

SBCTA VMT Screening Tool User's Guide

Available at: gosebcta.com/vmtscreening

Developed in collaboration with Fehr and Peers

FEHR & PEERS

Updated August 2020

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1. Purpose and Background

This user's guide was developed to provide instruction on how to operate and interpret the results of SBCTA's web-based VMT Screening Tool (referred to herein as 'the Tool'). The Tool was designed in response to implementation of California Senate Bill 743 (SB 743), which outlined its intent to "...more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions." As such, SB 743 required the Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within the California Environmental Quality Act. For land use projects, OPR identified Vehicle Miles Traveled (VMT) per capita, VMT per employee, and net VMT as new metrics for transportation analysis effective July 2020. The Tool is a web-based GIS application that enables users to determine whether or not a prospective project meets set thresholds requiring thorough VMT analysis.

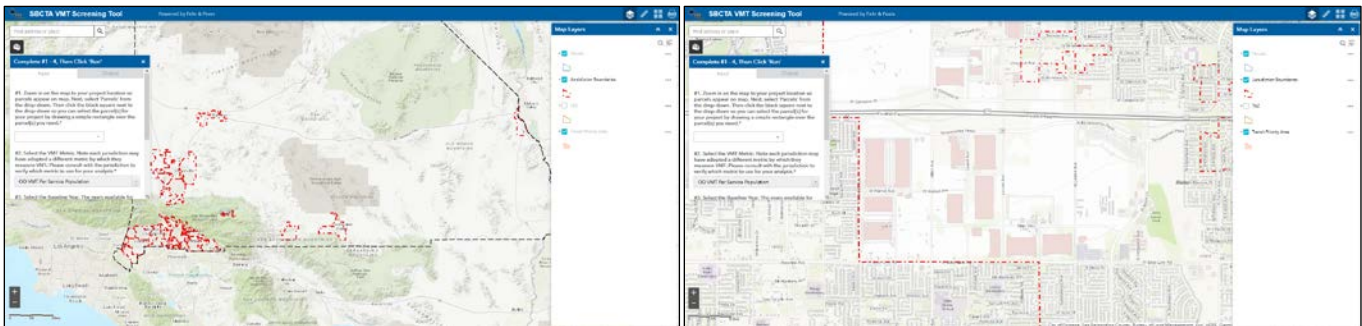
The Tool was developed by Fehr and Peers in collaboration with SBCTA and its member jurisdictions, with the exception of the City of Chino Hills. The Tool currently relies on a hybrid version of the San Bernardino Transportation Analysis Model (SBTAM), which uses a 2016 base year consistent with the 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and a 2040 forecast year consistent with the 2040 RTP/SCS.

2. Setup the Tool

The Tool requires no login credentials to use, only a modern internet browser to interface with the Tool (with limited functionality in Internet Explorer, so please leverage Firefox, Edge, Chrome, or Safari) and a reliable internet connection.

For the best experience, it's recommended to not use the Tool on a mobile device, and if your internet browser window or device screen is small (i.e. less than a typical 13" screen on a laptop), you can adjust some of the Tool's pre-opened dialogue boxes in order to use the Tool as described here.

1. **Begin by navigating on the Tool's map to your project's area.** To use the map, click and hold your computer mouse to pan the map, and use your mouse's scroll wheel to zoom the map in and out of the map.

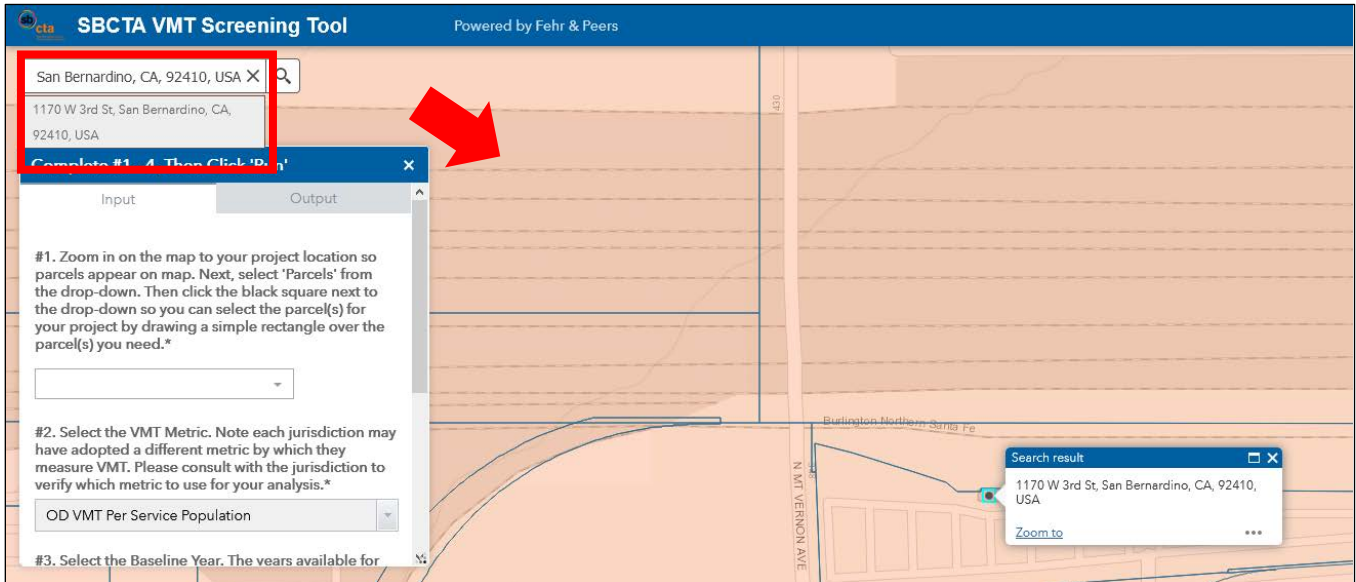


Initial map extent when the Tool loads.

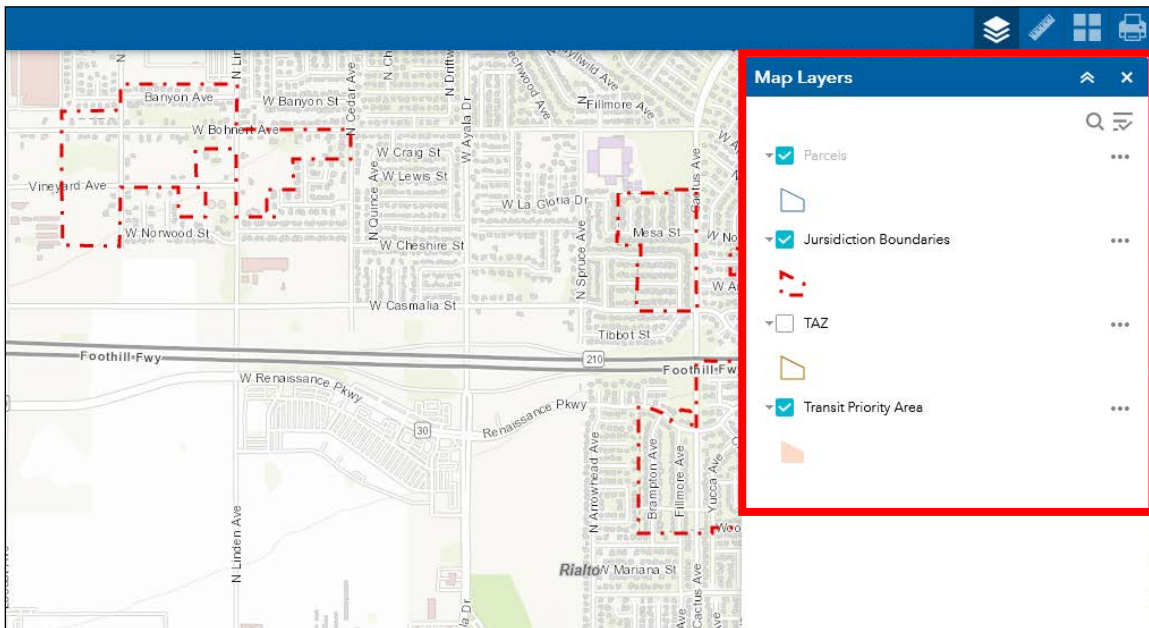
Example of the map zoomed in.

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If you know a street address at or near your project's area, you can also use the search bar in the upper left of the Tool to pan and zoom the map directly to the area.

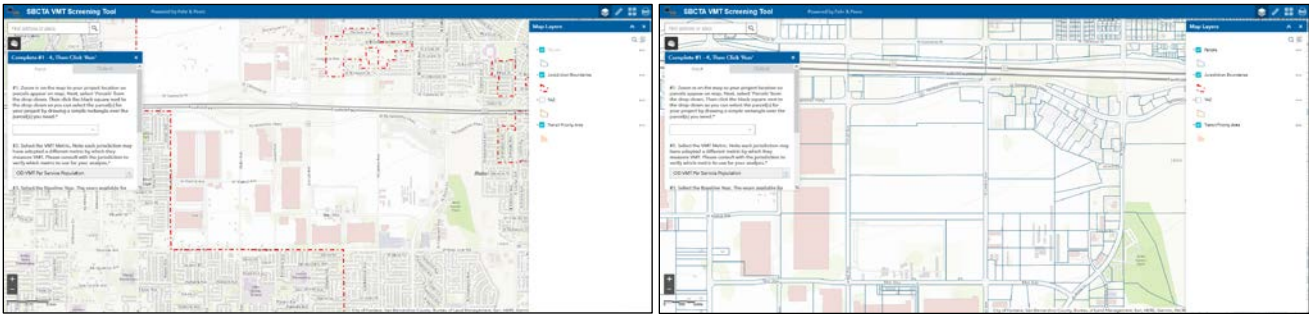


The Tool contains all the data necessary for it to complete the screening. You can review these data by referring to the 'Map Layers' dialogue box to the right of the map viewing area. With the exception of the 'Parcels' map layer, layer visibility can be toggled on and off by clicking in the box next to the layer's name.



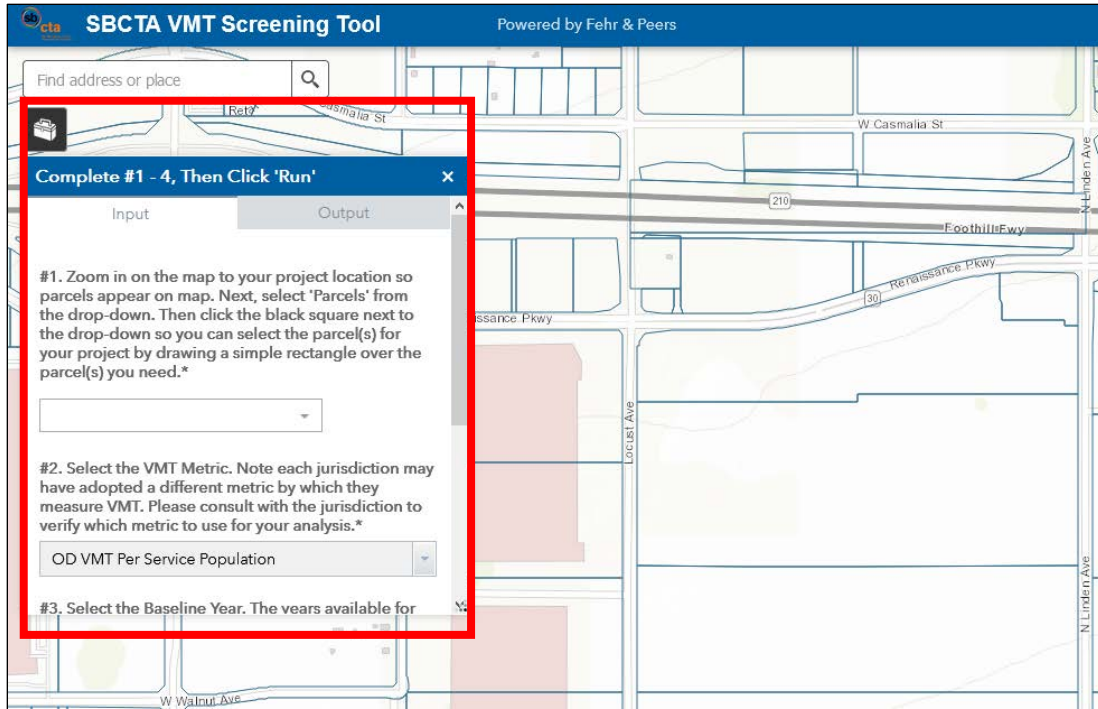
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The 'Parcels' map layer will only be visible if you zoom in for a closer look at the map and disappear when you zoom back out. This feature is by design to keep the Tool from working efficiently with various internet connections.

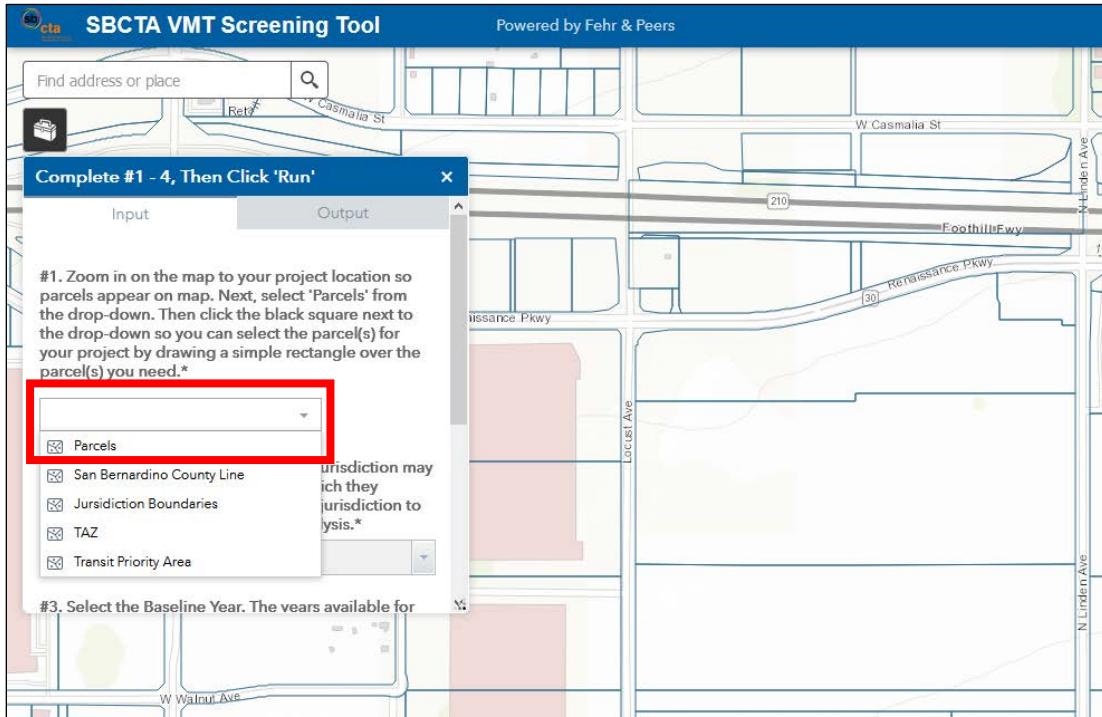


While the map on the left is zoomed in, it's not zoomed in enough to reveal the 'Parcels' layer. The map on the right however is zoomed enough so the 'Parcels' layer is revealed.

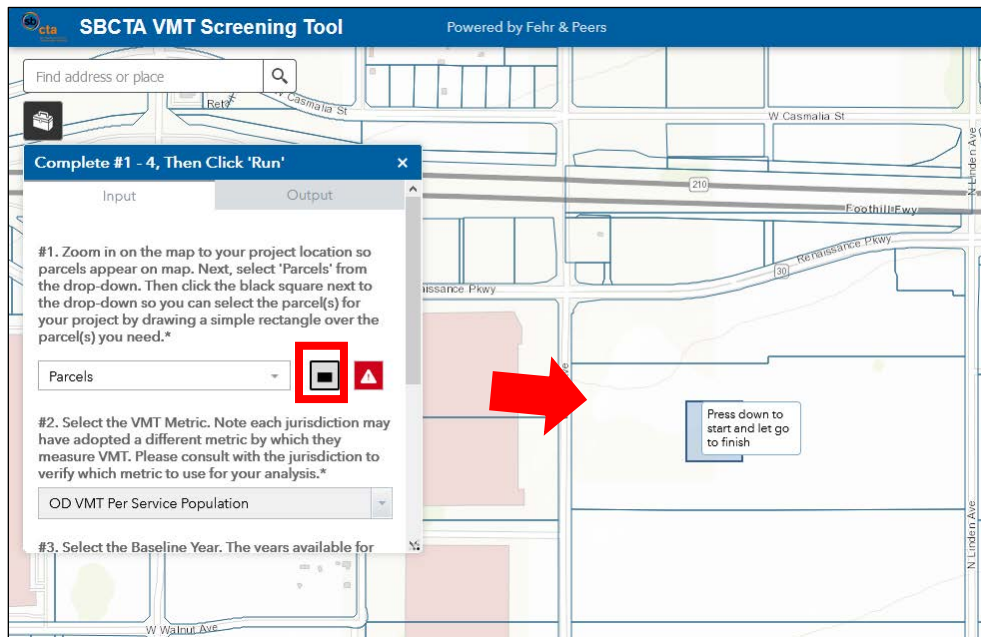
2. Once your map is zoomed in to your project area, use the open dialogue box directly beneath the toolbox icon in the upper left corner to **set the Tool's screening parameters**.



3. Remaining on the 'Input' tab, from the first drop down menu, select the map layer 'Parcels'. Then, click on the black square next to the drop down to select the parcel(s) on the map for your project area.

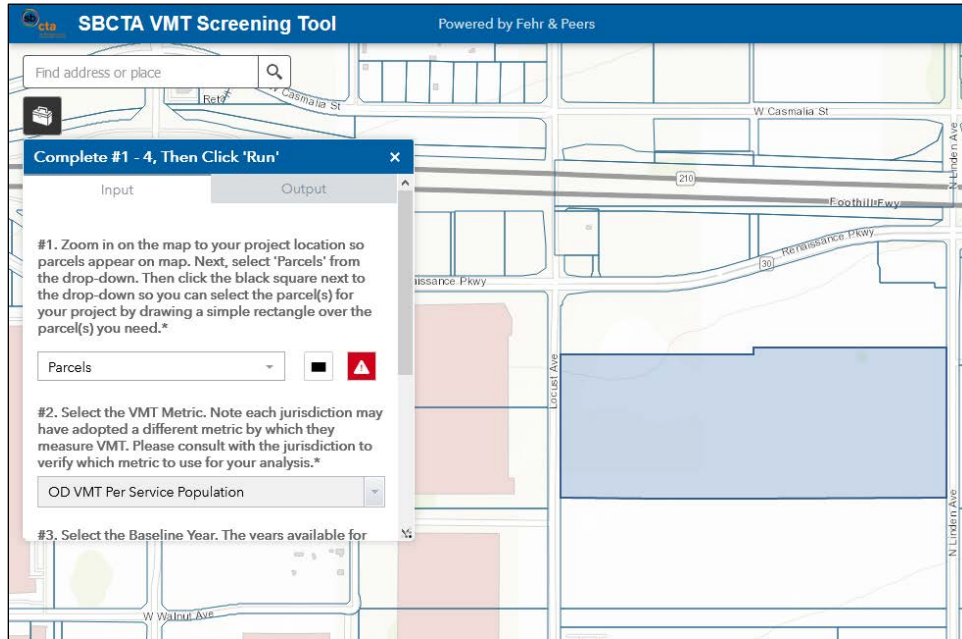


4. To select the parcel(s) that make up the project area, position your mouse on the map within the parcel you want, click and hold your mouse button, drag your mouse diagonally across the parcel(s) to draw your selection box to your liking, then release your mouse button. The parcel(s) intersecting the box will be selected. If a project spans multiple Transportation Analysis Zones (TAZs), select only the parcel(s) within one TAZ that most of the project is within. You can view how project boundaries intersect with TAZs by toggling on the 'TAZ' map layer.

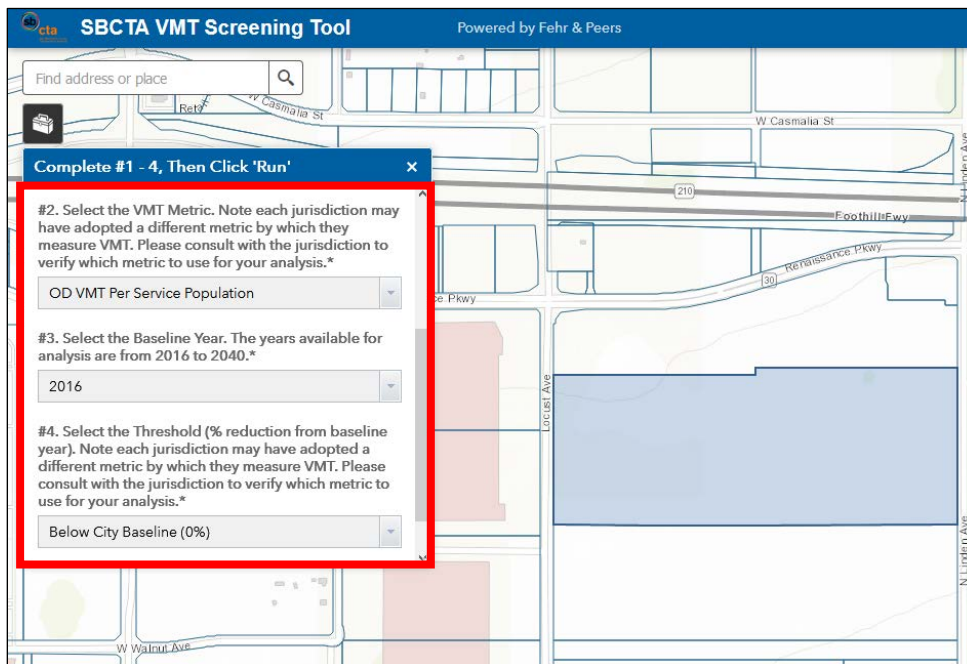


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The parcel(s) you've selected will be highlighted blue on the map. Note, you must select the parcel(s) you need in one motion! If you made a mistake and need to try again, you can clear your selection by clicking on the red triangle next to the black square.

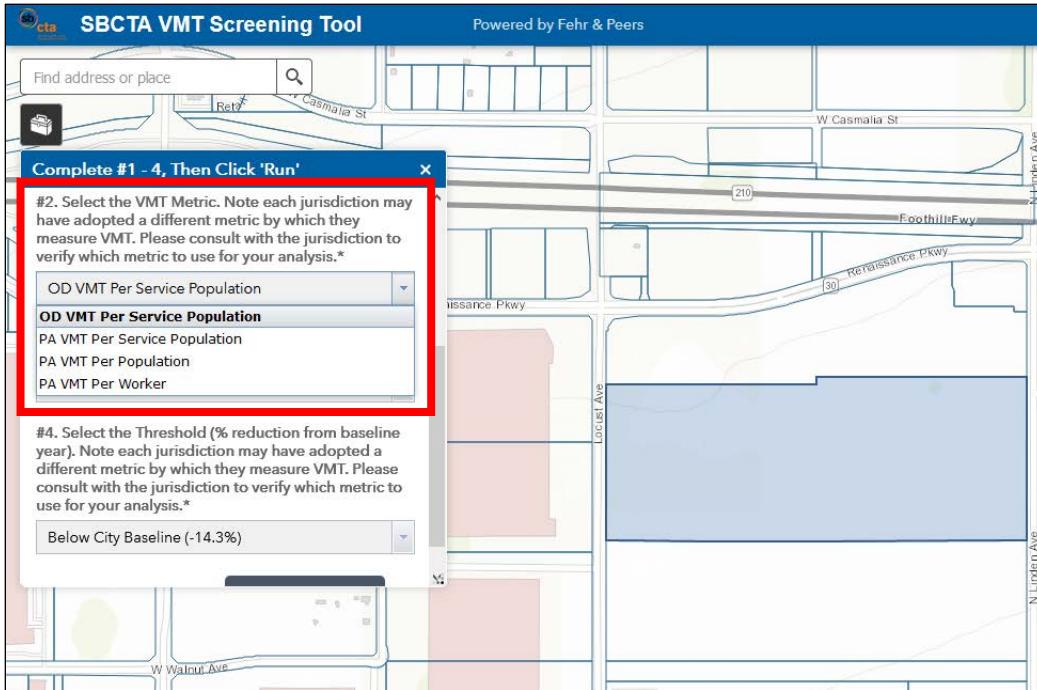


5. Once the desired parcels are selected, stay on the 'Input' tab and **set the remaining Tool's screening parameters: 'VMT Metric', 'Baseline Year', and finally the 'Threshold'.**



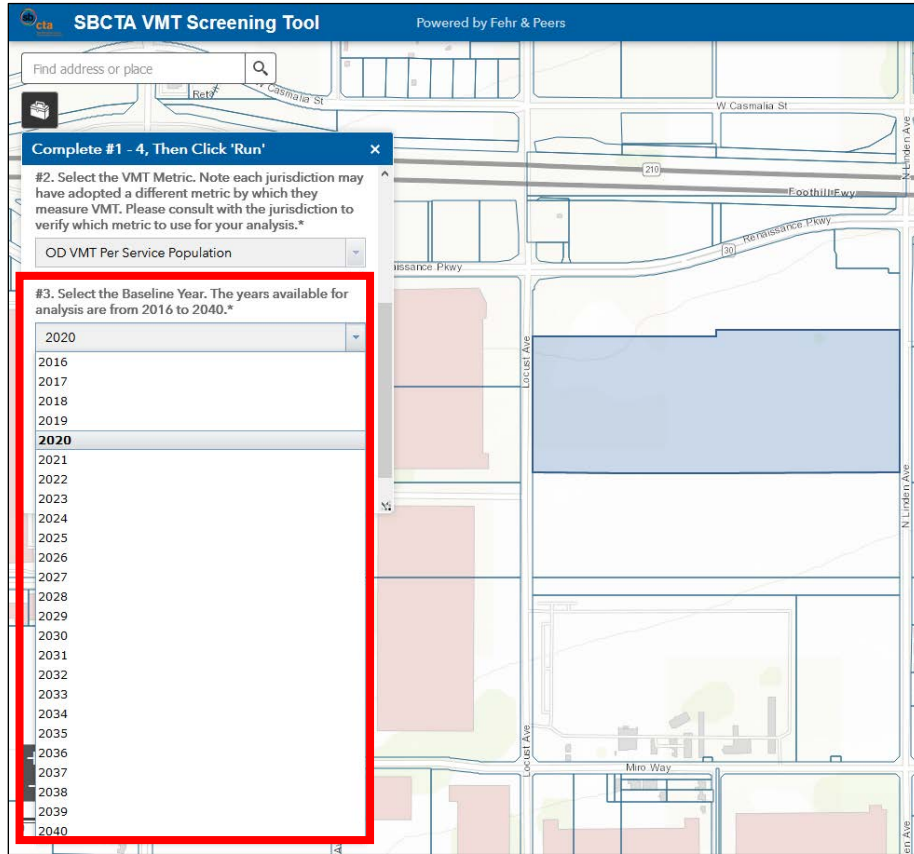
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- a. 'VMT Metric' parameter: This will be based on the local jurisdiction's adopted methodology for VMT analysis. You must confirm this when reviewing VMT analysis guidelines of the local jurisdiction prior to running the Tool:
 - i. If the local jurisdiction adopted the Origin-Destination Method, select "OD VMT Per Service Population".
 - ii. If the local jurisdiction adopted the Production-Attraction Method, review the proposed project's land use and...
 - 1. If the project is mixed use (residential and commercial), select "PA VMT Per Service Population".
 - 2. If the project is only residential, select "PA VMT Per Population".
 - 3. If the project is only commercial, select "PA VMT Per Worker".

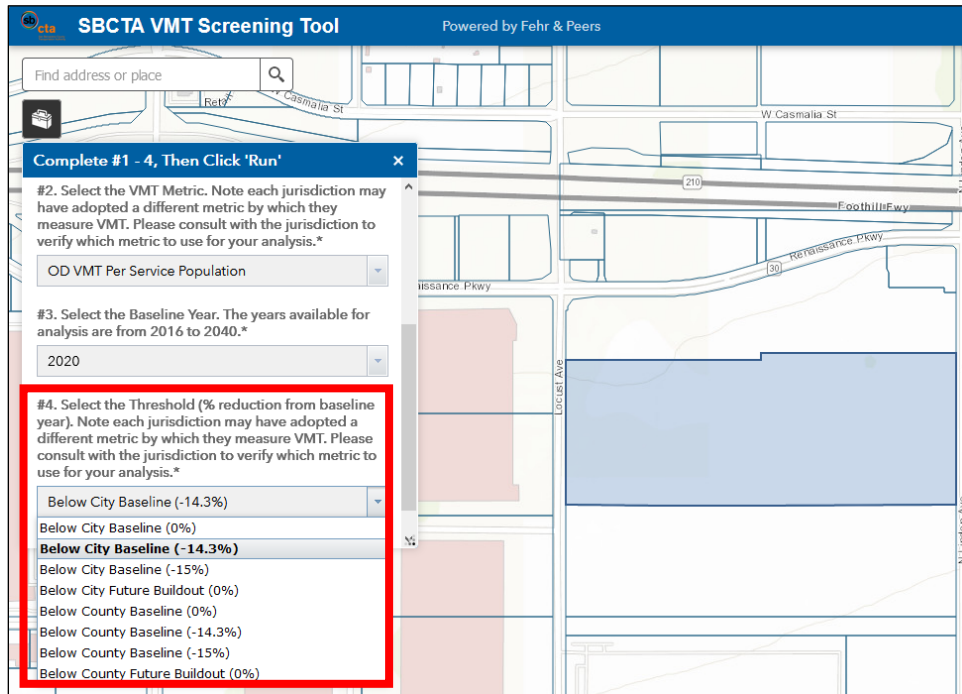


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- b. 'Baseline Year' parameter: The user can select any year between 2016 and 2040. This should be the year that the Notice of Preparation (NOP) was released for your project. The user must confirm the appropriate year for each project they are screening.



- c. 'Threshold' parameter: Like the 'VMT Metric', the threshold will be specified by each local jurisdiction. The user must confirm the adopted threshold of the local jurisdiction prior to running the Tool.



- d. Examples of how thresholds of significance relate to the drop-down options are presented below:
- i. A project would result in a significant project-generated VMT impact if either of the following conditions are satisfied...

1. The baseline project-generated VMT per service population exceeds the City baseline VMT per service population

Threshold (% reduction from baseline year)*

Below City Baseline (0%)

2. The baseline project-generated VMT per service population exceeds 15% below the County baseline VMT per service population

Threshold (% reduction from baseline year)*

Below County Baseline (-15%)

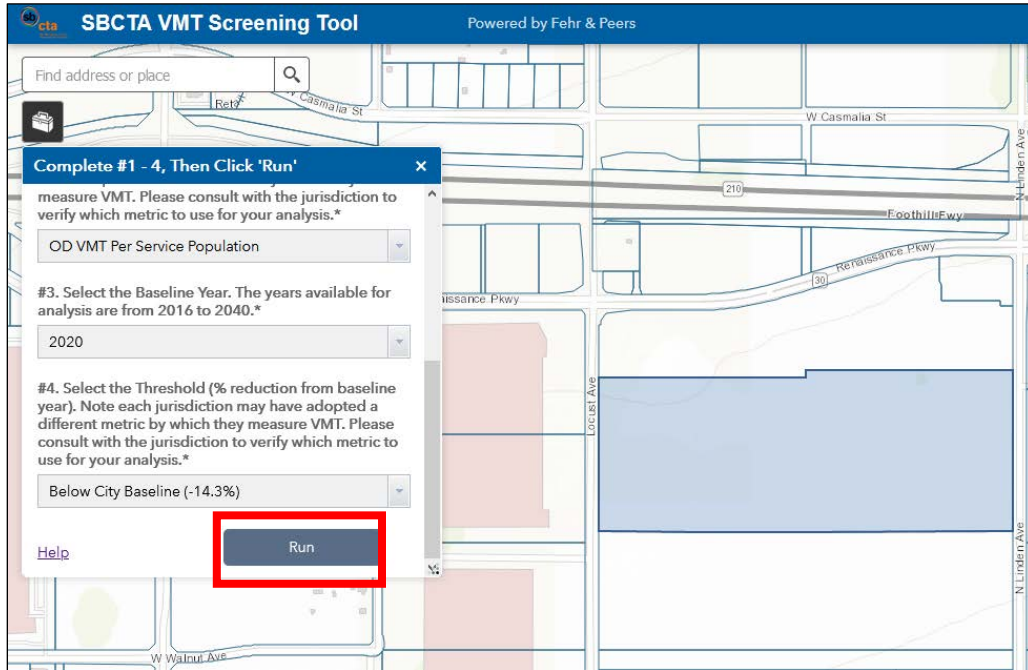
3. The baseline project-generated VMT per service population exceeds the City General Plan Buildout average VMT per service population

Threshold (% reduction from baseline year)*

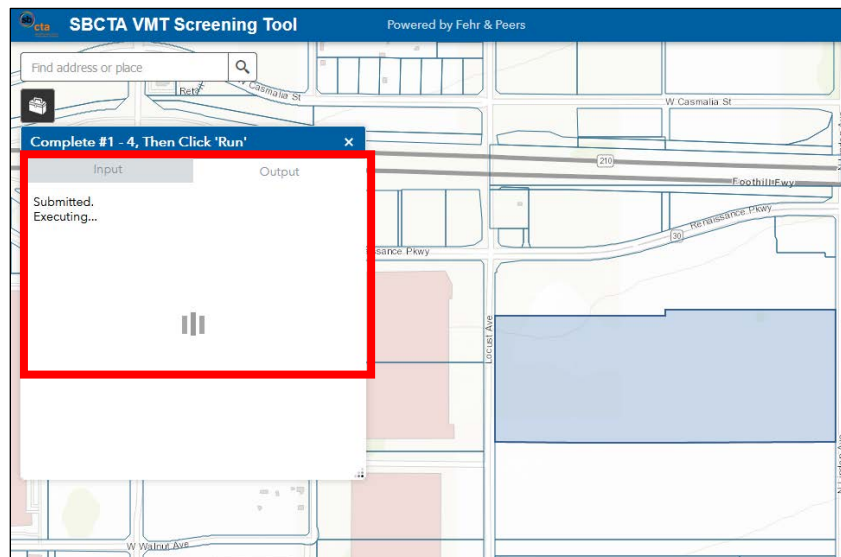
Below City Future Buildout (0%)

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- Once the 'VMT Metric', 'Baseline Year', and 'Threshold' parameters have been selected, **ensure you are satisfied with your choices and then click the 'Run' button** at the bottom of the dialogue box.



After clicking the 'Run' button, the Tool will automatically move to the 'Outputs' tab so you'll see the Tool's processing messages. The Tool can take a couple of minutes to run depending on your internet connection. *If the Tool does not complete its screening after 10 minutes, refresh your browser and complete the steps outlined above again.*



If you do not see any messages indicating that it's performing the screening, proceed back to Step 1 above to verify that you followed the procedures outlined. If you are still experiencing an error, first try refreshing your browser, or use a different type of browser and try the procedure again. If you're still seeing errors, you can reach out to SBCTA GIS: gis@gosbcta.com.

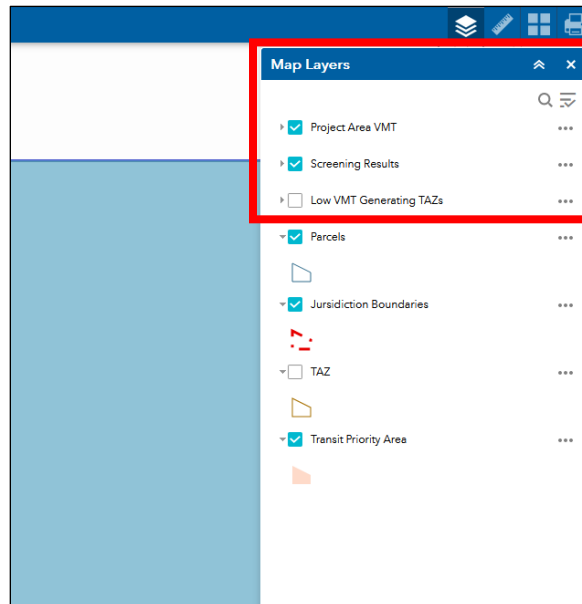
3. Reviewing Outputs

Please note all outputs from the tool are based on data from the SBTAM. Additionally, if a project does not meet screening criteria, thorough VMT analysis will be necessary in order to meet SB 743 requirements.

7. When the Tool has completed running, it will auto-zoom and pan into the selected parcel(s) for your project area.



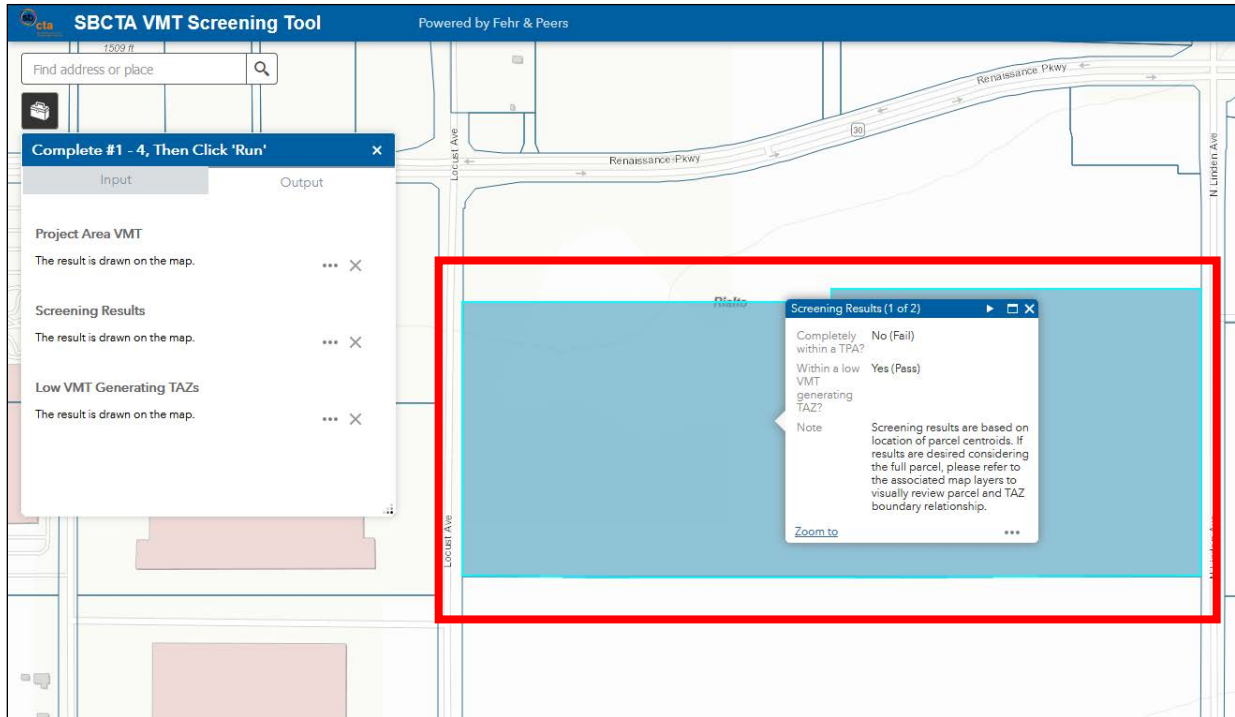
8. The Tool's screening results will generate three additional map layers that will automatically be added to the map and the 'Map Layers' dialogue box. The screening result layers are: 'Project Area VMT', 'Screening Results', and 'Low VMT Generating TAZs'. The layers 'Project Area VMT' and 'Screening Results' map layers will also be automatically toggled on while the 'Low VMT Generating TAZs' will be automatically toggled off.



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- To review if your project qualifies for VMT screening, move your mouse pointer over anywhere within your project area on the map and click on it. With your click, you should see a small window appear next to your mouse pointer. This popup presents your screening results.

The popup will display the screening results from the result layer that is toggled on in the 'Map Layers' dialogue box. To view then the 'Screening Results' layer's information, you may have to click on the left/right buttons at the top of the popup until the popup's title area to the left of the buttons reads 'Screening Results'.



- The results will issue a "Pass" or "Fail" for the screening criteria of Transit Priority Area (TPA)¹ and low VMT zone. The user should apply the appropriate checks to confirm the project meets these criteria. A project with a "Pass" result in the Tool may still not qualify for screening. Secondary checks are required for Low VMT Zones² and TPAs³.

¹ A TPA is defined as a half mile area around an existing major transit stop or an existing stop along a high quality transit corridor per the definitions below.

Pub. Resources Code, § 21064.3 - 'Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

Pub. Resources Code, § 21155 - For purposes of this section, a 'high-quality transit corridor' means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours

² Residential and office projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, other employment-related and mixed-use land use projects may qualify for the use of screening if the project can reasonably be expected to generate VMT per resident, per worker, or per service population that is similar to the existing land uses in the low VMT area. the analyst must identify if the project is consistent with the existing land use within that TAZ and use professional judgement that there is nothing unique about the project that would otherwise be misrepresented utilizing the data from the travel demand model.

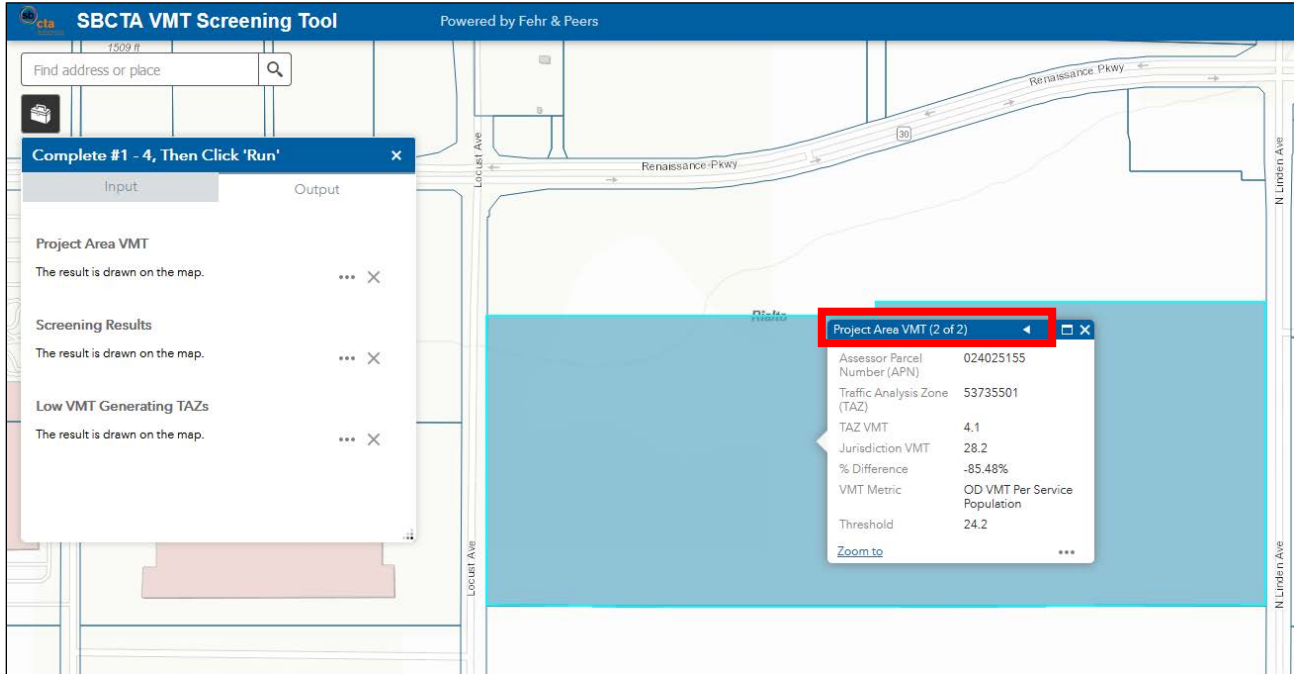
³ Projects located within a TPA may be presumed to have a less than significant impact absent substantial evidence to the contrary. This presumption may **NOT** be appropriate if the project:

- Has a Floor Area Ratio (FAR) of less than 0.75;
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);

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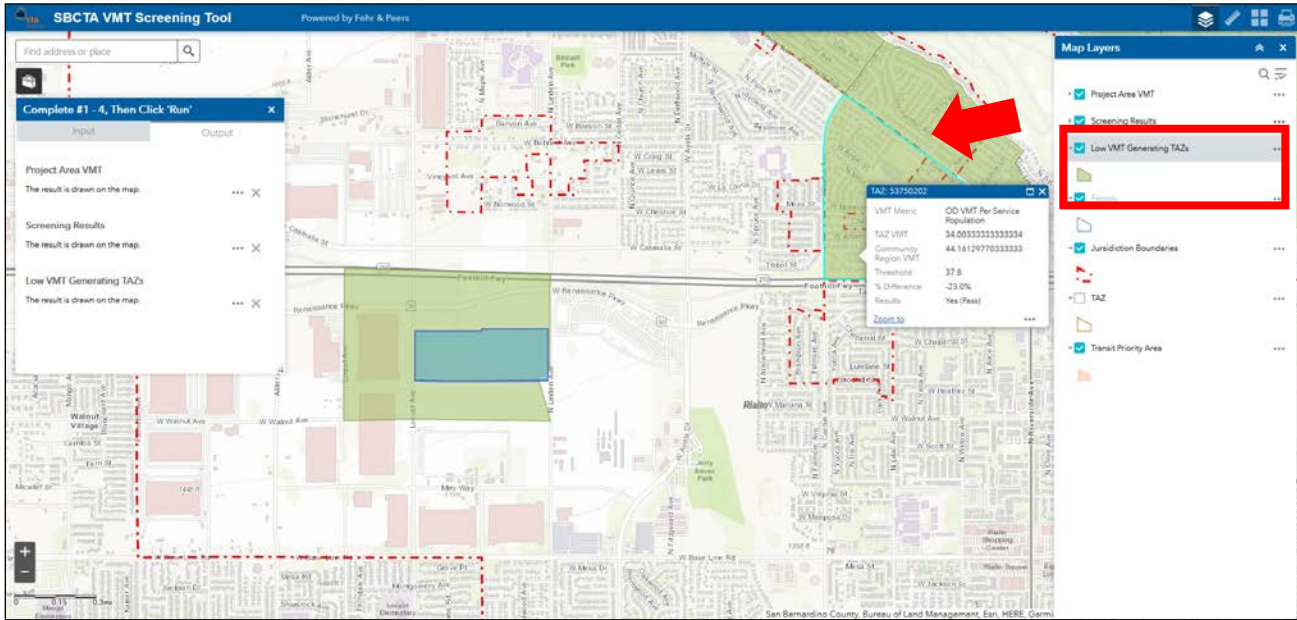
- b. To view additional VMT data, click on the left/right arrows in popup until the popup title reads 'Project Area VMT'. The display will show the VMT per service population of the TAZ, and the jurisdictional average.

Please note if "City" is selected under thresholds, this will be the City average in the selected year, and if "County" is selected under thresholds, this will be the County average in the selected year.



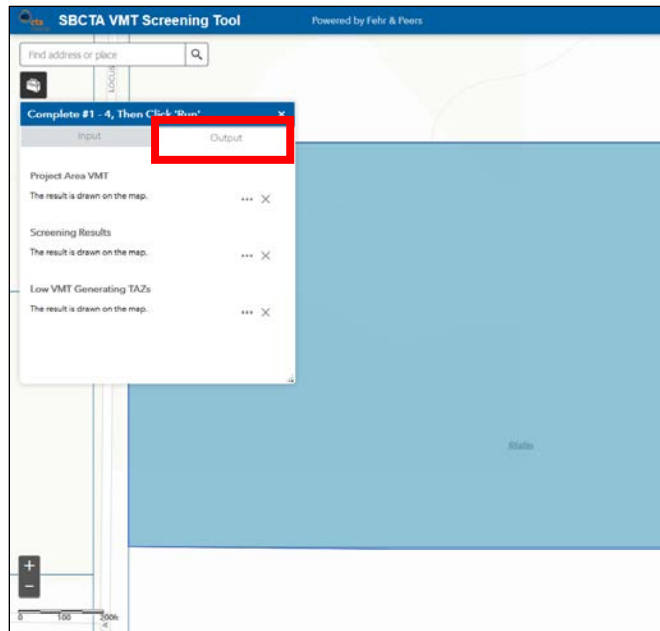
3. Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or
4. Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

- If you zoom out a little to the area around the parcel(s), you can toggle on the 'Low VMT Generating TAZs' map layer to view all the low VMT zones (for the entire San Bernardino County) under the selected 'VMT Metric', 'Baseline Year', and 'Threshold' parameters. This layer will draw areas on the map as a light, transparent green. Once on, click anywhere in the green area to get the popup for that location clicked. The VMT data for that area will be titled in the popup as 'TAZ' followed by the TAZ identifier for that location.

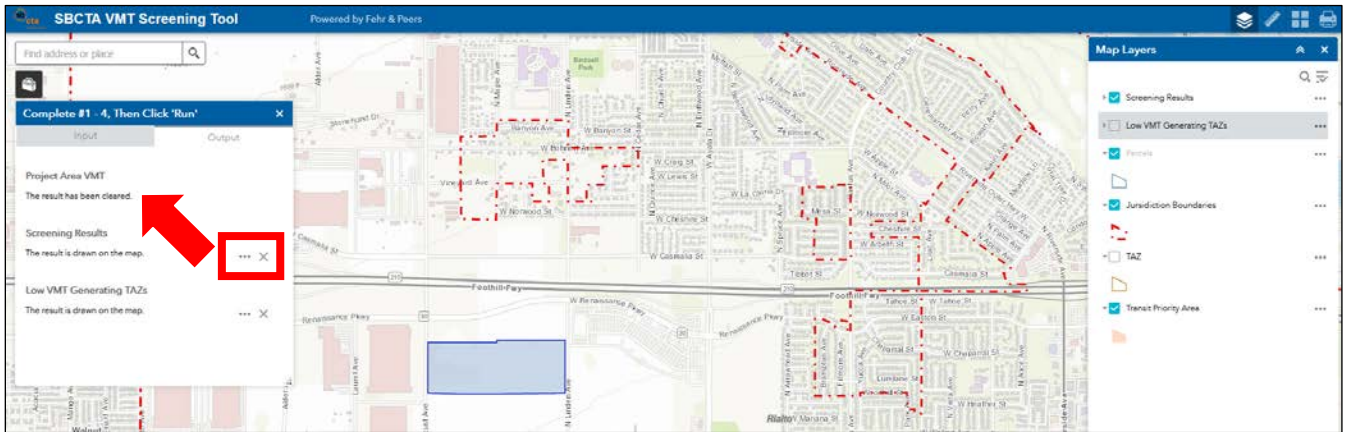


4. Rerunning the Tool

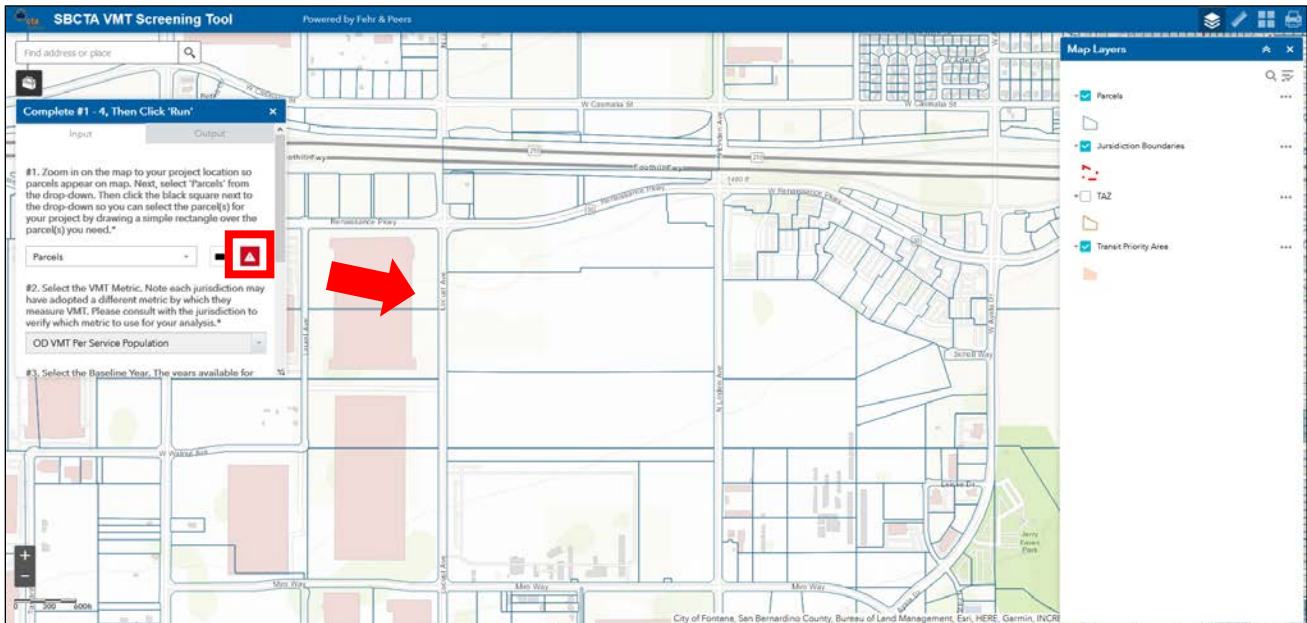
- If you would like to run the Tool again for another screening, ensure the 'Output' tab within the Tool's dialogue box in the upper left of the map is selected.



12. Within the 'Output' tab, notice across from each screening results layer to the right are an ellipses icon and an 'x' icon. **Click on each of the 'x' icons for the respective layer it's across from to remove it from the map.** This action will also remove the results from the 'Map Layers' dialogue box.



13. Next, **click the 'Input' tab for the Tool's dialogue box** to show the drop down menus outlined under the 'Setup the Tool' section above. Next to the black box you selected before to activate the parcel selecting tool, click on the red triangle to clear your original parcel(s) selection.



14. Once you've cleared the last run screening results layers and your parcel(s) selection, the Tool can be rerun by following the same steps as before under the 'Setup the Tool' and 'Review Outputs' sections outlined above.

If after reviewing the User Guide you're still having issues with the Tool, email SBCTA GIS: gis@gosbcta.com