simply put, this study seeks to develop a methodology and implementation approach that would satisfy state and regional policy goals, most notably reducing GHG emissions, incentivizing development that allows Californians to drive less, and conserving undeveloped land, water, and wildlife.

This report is organized as follows: the Study Approach describes the selection of parcels for analysis and the analysis methodology, the Parcel-Level Results discuss the outcomes of the analysis, the Implementation Framework outlines a path for including land conserved by RCA in WRCOG's VMT Exchange, and the Conclusion offers final thoughts.

2. Study Approach

Evaluating a conceptual mitigation strategy that integrates land conservation as an eligible activity for VMT mitigation required identifying parcels to conserve and then quantifying the net VMT reduction of conserving these parcels. This section provides an overview of the study scope and the methodologies we employed over the course of the study.

While the inclusion of land use policies in CAPCOA's GHG Handbook demonstrates the well-established nature of the relationship between development patterns and VMT per capita, there has been less focus on quantifying the VMT impacts of land conservation. The closest antecedent to this work is the Sustainable Agricultural Lands Conservation (SALC) Program, administered by the California Department of Conservation. The SALC Program provides grants to "permanently protect croplands, rangelands, and lands utilized for the cultivation of traditional resources from conversion to non-agricultural uses."² Applicants for these grants are required to quantify the VMT mitigated by conserving these lands using a methodology provided by SALC.³ Like the SALC methodology, the approach outlined in this report assumes that households not developed on the conserved land will instead be developed in a nearby urban environment. Unlike the SALC methodology which is designed to be applied to any eligible parcel of land across the state and therefore leverages regionwide averages for urban and rural household VMT, this methodology uses a travel demand model to more specifically estimate the VMT of households if they were to be built on a set of parcels identified as particularly suitable for conservation purposes, compared to those same number of households built elsewhere nearby. We also employed a scenario-based analysis to account for varying levels of development that could occur if the land were not conserved.

² [Sustainable Agricultural Lands Conservation Program \(SALC\) \(ca.gov\)](#)

³ [Agricultural Lands Conservation Quantitative Methodology \(ca.gov\)](#)



2.1 Study Scope and Parcel Selection

The first step of the workflow involved identifying groups of parcels across the study area that would be strong candidates for conservation. The study area is comprised of the pre-identified areas for conservation—geographically represented as 1,996 “criteria cells”—in the Western Riverside County MSHCP, managed by RCA⁴. Strong candidates for conservation met three criteria: 1) currently undeveloped, 2) not precluded from future development under the current applicable zoning code, and 3) in high VMT-generating areas. For the purpose of this study, any transportation analysis zone (TAZ) with an average VMT per capita above the regional average for Western Riverside County was considered “high VMT-generating.” VMT data was available at the TAZ level via WRCOG’s travel demand model (RIVCOM)⁵, so the VMT per capita of a given criteria cell was assumed to be equal to the VMT per capita of the TAZ within which it was located. The Project team applied the three-step filtering process below to arrive at a set of parcel candidates for conservation. Additional detail on the methodology is documented in Table 1. Figure 1 shows the criteria cells and the high VMT areas, with the results of the filtering process in bold outlines.

1. Identify criteria cells that exhibit VMT per capita higher than the regional average within the study area.
2. Filter criteria cells by additional characteristics to identify ~20 contiguous sets of criteria cells, referred to as “target areas,” for a more detailed review.
3. Review individual parcels within the target areas to select groups of parcels for VMT reduction analysis.

Table 1: Parcel Filtering Methodology

Filtering Step	Filtering Criteria	Output
1. Identify criteria cells in high VMT-generating areas	<ul style="list-style-type: none"> • Criteria cells that overlap with TAZ’s that exhibit VMT per capita higher than the regional average.¹ 	1,716 criteria cells
2. Filter by additional characteristics to narrow in on ~20 contiguous sets of criteria cells	<ul style="list-style-type: none"> • Less than 90% of criteria cells overlap with protected land. • Population density of the overlapping TAZ is less than 1,000 people per square mile (proxy for developable land) • RIVCOM model forecasts VMT in the overlapping TAZ will remain higher than the regional average in the future. • Overlapping TAZ falls into top 50th percentile for VMT per capita. • Not zoned as open space, watershed/watercourse, or floodway. • From a visual review, developable land remains. 	22 target areas comprised of <500 criteria cells

⁴ Permitted in 2004, the MSHCP focuses on conservation of species and their habitats. The RCA was created in 2004 to assist the other permittees implement the MSHCP. Acquiring and protecting habitat is a primary implementation task.

⁵ [Transportation Modeling Services | WRCOG, CA](https://www.wrcog.ca.gov/transportation-modeling-services)

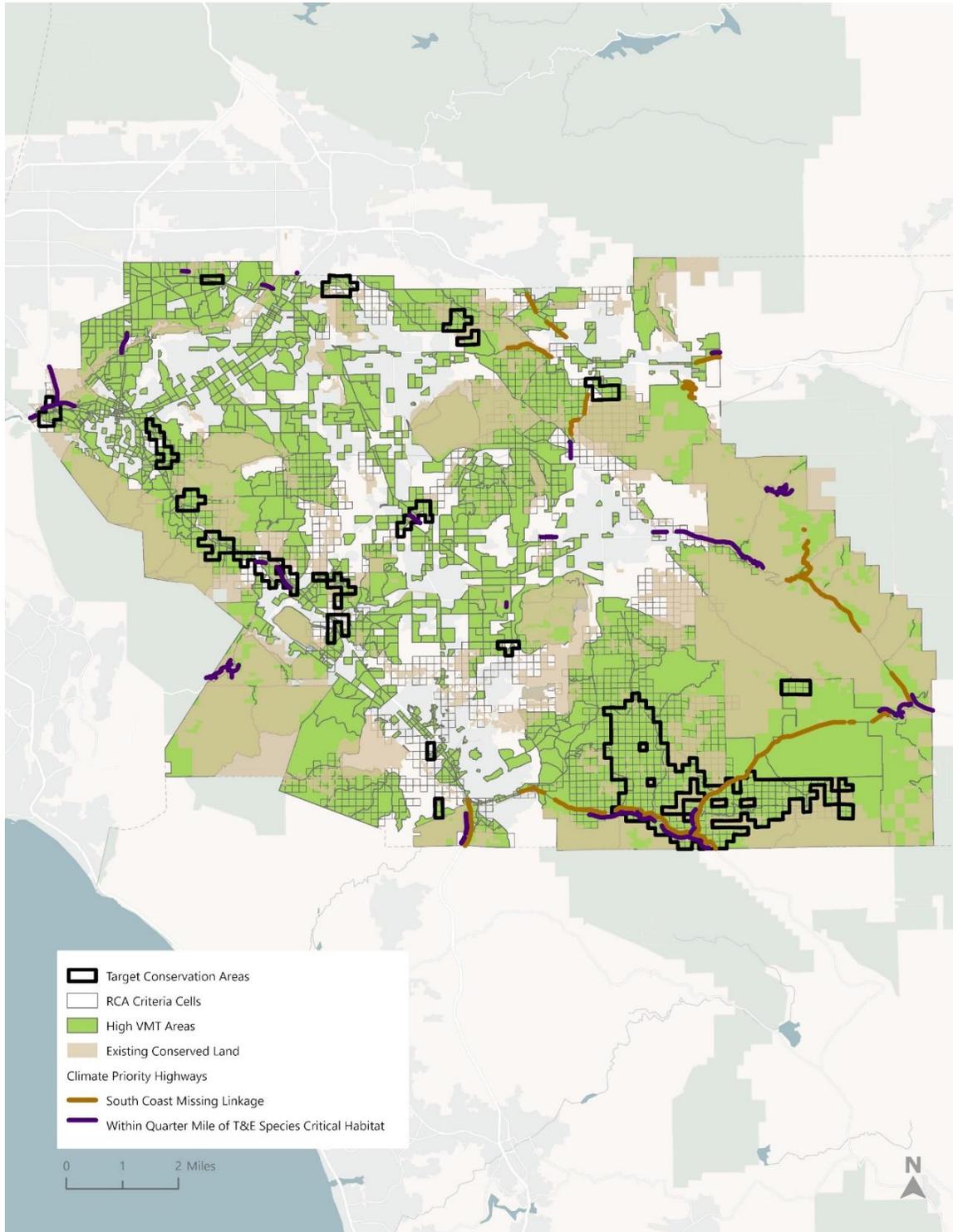


3. Select groups of parcels for VMT reduction analysis	<ul style="list-style-type: none">• Individual parcel review to ensure selected parcels represented a diversity of contexts in terms of parcel size, zoning, and characteristics of surrounding land.• Filtered out parcels with existing planned development.• Considered location relative to RCA Reserve and current ownership.• Leveraged RCA’s local knowledge	Nine parcel groups (Groups are comprised of 1-7 parcels each)
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Note: ¹WRCOG has documented all low and high VMT zones in the subregion based on the latest RIVCOM outputs in their online VMT tool.



Figure 1: Areas identified as good candidates for conservation



Source: Fehr & Peers, 2024.



The final parcels selected for VMT reduction analysis meet the criteria for strong conservation candidates described earlier in this section, while still representing a diversity of land contexts. They also provide a variety of environmental co-benefits, as shown in Table 3.

2.2 Quantification of VMT Reduction

After identifying parcels that could be a good fit for this VMT mitigation strategy, the Project team quantified the VMT that would be generated if the parcels were developed, which is the basis for a VMT reduction if each of the selected parcels were conserved instead. The quantification methodology was comprised of the four steps below and repeated for each parcel.

1. **Quantify level of development if parcel was developed.** Level of development was defined as the number of people who would live in a dwelling on the parcel if it were developed. It was calculated by multiplying the average household size in Riverside County (2.6 people per household⁶) by the estimated number of dwelling units that would be built if the parcel was developed. In response to feedback from the stakeholder working group, we evaluated three development alternatives, recognizing the intensity of future development is contingent on several factors and there may be variation from what is currently zoned.
 - a. **Development Alternative One:** 80% of the maximum possible dwelling units are built subject to the existing zoning code. This alternative assumes some portion of the land is set aside for open space, or that development occurs at a lower level of density than the zoning code's maximum for the given designation due to market conditions.
 - b. **Development Alternative Two:** The maximum possible number of dwelling units are built subject to the existing zoning code.
 - c. **Development Alternative Three:** 120% of the maximum possible dwelling units are built relative to the existing zone code due to market forces that might lead a developer to seek a change in the zoning code maximums to allow for greater development.
2. **Calculate total VMT if parcel was developed.** The team assigned a VMT per capita value to each of the parcels based on the base year home-based VMT per capita value in the RIVCOM model for the TAZ within which the parcel sits. For parcels straddling multiple TAZs, we used an area-weighted average. The VMT per capita of the parcel was multiplied by the assumed number of people associated with the parcel's development in each of the development alternatives (values obtained in Step 1) to get the total VMT that would occur if the parcel was developed.
3. **Quantify total VMT if the development that could have been built on the conserved parcel was built elsewhere.** This step used a similar approach to Step 2. We calculated VMT per capita value of the area in which the development was assumed to shift to: 1) assume the VMT per capita is equivalent to the regional average VMT per capita or 2) assign development to the nearest jurisdiction and assume VMT per capita is equivalent to the

⁶ 2021 ACS 5-year estimate.



nearest jurisdiction’s average VMT per capita.⁷ The VMT per capita of the area where development is assumed to occur instead was multiplied by the assumed number of people associated with the development in each of the alternatives (values obtained in Step 1) to get the total VMT that would occur if the parcel was conserved, and the same amount of development occurred elsewhere.

4. **Calculate the net change in total VMT.** We subtracted the total VMT if the parcel was developed (Step 2 output) from the total VMT if the parcel was conserved (Step 3 output) to determine the net change in total VMT if the parcel was conserved.

Using the methodology above, we calculated a range of possible net VMT reduction values for each selected parcel and the environmental co-benefits of conserving each parcel. Table 2 summarizes the six scenarios we evaluated. Section 3 discusses the results for each parcel group along with and the environmental co-benefits of conserving each parcel.

Table 2: Net Change in Total VMT Scenarios

Scenario	Development alternative	VMT per capita of development occurring elsewhere
1	80% of maximum possible dwelling units are built	Regional average for Western Riverside County
2	Maximum possible dwelling units are built	Regional average for Western Riverside County
3	120% of maximum possible dwelling units are built	Regional average for Western Riverside County
4	80% of maximum possible dwelling units are built	VMT per capita of nearest jurisdiction
5	Maximum possible dwelling units are built	VMT per capita of nearest jurisdiction
6	120% of maximum possible dwelling units are built	VMT per capita of nearest jurisdiction

2.3 Stakeholder Engagement

The team engaged a group of stakeholders with a variety of conservation, transportation, and planning-related backgrounds for input on the study approach throughout the process. These stakeholders supported the study with their knowledge of local jurisdictional policy, experience with

⁷ The first approach makes less restrictive assumptions about where development would be reallocated but may produce less comparative information than the above approach. The second approach allows the analysis to inform a comparison of when the conservation approach may be most fruitful for reducing VMT (e.g., more VMT can be reduced if the housing is reallocated to one location versus a different type of location). This approach requires a stronger assumption about where the housing would be developed otherwise but is consistent with SALC’s assumptions.



local implementation of SB 743, involvement with local conservation planning and climate policy. The stakeholder working group was comprised of members from:

- California Air Resources Board (CARB)
- Caltrans
- County of San Diego
- Coachella Valley Conservation Commission (CVCC)
- Endangered Habitats League (EHL)
- Riverside County Transportation Commission (RCTC)
- Temecula-Elsinore-Anza-Murrietta Resource Conservation District (TEAM RCD)
- Western Riverside Council of Governments (WRCOG)
- Southern California Association of Governments

In addition to providing feedback on the concept of land conservation as a VMT mitigation strategy, the stakeholder working group highlighted key factors to incorporate in the net VMT reduction quantification methodology and highlighted areas for future work.



3. Parcel-Level Results

This section presents the VMT reduction results for each of the parcels selected as conservation candidates. More information on each parcel’s characteristics can be found in the Appendix. The locations of the analyzed parcel groups are shown in Figure 2. Parcel Groups 5, 7, and 9 present the largest opportunity for net VMT reduction on a per acre basis. Table 3 summarizes the VMT reduction potential of conserving the nine parcel groups as well as the associated environmental co-benefits.

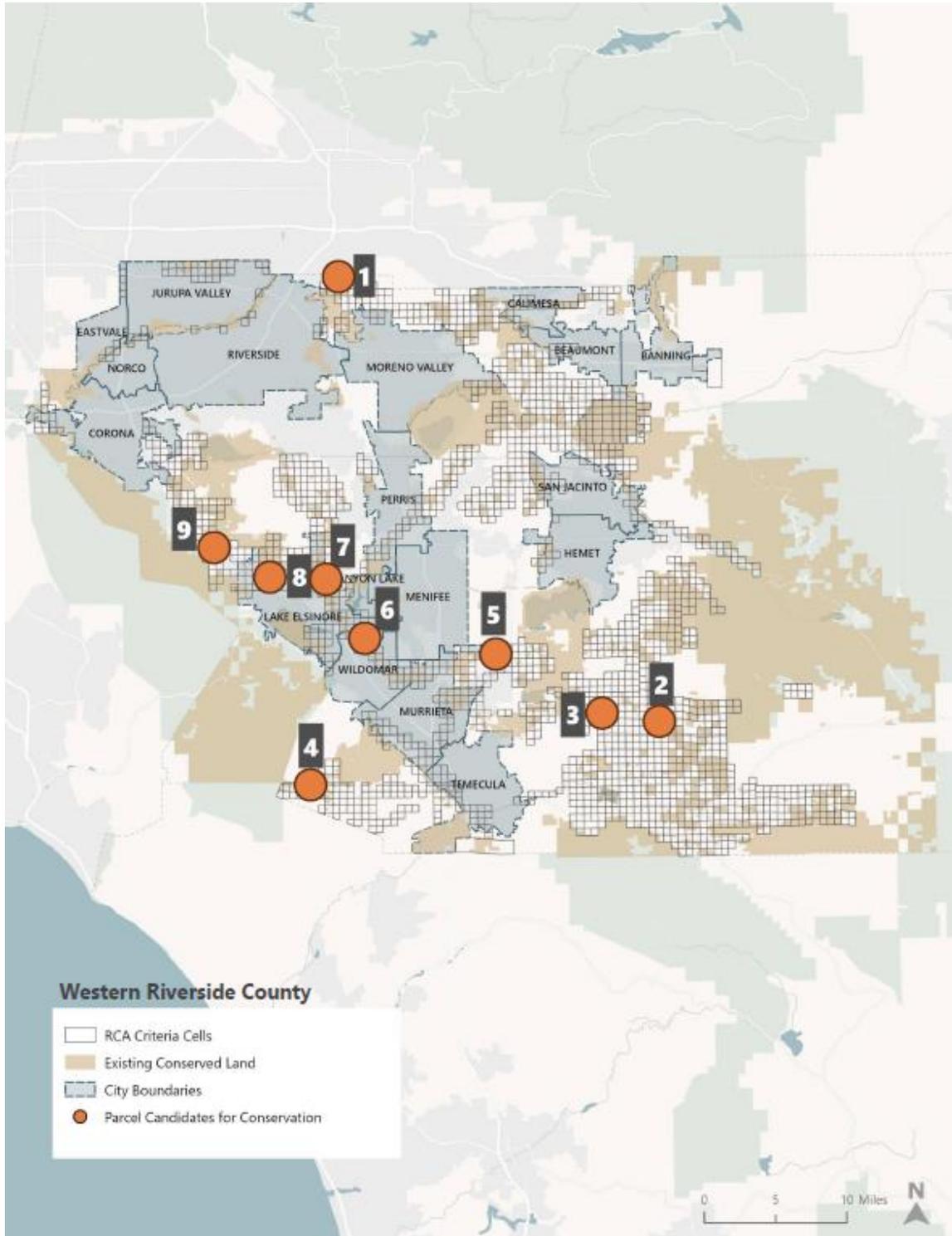
Table 3: Summary of VMT Reduction Analysis Results by Parcel Group

Parcel Group	Land area (acres)	Net annual reduction in home-based VMT if conserved			Environmental Co-benefits of Conservation				
		Minimum	Maximum	Average per acre	Protects underrepresented habitat	Supports environmental equity	Supports biodiversity	Supports climate resiliency	Protects environmental linkages
1	90.2	830,638	1,640,427	13,333	✓	✓	✓		
2	639	9,735,282	22,786,472	24,380		✓	✓	✓	
3	120.9	2,612,950	4,335,623	28,450	✓		✓	✓	✓
4	39.2	1,250,039	1,974,471	40,918			✓		
5	162.9	20,537,781	43,107,810	189,059			✓	✓	
6	81.2	1,124,569	2,335,656	20,641	✓	✓	✓	✓	
7	18.1	1,944,941	4,948,484	181,075		✓	✓	✓	
8	23.9	142,448	545,944	13,243	✓	✓	✓		
9	145.2	19,195,074	43,014,799	206,059		✓	✓		✓

Source: Fehr & Peers, 2024.



Figure 2: Parcels Selected for VMT Reduction Analysis



Source: Fehr & Peers, 2024.



4. Implementation Framework

RCA has a willing partner in WRCOG to include land conservation as an accepted mitigation action in their VMT Exchange. This section outlines one potential framework for implementing this, allowing RCA to receive funds from project proponents looking to mitigate VMT in exchange for conserving land. Note, Fehr & Peers does not provide legal advice and any party looking to deploy this approach through implementation should consult with a CEQA legal expert to identify any additional steps that may be required for establishing intent to use conservation parcels as VMT mitigation.

Quantify VMT mitigated by parcels of interest. This would leverage the approach outlined in Section 2 of this report. In consultation with WRCOG, RCA may choose one scenario for the quantification or may leverage the average value from across scenarios.

Purchase land. RCA purchases the land that aligns with its conservation value and quantifies VMT that would be generated if the land were instead developed.

Set a price that project applicants will pay in order to receive the VMT credits calculated. This price can be set by RCA. It may reflect the cost of the land, but it may also be less. To receive credit for the VMT mitigated, project proponents are not always required to pay the full cost of the mitigating effort. For example, in the case of housing, Caltrans allows a project proponent to claim all the VMT credits generated by a housing development that lowers VMT even if they only provide partial funding for the project.⁸ The Los Angeles County Metropolitan Transportation Authority (LA Metro) VMT Mitigation Program leverages this policy to price the VMT credits produced by LA Metro's Joint Development program, which develops affordable housing on Metro-owned land, at a portion of the actual cost to build to housing which represents a realistic amount that would "close the funding gap" and enable the housing to be built.⁹ Because WRCOG, not Caltrans, is the approving entity in this case, they are not required to adhere to Caltrans' policies, but this policy provides precedent for allowing a project proponent to partially fund a VMT mitigation effort but claim all or some of the credits, so long as no other entity is claiming the same VMT credits for providing another portion of the funding.

The price may also include administrative costs to cover the administration of the WRCOG VMT Exchange and annual operations/maintenance costs to cover, in perpetuity, RCA's costs of maintaining the health of the conserved land.

⁸ [Housing and VMT Mitigation | Caltrans](#)

⁹ [Vehicle Miles Traveled Mitigation Program - LA Metro](#)



Include these VMT credits in WRCOG’s Exchange. In alignment with the format established by WRCOG for their VMT Exchange, these VMT credits can be offered for purchase at the WRCOG VMT mitigation “store” at the price set according to the previous step.

5. Conclusion

The support and partnership of WRCOG in this effort is a key ingredient to offering land conservation as VMT mitigation as part of an established VMT Exchange. If RCA and WRCOG choose to move forward, the infrastructure and development communities and conservation community stand to learn much more about how this potential solution would work in practice. Due to there being almost no precedent for such an effort, there are few guidelines to which we can turn. This report outlines a path forward given a specific context and set of willing partners. The methodology and implementation will likely look different in different contexts, but this study provides a baseline to be built upon and refined.

A limitation to this approach is the assumption that development that is displaced from conserved lands will instead be built nearby in more VMT-efficient locations. During this study, our team heard the concern that by limiting the supply of undeveloped land via conservation, the average price of land could increase, forcing development further out (beyond our study region) into less expensive, and less VMT-efficient areas. This should be the focus of further study, but conservation in the context of Western Riverside County today is only one of many factors (including continued development) that affect land prices. Western Riverside has been growing rapidly over the last 30 years and is a source of relatively affordable housing for those priced out of the nearby Los Angeles and San Diego metropolitan areas. Per conversations with conservation and land use experts, the RCA has conserved approximately 70,000 acres in Western Riverside County over the last 20 years, yet the region still contains vast amounts of undeveloped land. Housing and warehouse development continues, greatly outpacing the rate of conservation. The relative contribution of land conservation in driving exurban development and sprawl and an increase in the cost of land is likely small compared to the effects of demand for more affordable housing. However, the question of where the development occurs instead of on the conserved land remains, even if changes in land price due to conservation is not the driver.

Where development happens after land is conserved is likely dependent on several interrelated factors including the availability of undeveloped land, the level of density allowed or incentivized in low-VMT areas, the cost of land in low-VMT or high-VMT areas, the terrain, the amount of demand for different land uses, and the relative location of employment and commercial hubs in the broader region. Future study should consider the relationship between these factors and development patterns over time when land is conserved, in order to understand the circumstances under which it can be asserted that conserving land in one area with high-VMT patterns results in more development in another, more VMT-efficient area.



Despite these limitations, this study is an important first step in establishing a methodology and working solution that meets multiple policy goals including climate, smart growth development patterns, conservation, and VMT reduction. Importantly, the additional carbon-sequestration co-benefits of conserving land, sequestering carbon and avoided carbon emissions related to expanding infrastructure and land disturbance remain unquantified but should not be discounted as valuable reasons to pursue the implementation of this idea.

Since the adoption of CEQA, case law has shaped and evolved the state of environmental protection policies and practices in California and will likely continue to do so. While this study demonstrates a promising idea with many environmental co-benefits, ultimately it is up to CEQA lead agencies (e.g., jurisdictions with land use authority or agencies with responsibility for environmentally analyzing and approving transportation projects) to consider the risk of using a mitigation measure that has an evidentiary basis for reducing VMT but may not be able to fully predict the future influence of every potential variable related to land use development patterns, travel behavior, and market forces.



Appendix A: Parcel-Level Analysis



Parcel-Level Analysis

Parcel Group One

Jurisdiction: Unincorporated Riverside County

Zoning Code: Residential Agricultural (R-A-10)

Maximum Allowable Density: 2 dwelling units per acre

Environmental Co-benefits of Conservation: Protects underrepresented habitat, supports environmental equity (within a priority population area), supports biodiversity (wetlands, groundwater dependent ecosystems, mammals, amphibians, reptiles, birds)

Parcel group one is comprised of three parcels located at the northern edge of Riverside County on unincorporated county land near Highgrove. These parcels are near conserved land and close to a relatively dense single family home development. Based on current zoning standards, the three parcels could be developed into a maximum of 181 dwelling units. If conserved, we estimate parcel group one could result in a net reduction of approximately 831,000 – 1.6M VMT annually. The lower end of the range assumes 80% of the maximum possible dwelling units are built subject to the existing zoning code and the VMT per capita of development occurring elsewhere is equal to the county average. The upper end of the range assumes 120% of the maximum possible dwelling units are built subject to the existing zoning code and the VMT per capita of development occurring elsewhere is equal to the VMT per capita of the nearest jurisdiction, Riverside.



Parcel Group Two

Jurisdiction: Unincorporated Riverside County

Zoning Code: Rural Residential (R-R)

Maximum Allowable Density: 2 dwelling units per acre

Environmental Co-benefits of Conservation: Supports environmental equity (within a priority population area), supports climate resiliency (high levels of carbon stored above ground in living biomass and in soil, prime/locally important farmland), supports biodiversity (mammals, reptiles, birds, plants)

Parcel group two is comprised of a single parcel located in the southeastern quadrant of the study area on unincorporated county land near Sage. This parcel is far from any substantial development and would connect to already conserved land. Based on current zoning standards, this parcel could be developed into a maximum of 1,278 dwelling units. If conserved, we estimate parcel group two could result in a net reduction of approximately 9.7M – 22.8M VMT annually. The lower end of the range assumes 80% of the maximum possible dwelling units are built subject to the existing zoning code and the VMT per capita of development occurring elsewhere is equal to the county average. The upper end of the range assumes 120% of the maximum possible dwelling units are built subject to the existing zoning code and the VMT per capita of development occurring elsewhere is equal to the VMT per capita of the nearest jurisdiction, Hemet.

Parcel Group Three

Jurisdiction: Unincorporated Riverside County

Zoning Code: Residential Agricultural (R-A-5)

Maximum Allowable Density: 2 dwelling units per acre

Environmental Co-benefits of Conservation: Protects underrepresented habitat, protects environmental linkages (limited existing human modification), supports climate resiliency (located in a drinking water watershed, located in wildland-urban interface area), supports biodiversity (mammals, reptiles, birds)

Parcel group three is comprised of seven parcels located in the southeastern quadrant of the study area on unincorporated county land near Sage. This parcel group is near some non-residential and low density residential development and does not currently abut conserved land. Based on current zoning standards, these parcels could be developed into a maximum of 242 dwelling units. If conserved, we estimate parcel group three could result in a net reduction of approximately 2.6M – 4.3M VMT annually. The lower end of the range assumes 80% of the maximum possible dwelling units are built subject to the existing zoning code and the VMT per capita of development occurring elsewhere is equal to the county average. The upper end of the range assumes 120% of the maximum possible dwelling units are built subject to the existing zoning code and the VMT per



capita of development occurring elsewhere is equal to the VMT per capita of the nearest jurisdiction, Temecula.

Parcel Group Four

Jurisdiction: Unincorporated Riverside County

Zoning Code: Rural Residential (R-R)

Maximum Allowable Density: 2 dwelling units per acre

Environmental Co-benefits of Conservation: Supports biodiversity (mammals, reptiles, birds)

Parcel group four is comprised of a single parcel located in southwestern Riverside County on unincorporated county land south of La Cresta. This parcel abuts conserved land and is located near low density development. Based on current zoning standards, this parcel could be developed into a maximum of 78 dwelling units. If conserved, we estimate parcel group four could result in a net reduction of approximately 1.3M – 2M VMT annually. The lower end of the range assumes 80% of the maximum possible dwelling units are built subject to the existing zoning code and the VMT per capita of development occurring elsewhere is equal to the county average. The upper end of the range assumes 120% of the maximum possible dwelling units are built subject to the existing zoning code and the VMT per capita of development occurring elsewhere is equal to the VMT per capita of the nearest jurisdiction, Murrieta.

Parcel Group Five

Jurisdiction: Unincorporated Riverside County

Zoning Code: Planned Residential (R-4)

Maximum Allowable Density: 20 dwelling units per acre

Environmental Co-benefits of Conservation: Supports climate resiliency (high levels of carbon stored in soil, located in wildland-urban interface area), supports biodiversity (mammals, amphibians, reptiles)

Parcel group five is comprised of a single parcel located in the southwestern quadrant of the study area on unincorporated county land east of Menifee. This parcel abuts conserved land and is located near low density development. Based on current zoning standards, this parcel could be developed into a maximum of 3,258 dwelling units. If conserved, we estimate parcel group five could result in a net reduction of approximately 20.5 – 43.1M VMT annually. The lower end of the range assumes 80% of the maximum possible dwelling units are built subject to the existing zoning code and the VMT per capita of development occurring elsewhere is equal to the VMT per capita of the nearest jurisdiction, Menifee. The upper end of the range assumes 120% of the maximum possible dwelling units are built subject to the existing zoning code and the VMT per capita of development occurring elsewhere is equal to the county average.



Parcel Group Six

Jurisdiction: Wildomar

Zoning Code: Rural Residential (R-R)

Maximum Allowable Density: 2 dwelling units per acre

Environmental Co-benefits of Conservation: Protects underrepresented habitat, supports environmental equity (within a priority population area), supports climate resiliency (high levels of carbon stored above ground in living biomass and in soil, located in wildland-urban interface area), supports biodiversity (mammals, reptiles, birds)

Parcel group six is comprised of a single parcel located in the northern portion of the City of Wildomar and abuts conserved land to the west. There are no housing developments in the immediate area surrounding the parcel but there is relatively dense single family home development south of the parcel. Based on current zoning standards, this parcel could be developed into a maximum of 162 dwelling units. If conserved, we estimate parcel group six could result in a net reduction of approximately 1.2 – 2.3M VMT annually. The lower end of the range assumes 80% of the maximum possible dwelling units are built subject to the existing zoning code and the VMT per capita of development occurring elsewhere is equal to the VMT per capita of the nearest jurisdiction, Wildomar. The upper end of the range assumes 120% of the maximum possible dwelling units are built subject to the existing zoning code and the VMT per capita of development occurring elsewhere is equal to the county average.

Parcel Group Seven

Jurisdiction: Lake Elsinore

Zoning Code: High Density Residential (R3)

Maximum Allowable Density: 24 dwelling units per acre

Environmental Co-benefits of Conservation: Supports environmental equity (within a priority population area), supports climate resiliency (located in wildland-urban interface area), supports biodiversity (mammals, reptiles)

Parcel group seven is comprised of a single parcel located in the northeastern portion of the City of Lake Elsinore and abuts conserved land. This parcel is adjacent to relatively dense single family home development. Based on current zoning standards, this parcel could be developed into a maximum of 434 dwelling units. If conserved, we estimate parcel group seven could result in a net reduction of approximately 1.9 – 5M VMT annually. The lower end of the range assumes 80% of the maximum possible dwelling units are built subject to the existing zoning code and the VMT per capita of development occurring elsewhere is equal to the VMT per capita of the nearest jurisdiction, Lake Elsinore. The upper end of the range assumes 120% of the maximum possible dwelling units are built subject to the existing zoning code and the VMT per capita of development occurring elsewhere is equal to the county average.



Parcel Group Eight

Jurisdiction: Lake Elsinore

Zoning Code: Single Family Residential (Alberhill Ranch Special Plan RCD)

Maximum Allowable Density: 3 dwelling units per acre

Environmental Co-benefits of Conservation: Protects underrepresented habitat, supports environmental equity (within a priority population area), supports biodiversity (mammals, reptiles)

Parcel group eight is comprised of two parcels located in the northwestern portion of the City of Lake Elsinore and abuts conserved land. This parcel is close to relatively dense single family home development and is near Interstate 15. Based on current zoning standards, these parcels could be developed into a maximum of 71 dwelling units. If conserved, we estimate parcel group eight could result in a net reduction of approximately 142,000 – 546,000 VMT annually. The lower end of the range assumes 80% of the maximum possible dwelling units are built subject to the existing zoning code and the VMT per capita of development occurring elsewhere is equal to the VMT per capita of the nearest jurisdiction, Lake Elsinore. The upper end of the range assumes 120% of the maximum possible dwelling units are built subject to the existing zoning code and the VMT per capita of development occurring elsewhere is equal to the county average.

Parcel Group Nine

Jurisdiction: Unincorporated Riverside County

Zoning Code: Residential Rural (R-R), Planned Residential (R-4)

Maximum Allowable Density: 2-20 dwelling units per acre

Environmental Co-benefits of Conservation: Protects environmental linkages (high occurrence of linkages/climate migration routes), supports environmental equity (within a priority population area), supports biodiversity (mammals, amphibians, reptiles)

Parcel group nine is comprised of three parcels and is in eastern Riverside County on unincorporated county land northwest of Alberhill. This parcel group is situated between relatively dense single-family home development, and is near Interstate 15. Based on current zoning standards, these three parcels could be developed into a maximum of 3,039 dwelling units. If conserved, we estimate parcel group nine could result in a net reduction of approximately 19.2M – 43M VMT annually. The lower end of the range assumes 80% of the maximum possible dwelling units are built subject to the existing zoning code and the VMT per capita of development occurring elsewhere is equal to the VMT per capita of the nearest jurisdiction, Lake Elsinore. The upper end of the range assumes 120% of the maximum possible dwelling units are built subject to the existing zoning code and the VMT per capita of development occurring elsewhere is equal to the county average.