

## 2020 Project Performance Assessment beta tool: summary guide

**What is the PPA tool?** The Project Performance Assessment (PPA) tool brings together numerous regional data sets and other quantitative information to create performance indicators for individual transportation projects. The tool is online and has been used as the baseline data in the past two SACOG funding rounds (2018 and 2019). The tool stems from a working group exploring best practices to analyze transportation investments at the project level.

**Why this beta period?** Following its initial rollout in 2018, SACOG staff assessed the use of the tool to date. The assessment also drew on comments provided by project sponsors and other users of the tool. SACOG has created an updated version of the tool that responds to this feedback, and is seeking comments on the revised 2020 version through an open beta period. The beta period closes May 15, 2020.

### **How to use the tool?**

When you open the beta 2020 PPA tool the first thing you will see on the left is instruction on how to use the tool. These instructions also live in the tool's tab bar, under the information icon.



Once you have familiarized yourself with the instructions, go to the first step in the tool, data visualization, represented by the stacked layers in the tab bar on the left. This allows the user to explore many of the data layers that form the PPA.



Next, run the tool itself. The beta tool is built to mirror the 2018 funding round, so includes a tab for the Regional Program and a tab for the Community Design program. This is for the beta testing purposes only. If the SAOCG board acts to change the funding round, the programs represented within the PPA could change as well. Each beta program has a separate tab in the bar. The Regional Program beta application is the gear tab, shown below.



The Community Design beta application is the circle tab, shown below

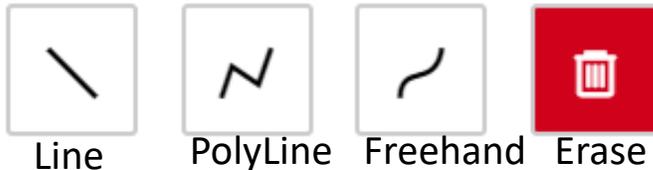


Finally, the share tab allows you to share the application with other users. We do not anticipate this being needed, as the tool will produce a shareable output report.



### **Running the tool**

- After exploring the various data layers, you can navigate over to the program specific tabs (currently Regional Program and Community Design) and run the tool. Navigate to your project location and draw its extent. The polyline and freehand tools are helpful if your project is not a straight line. Also, if your project is too large to fit on the screen, you can use the polyline to scroll while drawing a line. Please be as accurate as possible when drawing the segment, as the PPA includes different data on the facility itself. The red erase function will delete all segments you have drawn.



- After drawing your segment, put in the user inputs, including project title and jurisdiction (or lead agency).
- For the Regional Program beta, also select from one of the three project types: freeway, transit expansion/arterial expansion, or complete street/state of good repair (note that transit state of good repair projects, such as bus or light rail vehicle replacements, do not use the PPA tool, as there is not a geographic component to these projects. These transit state of good repair projects instead use the separate Transit Asset Management). Each project type has separate indicators.
- The beta the tool does not ask for you to select a subset of the possible performance outcomes. Instead, the report will include all the performance outcomes. For the final version of the tool we plan on building in the functionality where a user selects just a subset of the outcomes and the tool only reports on the outcomes selected.
- Once you have added the user inputs, hit run. The tool will automatically shift over to the outputs tab and start running. You will see three bars moving up and down while the tool runs. It currently takes 3-5 minutes to complete a run (i.e., be patient. If the three bars are moving, the tool is running). Once the tool completes it will produce a link to an excel spreadsheet with the outputs.
- If you wish to run another project, navigate back to the input tab, clear your line segment, delete your user inputs, and start again.

### **What does the tool output look like?**

- A completed run produces a link to an excel workbook. You will need to click enable editing to see the results.
- As mentioned above, the beta version excel output report produces indicators on all the covered performance outcomes. This is a lot of information. For the final version, we are working for the tool to provide information just one the outcome(s) selected by the project sponsor.
- In the excel output the 2 leftmost tabs are just a summary of the raw input data (ie you don't need to spend time going through these tabs, it is the raw data summary)
- The next two tabs (tabs 0A and 0B) are the summary of the project and a reminder of the tool.
- The subsequent seven tabs give the PPA indicators for the various performance outcomes included in the program.

- The Regional Program includes seven performance outcomes plus an optional ‘cross cutting’ outcome on socioeconomic equity.

[1ReduceVMT](#) | [2ReduceCongestion](#) | [3Multimodal](#) | [4EconProsperity](#) | [5Freight](#) | [6Safety](#) | [7SGR](#) | [8SocioEconEquity](#)

- The Community Design uses the seven Blueprint principles. The PPA does not have any indicator on the seventh Blueprint principles (quality design) as this is qualitative in nature.

[1TranspoChoice](#) | [2CompactDev](#) | [3MixedUseDev](#) | [4HousingChoice](#) | [5UseExistingAssets](#) | [6NaturalRsrcePreservn](#)

- In these various tabs you will see the project results within the various indicators. Many indicators include a comparison to the project’s community type average. is an important part of the PPA evaluation framework, where projects are compared relative to those of similar size and community type. The 2020 version has an expanded number of community types.
- Each performance outcome includes 2 to 3 indicators. The tables on the last two pages show the beta indicators used to support each programs’ performance outcomes. The separate Beta Indicators document describes each of these indicators, for those that want a fuller description of the outputs.
- Finally, SACOG is still working on some additional functionality for the final tool. The current beta tool reports an excel workbook on all seven performance outcomes. The final tool will report a pdf, not an excel, and just on the performance outcomes selected by the project sponsor, thus saving an additional step.

### **How can I give feedback on the beta version?**

Direct your comments to the following SACOG staff contacts:

Darren Conly, [dconly@sacog.org](mailto:dconly@sacog.org)

Garett Ballard-Rosa, [gballard-rosa@sacog.org](mailto:gballard-rosa@sacog.org)

If you receive an error message while running the tool, please let us know.

When reporting your error message include:

- Operating system name and version (e.g. Windows 10, OSX, etc)
- Browser (e.g. Firefox, Chrome, etc)
- Copy and paste all the text content that appears in the ‘output’ window of the tool

2020 Project Performance Assessment: Beta Indicators by Project Type for Regional Program

	<b>Freeways</b>	<b>Maintenance and Complete Streets</b>	<b>Transit and Road Expansion</b>
<b>Performance Outcome</b>	<b>Indicators by Project type</b>		
<b>Reduce VMT/capita</b>	-transit trips -avg vehicle occupancy on project	-density -land use diversity -point of interest (POI) accessibility	-change in jobs + DUs -change in land use diversity -POI accessibility
<b>Reduce congested VMT/ capita</b>	- congestion severity - travel reliability	- congestion severity - travel reliability	- congestion severity - travel reliability -growth in project corridor
<b>Increase multi-modal travel</b>	-transit person-trips on segment	-street connectivity -bike network connection -transit activity	-street connectivity -bike network connection -transit activity
<b>Econ prosperity (jobs)</b>	-job access	-job access	-job access -job growth
<b>Econ prosperity (schools)</b>	-school access -school enrollment	-school access -school enrollment	-school access -school enrollment
<b>Econ prosperity (agriculture)</b>	-ag intensity near project	-agricultural intensity near project	-agricultural intensity near project
<b>Improve freight movement</b>	-STAA truck route -truck mode share	-STAA truck route -industrial jobs share	-STAA truck route -industrial jobs share -industrial job growth
<b>Safety</b>	-total collisions -collision rate	-total collisions -collision rate -bike/ped rate	-total collisions -collision rate -bike/ped rate
<b>Maintain State of Good Repair</b>	-SHOPP program	-PCI -volumes -Complete Street index	-PCI -volumes
<b>Socioeconomic Equity</b>	-Replica post-processing indicators	-EJ population -EJ percent -EJ accessibility	-EJ population -EJ percent -EJ accessibility

2020 Project Performance Assessment: Beta Indicators for Community Design

<b>Blueprint Principle</b>	<b>Indicator</b>
<b>Transportation Choice</b>	Transportation mode split for residents within half mile of corridor, 2016 and 2040
<b>Compact Development</b>	Combined jobs and housing units within half mile of project location, 2016 and 2040
<b>Mixed-Use Development</b>	Land Use Diversity Index within 1 mile of project location, 2016 and 2040
<b>Housing Choice</b>	Housing type mix within 1 mile of project location, 2016 and 2040
<b>Use Existing Assets</b>	Travel time accessibility to neighborhood amenities by transportation mode, 2016 only  Infill/greenfield project location
<b>Preserve Natural Resources</b>	Combined acres of forest, agricultural land and park/open space within half mile of project location, 2016 and 2040
<b>Quality Design</b>	No quantitative indicators