**TRPA Project Impact Assessment Tool User Guidelines**

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12. **Purpose**

The tool provides initial screening for all project types and more detailed analysis for residential, tourist accommodation unit, and public service projects. All non-screened commercial, recreation, and other projects will need to complete a more detailed transportation analysis.

* Project screening
* VMT analysis for residential, tourist accommodation, and public service projects that do not meet any screening criteria
* Identification of appropriate VMT mitigations for projects that exceed VMT standards of significance
* Calculation of mitigation fees

1. **Limitations**
   1. Project Types & Sizes

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* 1. Geographic Coverage: The tool encompasses the area with the official boundary of the Tahoe Regional Planning (which can be found [here](https://www.tahoeopendata.org/datasets/85a2e8e4bf994742a5855c1339517681_0/explore?location=39.016300%2C-120.051800%2C10.68)) and cannot be used to analyze projects in adjacent area such as Truckee, Squaw Valley, and Kirkwood. In some rare cases, a proposed project may be located in an area within the Tahoe region where existing tool data does not cover. In that case, the applicant should contact TRPA staff to determine the best course of action.

1. **How to Use the Tool**
2. Go to [trpa.shinyapps.io/PIA\_Tool/](https://trpa.shinyapps.io/PIA_Tool/)

Graphical user interface, map

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1. Read the disclaimer and instructions upon the website opening.
2. Using the map, zoom into your project area and click on the map to identify your project site location. You may utilize the GIS layers found on the top right of the screen to better understand the characteristics of your project location.

Map

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1. From the panel on the far left of the screen, select your project type from the dropdown “Select Project Type”.

Graphical user interface, application

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1. Below the project type dropdown, enter the number of units for your project.

Graphical user interface, application

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1. If your project is a redevelopment project, click Yes on the “Redevelopment Project” toggle and then enter the existing land use and land use size.

Graphical user interface, text, application, chat or text message

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1. Observe the summary data in the boxes below the map.

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1. If you plan to incorporate mitigations, select the available mitigation check boxes under “Select Mitigations”

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1. Once you are finished entering your project data per the instructions above and you have reviewed the input data for accuracy, click the “Export Project Info” button to export your project analysis for incorporation into your TRPA permit packet. It may take a few seconds to download the file.

Graphical user interface, application

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1. **Tool Calculations**

**Residential Projects**

*Project VMT* = (Zone VMT Per Resident) \* (Persons per Household) \* (Number of Proposed Units) \* (Low Income Factor) – Mitigations

*Standard of Significance* VMT = (15% Below Jurisdiction Average VMT Per Resident) \* (Persons per Household) \* (Number of Proposed Units)

**Non-Residential Projects**

*Project VMT* = (ITE trip rates) \* (Trip Length) \* (Project Size) – Mitigations

*Standard of Significance* VMT = (ITE trip rates) \* (15% Below Jurisdiction Average Trip Length) \* (Project Size)

**All Project Types**

*VMT Mitigation Needed* = (Project VMT) – (Standard of Significance VMT (non-screened projects))

*Mobility Fee -* The mobility fee calculation is based upon a binary formula depending on the project type; there are two sets of calculations, one for Residential, TAU, & Campground Projects and one for all other project types. This is based upon the concept of 90% attribution of VMT to trip generators and 10% to trip attractors.

* Residential, TAU, & Campground Projects
  + (Project VMT) \* 0.9 \* $80
* Non-Residential, TAU, & Campground Projects
  + (Project VMT) \* 0.1 \* $80

**Mixed-Use Projects –** Not currently represented in the tool but future versions may include this functionality.

**Redevelopment Projects**

Project VMT = Proposed Project VMT - Existing Project VMT

1. **Tool Metadata**

*Residential VMT –* TRPA travel demand model, 2018. See appendix A for full data tables.

*Trip lengths –* TRPA travel demand model, 2018. See appendix B for full data tables.

*Trip generation (non-residential projects) –* ITE, 2018. See appendix C for full data tables.

*GIS Map Layers –* TRPA, 2018

*Mitigations – CAPCOA.* See appendix D for full data tables.

*Low-Income Factor*

1. **Tool Components**

*Screening*

* Low Income Screen: Low Income Residential Units and project located in a bonus unit eligible area.
* Low VMT screen: Less than 715 Project VMT for all locations and less than 1300 project VMT if located within ½ mile of Town or Regional Center.

*Mitigations ­*­– The tool includes mitigations that an applicant may select to decrease their project’s VMT. The available mitigations are available to specific project types and vary in the assumed amount of VMT reduction. In general the formula for the mitigation reductions are Project VMT – (Project VMT \* *mitigation %).* See appendix D for a full table of mitigations and background information.

*Internal Trip Capture* – provide all of the research and data associated with the mitigations.

*Low Income Housing Factor* – The tool includes a VMT reduction factor that is applied to projects which include low-income housing units. This factor is set at 10% of the project VMT and is based upon research from California Housing Partnership. https://www.cnt.org/sites/default/files/publications/CNT%20Working%20Paper%20revised%202015-12-18.pdf

1. **Additional Information**

This tool was created using [R-Shiny](https://shiny.rstudio.com/) and the full tool code can be found on [github](https://github.com/trpa-reid/pia_tool_test/blob/master/app.R).

Link here to Michael’s guidelines and any other info we want to cite

1. **Appendix A – Zone Model Data**

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1. **Appendix B – Map of PIA Zones**

**Map

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1. **Appendix C – ITE trip rates**

Table

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1. **Appendix D – Mitigations Data Table**