

County of Santa Barbara VMT Tool

User Guide

Version 1.0

County of Santa Barbara
Planning and Development Department



March 2021

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1. User Guide Overview

This User Guide provides a step-by-step approach to using the County of Santa Barbara (County) Vehicle Miles Traveled Tool (VMT Tool). The VMT Tool determines if certain projects meet any of the screening criteria developed by the County as described in their *Environmental Thresholds and Guidelines Manual*.¹ With the VMT Tool, users can enter various mixes and intensities of land use and review the resulting daily vehicle trips and VMT generated by the project. The VMT Tool applies the screening criteria to determine whether a VMT analysis is required and displays the relationship of the project's estimated VMT to the County's screening criteria.

Section 2 of this guide explains how to enter details of the project's location and land use characteristics and provides examples of the VMT Tool's reporting capabilities. The VMT Tool summary can be submitted to the County Planning and Development Department as part of the transportation study for the project.

1.1 Purpose

The VMT Tool is specifically designed and intended to be used to develop project-specific daily Home-Based VMT per Resident and Home-Based Work VMT per Employee metrics for land use development projects in the unincorporated areas of the County of Santa Barbara. It implements the methodologies, screening criteria, and impact significance thresholds described in the *Environmental Thresholds and Guidelines Manual*.

The VMT Tool allows the user to choose from the following commonly occurring land uses:

- Residential
 - Single-Family Housing
 - Multi-Family Housing
 - Affordable Housing
- Employment
 - General Office
 - Medical Office
 - Light Industrial
 - Manufacturing
 - Retail/Service

¹ County of Santa Barbara Planning and Development, *Environmental Thresholds and Guidelines Manual*. (Planning and Development, January 2021). <https://cosantabarbara.app.box.com/s/vtxutffe2n52jme97lgmV66os7pp3lm5>



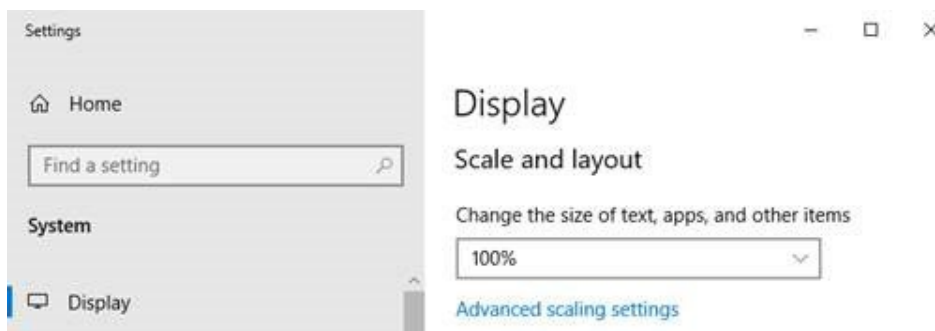
Projects with a mix of these uses can be analyzed using the VMT Tool. The VMT Tool also allows for data describing a custom land use to be entered, based on the daily trips input by the user.

The VMT Tool is not designed to do the following:

- Calculate VMT for land use types not listed above.
- Calculate VMT for rural areas of the county.
- Calculate VMT for projects that are larger than one Traffic Analysis Zone (TAZ).
- Calculate peak hour or peak period vehicle trips, or Total VMT.
- Calculate person trips.
- Calculate truck trips.
- Estimate net changes in area VMT due to implementation of a retail project.
- Evaluate VMT impacts of regional-serving retail projects, entertainment projects, or event centers.
- Evaluate VMT impacts of land use plans (e.g., general plans, community plans, and specific plans).
- Evaluate VMT impacts of transportation improvement projects.

1.2 System Requirements

The VMT Tool has been tested to run in Excel for Office 365 in Windows 10. Prior to opening the VMT Tool, it is helpful to check the Display Settings under the System Settings in Windows and set to **100%** as shown below. The VMT Tool may work without this setting but the map layout may be out of place. If the display setting needs to be changed to 100%, the computer should be restarted for it to work properly.



Screenshot of "Display Settings"

2. Main Tab



The VMT Tool Main Tab is divided into four parts, as shown in the image on the next page:

1. Project Information
 - a. Project name, parcel number, notice of preparation (NOP) year, project location map, and project land use information.
2. Screening Criteria for County of Santa Barbara
3. Project VMT Estimate
4. Dialogue Box Results

Color Coding

The VMT Tool is color coded to highlight the input and output values.

- Gold = *user input*
 - This color indicates user input fields used to generate a VMT result.
 - Example:

Residential	Values	Unit
Single-Family Housing	1	DU
Multi-Family Housing	2	DU
Affordable Housing	3	DU

- Light Blue = *matching screening criteria*
 - This color indicates an output calculated by the VMT Tool based on the user inputs.
 - Example:

Screening Criteria

Does the project generates 110 or fewer average daily trips?
(enter project land use in the section above) **No**

Is the project screened in a Transit Priority Area?

Does the project have locally serving retail uses that are 50,000 square feet or less?



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Project Information

Project Name	NOP Year
Sample Project Name	2022
Parcel Numbers (County Land Use and Zoning Map)	
103092001	

Project Land Use Information

Residential	Values	Unit
Single-Family Housing		DU
Multi-Family Housing		DU
Affordable Housing		DU
Employment	Values	Unit
General Office		KSF
Medical Office		KSF
Retail / Service		KSF
Light Industrial		KSF
Manufacturing		KSF
Custom Land Use	Values	Unit
Custom Land Use (ignores all other land use entries)		Daily Trips

Project Daily Trips = N/A

Project Location

2

Screening Criteria

Does the project generate 110 or fewer average daily trips? (enter project land use in the section above)	N/A
Is the project screened in a Transit Priority Area?	No
Does the project have locally serving retail uses that are 50,000 square feet or less?	N/A
Is the project located in a VMT efficient area for Residential uses? ⓘ	N/A
Is the project located in a VMT efficient area for Employment uses? ⓘ	N/A
Is the residential portion of the project 100% affordable housing (units set aside for very low income and low income households)?	N/A

Project VMT Estimate

County Baseline Home-Based VMT per Resident (N/A)

Residential VMT per Resident

County Baseline Home-Based Work VMT per Employee (N/A)

Employment VMT per Employee

4

Please enter project land use information

2.1 Project Information

The Project Information section begins with a description of the project name, parcel numbers, and notice of preparation (NOP) year. Follow the steps (1 through 9) below:

1. Enter the name of the project in the “Project Name” box.

County of Santa Barbara

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Project Information	
1 Project Name	NOP Year
Sample Project Name	2021
Parcel Numbers (County Land Use and Zoning Map)	
75201022	

2. Select the notice of preparation (NOP) year from the “NOP Year” drop-down menu.

Project Name	2 NOP Year
Sample Project Name	2021
Parcel Numbers (County Land Use and Zoning Map)	2020
75201022	2021
	2022
	2023
	2024
	2025

3. Select the “Parcel Numbers” box.

Project Information	
Project Name	NOP Year
Sample Project Name	2021
3 Parcel Numbers (County Land Use and Zoning Map)	
75201022	

When selecting the “Parcel Numbers” box, the following dialog box appears for the user to input the project parcel numbers. The VMT Tool relies on a parcel lookup using Assessor’s Parcel Numbers (APN) as defined by the Santa Barbara County Assessor’s Division.

4. Input the 10-digit parcel number, and then press “Enter.” Do not enter dashes between the parcel numbers (e.g., 111222333).



Project Parcel Numbers

Enter Parcel Numbers Here

(adding parcel number will clear the user response in the TPA_Secondary_Info tab)

Project Parcel Numbers
(click/select to remove)

5. If the project is larger than one parcel, the VMT Tool can accommodate multiple parcel numbers. To delete existing parcels from the menu, click on the parcel number from the menu list you wish to delete and click “Yes.”

To enter multiple parcels, enter the first parcel number into the Project Parcel Number dialog box, and then press “Enter.” The Project Parcel Number dialog box will then reappear. Enter the second parcel number into the Project Parcel Number dialog box, and again press “Enter.” Repeat these steps for all affected parcels. All parcel numbers will appear in the “Parcel Numbers” box.



The image shows two overlapping windows. The primary window is titled "Project Parcel Numbers" and has a light blue background. At the top, it says "Enter Parcel Numbers Here" above a text input field. Below this, a note reads: "(adding parcel number will clear the user response in the TPA_Secondary_Info tab)". Underneath is a list titled "Project Parcel Numbers (click/select to remove)". The list contains one item, "75201022", which is highlighted with a blue border. A small blue box with the number "5" is positioned to the left of the list item. A secondary window titled "Microsoft Excel" is open over the bottom right of the first window. It displays the text "Delete parcel number: 75201022" and has two buttons: "Yes" and "No". The "Yes" button is highlighted with a blue border.

If the project contains parcels that are in multiple TAZs, or if the parcels are inside and outside of a transit priority area (TPA), the VMT Tool will not estimate project VMT and the following error messages will be shown:

The tool is unable to calculate due to the following project parcel issues:
Project parcels are in different TAZs.



The tool is unable to calculate due to the following project parcel issues:
 Project parcels are not all within a TPA.

The tool is unable to calculate due to the following project parcel issues:
 Project parcels are not all within a TPA.
 Project parcels are in different TAZs.

6. The project land use information should be entered based on the project description. The user can enter the project land use information by total number of dwelling units (DU) for residential uses and size in thousand square feet (KSF) for employment uses. For example, the user would enter “25” for Multi-Family Housing and “10” for Affordable Housing for a 35 DU project that includes 25 multi-family DUs and 10 affordable housing DUs. The user would enter “25.000” for Retail/Service for a commercial project that includes 25,000 square feet of retail space.

Project Land Use Information

Residential	6	Values	Unit
Single-Family Housing		<input type="text"/>	DU
Multi-Family Housing		<input type="text"/>	DU
Affordable Housing		<input type="text"/>	DU
Commercial		Values	Unit
General Office		<input type="text"/>	KSF
Medical Office		<input type="text"/>	KSF
Retail / Service		<input type="text"/>	KSF
Light Industrial		<input type="text"/>	KSF
Manufacturing	<input type="text"/>	KSF	
Custom Land Use		Values	Unit
Custom Land Use (ignores all other land use entries)		<input type="text"/>	Daily Trips

7. For the custom land use category, the user must enter the number of daily trips. The VMT Tool will ignore other land uses when inputting values for the custom land use daily trips. For custom land use projects, the VMT Tool will not estimate project VMT but it can be used to determine if the project site is in a TPA and if it meets the screening criteria for 110 daily trips or less.



Project Land Use Information

Residential	Values	Unit
Single-Family Housing		DU
Multi-Family Housing		DU
Affordable Housing		DU
Commercial	Values	Unit
General Office		KSF
Medical Office		KSF
Retail / Service		KSF
Light Industrial		KSF
Manufacturing		KSF
Custom Land Use	Values	Unit
Custom Land Use (ignores all other land use entries)		Daily Trips

7 **Values**

8. Based on the project land use information input by the user, project daily trips are estimated based on ITE trip generation rates and provided at the bottom of this section.

Project Land Use Information

Residential	Values	Unit
Single-Family Housing	1	DU
Multi-Family Housing	2	DU
Affordable Housing	3	DU
Commercial	Values	Unit
General Office	4.000	KSF
Medical Office	5.000	KSF
Retail / Service	6.000	KSF
Light Industrial	7.000	KSF
Manufacturing	8.000	KSF
Custom Land Use	Values	Unit
Custom Land Use (ignores all other land use entries)		Daily Trips

8 **Project Daily Trips = 538**

2.2 Screening Criteria for County of Santa Barbara

The Screening Criteria section provides information to the user on which elements of the project may be screened from further VMT analysis. The County presumes that projects



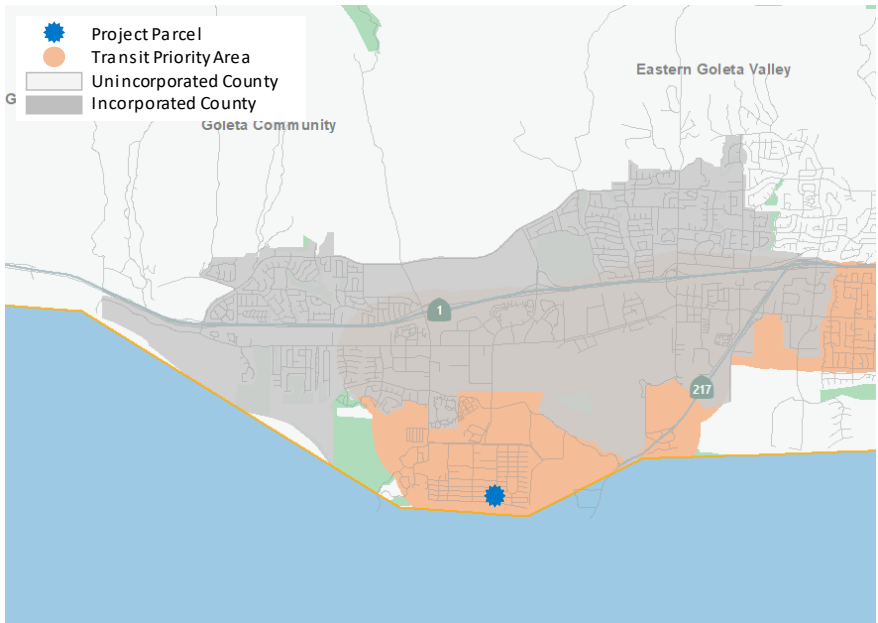
meeting one or more of the screening criteria, absent substantial evidence to the contrary, would have a less than significant VMT impact and would not require further analysis. Projects that do not meet any of the screening criteria require an analysis of VMT and a VMT transportation study.

Screening Criteria

Does the project generates 110 or fewer average daily trips? (enter project land use in the section above)	N/A
Please answer additional questions in the TPA_Secondary_Info tab	Pending
Does the project have locally serving retail uses that are 50,000 square feet or less?	N/A
Is the project located in a VMT efficient area for Residential uses?	N/A
Is the project located in a VMT efficient area for Employment uses?	N/A
Is the residential portion of the project 100% affordable housing (units set aside for very low income and low income households)?	N/A

The project location is shown on the map as a blue star symbol. The base map includes parcel local information, as well as TPA information. The light grey areas represent unincorporated Santa Barbara County.

Project Location



For TPA screening, there are secondary screening questions in the VMT Tool that must be filled out to determine if the project may be screened when located in a TPA.

Screening Criteria

Does the project generates 110 or fewer average daily trips?
 (enter project land use in the section above) **N/A**

Please answer additional questions in the TPA_Secondary_Info tab **Pending**

Does the project have locally serving retail uses that are 50,000 square feet or less? **N/A**

Is the project located in a VMT efficient area for Residential uses? **N/A**

Is the project located in a VMT efficient area for Employment uses? **N/A**

Is the residential portion of the project 100% affordable housing (units set aside for very low income and low income households)? **N/A**

9. If the user receives a “Pending” value for the TPA screening question, go to the “TPA_Secondary_Info” Tab. The user must address four additional “Yes” or “No” questions to determine if the project may be screened when located in a TPA.

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Project Information

Project Name	Year	Parcel Number (TAZ# 20622100)
Sample Project Name	2021	103092001

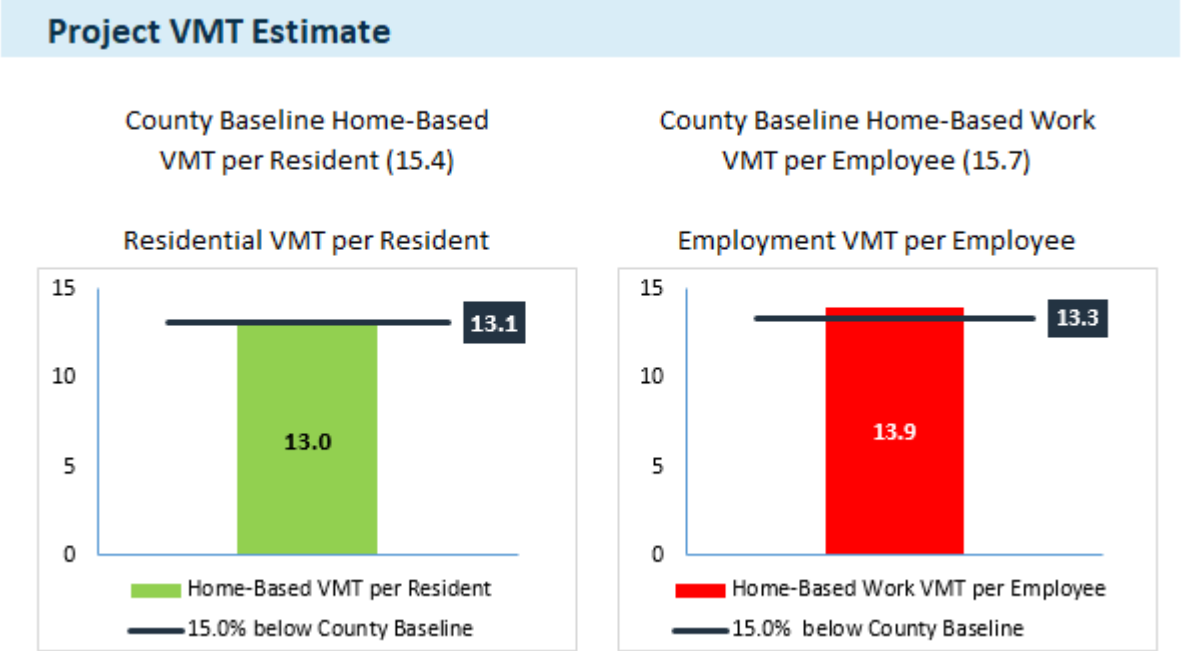
Project Land Use TPA Secondary Information

	Values	Additional Info on Secondary Information
Does the project have a Floor area ratio (FAR) or 0.75 or less? [1]	9 <input type="button" value="Yes"/> <input type="button" value="No"/>	Determine from Project Site Plan
Does the project provide more parking than required by the County's Comprehensive Plan and zoning ordinances? [1]	<input type="button" value="Yes"/>	Link to County parking code/website link
Is the project inconsistent with the applicable SBCAG Sustainable Communities Strategy (as determined by the County)? [1]	<input type="button" value="No"/>	Contact County to determine how to check for consistency with the SBCAG SCS
Does the project replace affordable housing units (units set aside for very low income and low income households) with a smaller number of moderate or high-income housing units? [1]	<input type="button" value="No"/>	The total number of lower income housing units that exist on the project site should be counted and compared to the total number of lower income and market-rate residential units proposed by the project



2.3 Project Summary Information

The project VMT information and project VMT threshold comparison provide the user with an estimate of the project generated VMT and indicate if the project would have a significant VMT impact.



The following metrics are reported for the NOP year as shown in the diagram above:

- Home-Based VMT per Resident: VMT generated from travel between residents’ homes and other destinations, such as work, school, or household errands, for the project site divided by the total number of residents. This metric excludes trips between two non-residential locations, such as from the store to the coffee shop. Home-based VMT per resident reflects all passenger vehicles (cars and light duty trucks) assigned on the roadway network. The County applies this metric to residential projects.
- Home-Based Work VMT per Employee: VMT generated from travel between employees’ homes and work for the project site divided by the number of employees. Home-based work VMT per employee reflects all passenger vehicles (cars and light duty trucks) assigned on the roadway network. The County applies this metric to employment projects.



- Residential Screening Threshold: The Home-Based VMT per Resident is measured against the County threshold to determine if the project exceeds the threshold. The bar is green if the VMT is at or below the threshold and the bar is red if the VMT is above the threshold.
- Employment Screening Threshold: The Home-Based Work VMT per Employee is measured against the County threshold to determine if the project exceeds the threshold. The bar is green if the VMT is at or below the threshold and the bar is red if the VMT is above the threshold.

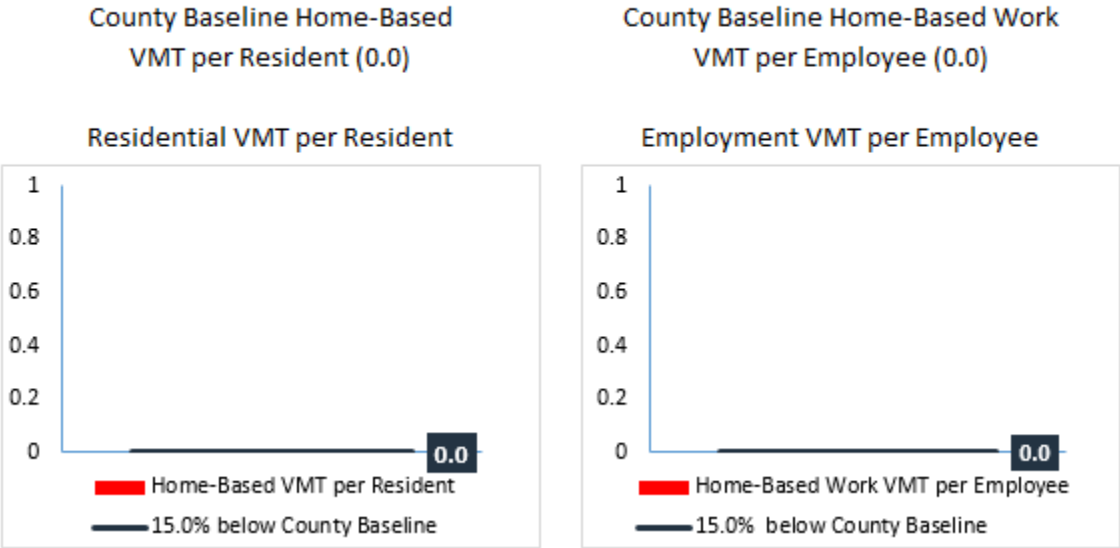
Home-Based VMT per Resident is not reported for projects when:

- The project generates less than 110 average daily trips
- The project is in a TPA and meets all additional criteria
- The only residential use is affordable housing

Home-Based Work VMT per Employee is not reported for projects when:

- The project generates less than 110 average daily trips
- The project is in a TPA and meets all additional criteria
- The only commercial use is retail, since retail VMT is not addressed by the VMT Tool

Project VMT Estimate



SBCAG Model Data

The VMT estimates for the project are based on Santa Barbara County Association of Governments (SBCAG) travel demand model data. The VMT Tool does not replace the SBCAG's travel demand model. If the VMT Tool identifies a need for further VMT analysis, the project may need to be analyzed using SBCAG's travel demand model to assess the project generated VMT impacts.

2.4 Dialogue Box Results and Next Steps

The dialogue box at the bottom of the VMT Tool provides a summary of the project VMT results by (1) describing whether or not the project is presumed to have a less than significant VMT impact, and (2) the next steps the user should take after using the VMT Tool.

2.5 Print VMT Tool Reports

VMT Tool reports should be provided to the County of Santa Barbara Planning and Development Department along with the transportation study. The VMT Tool reports can be printed by using the features in Excel to print to PDF. The VMT Tool reports should contain the information in the Main Tab. If the project is located in a TPA, the TPA Secondary Info Tab should also be printed.

3. User Agreement

Applicants, planners, and other interested persons may use the VMT Tool without any formal authorization or agreement with the County. However, applicants or their agents that submit the results of the VMT Tool with their permit application to the County need to submit a VMT Tool User Agreement. Appendix A includes a copy of the VMT Tool User Agreement.

The User Agreement should be printed, signed, and submitted to County of Santa Barbara Planning and Development Department along with the transportation study, if required, and printouts of the VMT Tool reports.



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Appendix A: User Agreement



County of Santa Barbara VMT Tool User Agreement

The County of Santa Barbara, with the assistance of its consultant, Fehr & Peers, developed the County of Santa Barbara Vehicle Miles Traveled (VMT) Tool to estimate project-specific daily Residential VMT per capita and Work VMT per employee for land-use development projects. This application, the VMT Tool, has been provided to You, the User, to assess VMT outcomes of land-use projects within the County of Santa Barbara (County). When the term "County" is used herein as a geographical descriptor, it shall refer to the unincorporated areas of Santa Barbara County. In using the VMT Tool, You agree to be bound by all of the terms and provisions of this VMT Tool User Agreement (Agreement).

VMT Tool Application for the County of Santa Barbara. The County's consultant calibrated the VMT Tool's parameters in 2020 based on the Santa Barbara County Association of Government Travel Demand Model. However, this calibration process is limited to locations within the unincorporated areas of the County.

Limited License to Use. This Agreement gives You a limited, non-transferrable, non-assignable, non-exclusive, and revocable license to use and execute a copy of the VMT Tool on a computer system owned, leased, or otherwise controlled by You in Your own facilities, as set out below, provided You do not use the VMT Tool in an unauthorized manner, and that You do not republish, copy, distribute, reverse-engineer, modify, decompile, disassemble, transfer, or sell any part of the VMT Tool, and provided that You understand, agree to, and follow the terms of this Agreement. Your failure to follow any of the terms of this Agreement shall automatically terminate this license and Your right to use the VMT Tool.

Ownership. You understand and acknowledge that the County exclusively owns the VMT Tool, and shall continue to exclusively own it through Your use of it, and that no transfer of ownership of any kind is intended, or occurs, when allowing You to use the VMT Tool.

Warranty Disclaimer. In spite of the efforts of the County and Fehr & Peers, it is possible that some of the information contained in the VMT Tool may not be accurate. The VMT Tool, OUTPUTS AND ASSOCIATED DATA ARE PROVIDED "as is" WITHOUT WARRANTY OF ANY KIND, whether expressed, implied, statutory, or otherwise including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

No Liability. It is understood that the VMT Tool is provided to You without charge. It is further understood and agreed that neither the County nor Fehr & Peers are responsible or liable in any manner for Your use of, or Your inability to use, the VMT Tool, including, without limitation, for any information derived from its use, for any delays, inaccuracies, incompleteness, errors or omissions, or damages of any kind, arising out of Your use of the VMT Tool or with respect to the material contained in the VMT Tool, including, without limitation, any damage to Your computer, network, or system resulting from receiving, downloading, or using the VMT Tool. By using the VMT Tool, You hereby voluntarily and unconditionally waive and release all claims, responsibilities, liabilities, actions, damages of any kind, costs, and losses, known and unknown, against the County and Fehr & Peers related to or arising from Your use of the VMT Tool, including, without limitation, whether the VMT Tool improperly or incorrectly determined that You are exempt from doing a transportation impact analysis or any other environmental analysis, or made an improper or incorrect environmental review determination. In no

event shall the County or Fehr & Peers be responsible or liable to You or anyone else for, or have liability for any actual, special, direct, indirect, incidental or consequential or any other type or category of damages (including, without limitation, damages for loss of business profits or changes to businesses costs) or lost data or downtime, however caused, and on any theory of liability from the use of, or the inability to use, the VMT Tool, whether the data, and/or formulas contained in the VMT Tool are provided by the County or Fehr & Peers, or another third party, even if the County or Fehr & Peers have been advised of the possibility of such damages. Further, the County has no obligation to provide You with the VMT Tool or to continue to provide You with the VMT Tool in the future. If the County determines for any reason that the VMT Tool should no longer be used, the County may discontinue Your use of the VMT Tool in the County's sole discretion.

Term and Termination. This Agreement and License shall be governed by the laws of the State of California without regard to conflicts of law provisions and shall be effective as of the date set forth below and, unless terminated in accordance with the above or extended by written amendment to this Agreement, shall terminate on the earlier of the date that You are not making use of the VMT Tool or one year after the beginning of Your use of the VMT Tool.

Termination for Convenience. The County may terminate this Agreement (and the User's right to use the VMT Tool), with or without cause, including for the County's convenience, by giving written notice thereof to the User.

Print and sign below and submit to Santa Barbara County Planning and Development Department.

You, the User	
By:	_____
Print Name:	_____
Title:	_____
Company:	_____
Address:	_____
Phone:	_____
Email Address:	_____
Date:	_____