

# Appendix N

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Vehicle Miles Traveled (VMT) Analysis  
(April 7, 2022)



April 7, 2022

Zachary Miller, Senior Transportation/Environmental Planner  
Ascent Environmental, Inc.  
455 Capitol Mall, Suite 300  
Sacramento, California 95814

Subject: Addendum to the Green Valley Specific Plan – VMT Analysis

Dear Mr. Miller,

Translutions, Inc. (Translutions) is pleased to provide this letter discussing the Vehicle Miles Traveled (VMT) for the addendum to the Green Valley Specific Plan in the City of Perris. The Specific Plan was approved in 1990. The addendum evaluates proposed amendments to the GVSP land use designations and zoning located within 253.6 acres of the northeast portion of the GVSP area (herein referred to as Phase 2) that would change land use designations to be consistent with the Perris Valley Airport Land Use Compatibility Plan. The proposed changes would not result in an increase in number of dwelling units approved under the 1990 GVSP.

## PHASE 2 PROJECT AREA

Figure 1 shows the Planning Areas (PA) included in Phase 2. As shown in Figure 1, Phase 2 includes two commercial sites (PA 3 and 29), one park (PA 33), two open space sites (PAs 6b and 22a), and five residential sites (PAs 6a, 19a, 20, 21, and 30). Phase 2 includes a total of 1,621 dwelling units.

## PHASE 2 PROJECT TRIP GENERATION

Trip generation for Phase 2 is based on trip generation rates from the Institute of Transportation Engineers' (ITE) *Trip Generation* (11<sup>th</sup> Edition) and are based on Land Use 210 "Single-Family Detached Housing", Land Use 220 "Multifamily Housing (Low-Rise) Not Close to Rail", Land Use 822 "Strip Retail Plaza", Land Use 821 Shopping Plaza (40-150K), and Land Use 411 "Public Park". The project trip generation for Phase 2 is shown in Table A. As shown in Table A, Phase 2 is forecast to generate 19,548 external daily trips with 952 external trips during the a.m. peak hour and 1,406 external trips during the p.m. peak hour.

## PHASE 2 VMT ANALYSIS

The City of Perris has adopted guidelines to help ensure that land use development and transportation projects comply with the latest requirements of the California Environmental Quality Act (CEQA) regarding Vehicle Miles Traveled (VMT). The guidelines provide the City with standardized criteria and established thresholds of significance to be used for analyzing transportation impacts for CEQA.

Based on the City of Perris Guidelines, certain projects may require additional VMT modeling to determine impacts. In particular, the following conditions require a project to perform project specific VMT modeling using the RivCOM/RivTAM in order to determine if it would have a significant VMT impact:

- Project requires a zone change and/or General Plan amendment and generates 2,500 or more net daily trips.
- Project is located in a TAZ without VMT data for screening.
- Project is not able to effectively mitigate impacts using the VMT Scoping Form.

Based on the criteria above, the Vehicle Miles Traveled (VMT) analysis should be based on the RivTAM. Further, the analysis should include the following scenarios to determine the project-generated VMT per service population (population plus employment):

- Base Year Conditions.
- Base Year plus Project Conditions.
- Horizon Year without Project Conditions.
- Horizon Year with Project Conditions.

## VMT IMPACT THRESHOLDS

The City guidelines have established thresholds of significance for project generated VMT for use as part of the environmental review process under CEQA. For projects that require RIVTAM/RIVCOM VMT modeling, a project would result in a significant project-generated VMT impact if either of the following conditions are satisfied:

- The base model year project-generated VMT per service population exceeds the City of Perris base year VMT per service population, or
- The future model year project-generated VMT per service population exceeds the City of Perris base year VMT per service population.

### Base Year Conditions

Based on documentation from the Western Riverside Council of Governments (WRCOG), the base model year VMT per service population for the City of Perris is 27.5 miles. Figure 2, extracted from the *WRCOG SB-743 Implementation Pathway, (March 2019)* shows the City VMT per service population.

### Base Year plus Project Conditions

The base year plus project conditions was derived from a RivTAM model run by adding the project related Socio-Economic Data (SED) to Traffic Analysis Zones (TAZs) 404191807, 404191808, 404191809, 404191810, 404191811, 404191812, 404191813, 404191814, and 404191815. The project was coded using a service population (population plus employment) of 9,938. The project generated VMT was extracted from the model using the origin-destination trip matrix. Table B shows the base year plus project VMT per service population. As shown in Table B, the base year plus project VMT per service population is 24.9 miles. Based on the City thresholds, a project would have a significant VMT impact if the base year plus project generated VMT per service population exceeds the City base year VMT per service population of 27.5. The base year plus project VMT per service population is less than the City base year VMT per service population, and therefore, the project does not have a significant VMT impact under base year plus project conditions.

**Table B: Phase 2 Base Year Project Generated VMT**

Base Year	Project	City of Perris*	City of Perris**
Population	9,747	70,602	
Employment	191	15,153	
Service Population	9,938	85,755	
Homebased (HB) VMT	169,493	1,087,921	
Homebased Work (HBW) VMT	2,025	178,280	
OD VMT	247,344	2,254,113	
OD VMT per service population	24.9	26.3	27.5

\*: Obtained from Translutions "No Project" model runs;

\*\* : Obtained from SBCTA SB743 screening tool (<https://www.gosbcta.com/vmtscreening>)

### Horizon Year without Project Conditions

The horizon year without project conditions was derived from a RivTAM "Without Project" model run. Table C shows the horizon year without project VMT per service population. As shown in Table C, the horizon year without project VMT per service population is 27.7 miles.

### Horizon Year plus Project Conditions

The horizon year plus project conditions was derived from a RivTAM model run by adding the project related Socio-Economic Data (SED) to Traffic Analysis Zones (TAZs) 404191807, 404191808, 404191809, 404191810, 404191811, 404191812, 404191813, 404191814, and 404191815. The project was coded using a service population (population plus employment) of

9,938. The project generated VMT was extracted from the model using the origin-destination trip matrix. Table C shows the horizon year plus project VMT per service population. As shown in Table C, the horizon year plus project VMT per service population is 26.1 miles. Based on the City thresholds, a project would have a significant VMT impact if the horizon year plus project generated VMT per service population exceeds the City base year VMT per service population of 27.5. The horizon year plus project VMT per service population is less than the City base year VMT per service population, and therefore, the project does not have a significant VMT impact under horizon year plus project conditions.

**Table C: Phase 2 Horizon Year Project Generated VMT**

Horizon Year	Project	City of Perris*	City of Perris**
Population	9,747	108,081	
Employment	191	27,000	
Service Population	9,938	135,081	
Homebased (HB) VMT	155,005	1,750,647	
Homebased Work (HBW) VMT	2,334	322,049	
OD VMT	258,964	3,735,350	
OD VMT per service population	26.1	27.7	27.5

\*: Obtained from Translutions "No Project" model runs;

\*\* : Obtained from SBCTA SB743 screening tool (<https://www.gosbcta.com/vmtscreening>)

#### APPROVED SPECIFIC PLAN (1990) VMT ANALYSIS

A VMT analysis was also conducted for the approved specific plan from 1990 for the future horizon year. The project VMT for the approved specific plan was derived from a RivTAM model run by adding the project related SED for the entire specific plan to several TAZs.

The project generated VMT for the approved specific plan (1990) under the base year and horizon year plus project conditions are shown in Table E. As shown in Table E, the parcels under the approved specific plan (1990) project VMT per service population is 28.1 miles under the base year condition and 27.78 miles under future year conditions. When compared to the Phase 2 project VMT of 28.1 miles under the base year and 26.1 miles under future year, the approved specific plan project VMT is higher than the proposed project under both scenarios. Therefore, the impacts from Phase 2 would be less than the approved specific plan from 1990 under horizon year conditions.

**Table E: VMT Comparison - Approved SP & Proposed Project**

	Base Year		Future Year	
	Proposed SP	1990 GVSP (Project Parcels Only)	Proposed SP	1990 GVSP (Project Parcels Only)
Households	3,465	1,513	3,465	1,513
Population	9,747	5,191	9,747	5,191
Employment	191	-	191	-
Service Population	9,938	5,191	9,938	5,191
OD VMT	247,344	145,751	258,964	137,619
OD VMT/SP	24.9	28.1	26.1	26.5

#### CONCLUSION

Based on the above analysis, Phase 2 does not have a significant VMT impact under base and horizon year plus project conditions when compared to the City's VMT thresholds. In addition, the Phase 2 project VMT is less than the approved specific

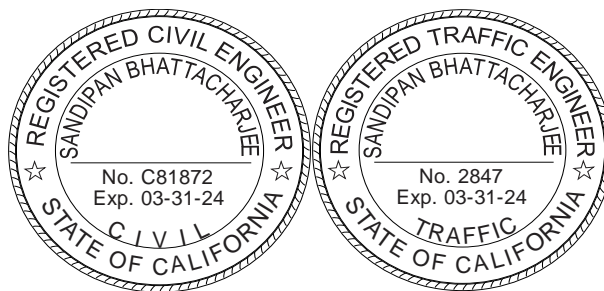
plan project VMT from 1990. Therefore, the impacts from Phase 2 would be less than the approved specific plan from 1990 under base year and horizon year conditions.

We hope you will find this information helpful. Should you have any questions, please don't hesitate to call me at (949) 656-3131 or by email at [sandipan@translutions.com](mailto:sandipan@translutions.com).

Sincerely,

**translutions, Inc.**

Sandipan Bhattacharjee, P.E., T.E., AICP, ENV SP  
Principal



Attachments: Figure 1 – Land Use Plan