

Appendix 1 Frequently Asked Questions

Drawing Your Project

Importance of Drawing Accurately

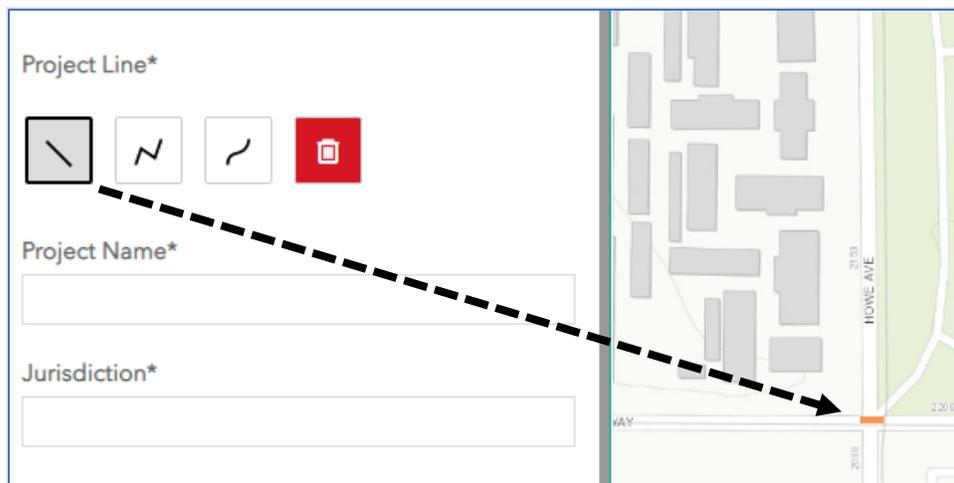
The PPA is inherently spatial. Most of its numbers rely on one or more distance-based analyses, so if you draw the line too far from the actual project location, it may give you incorrect numbers. In particular, the tool only counts collisions that are within 75 feet of the project line, so if you draw the line too far from the actual road alignment, [you risk under- or overcounting the collisions](#).

To draw an accurate line, follow these tips:

- Zoom in close to the project location.
- If zooming in makes it so you cannot see the entire project extent in the map frame, draw what you can in the frame, then click and drag the map frame as much as needed, then continue drawing your project line.
- Use the correct line drawing tool. The multi-vertex tool  is the best for most projects.

Draw an Intersection Instead of a Line Project

To draw a project line that represents an intersection instead of a segment or corridor, simply zoom in close to the location and draw a very short line that just crosses the intersection.



Draw A Project with Limited Access Points

Limited-access projects are linear projects whose actual affected area may be better represented by the locations near points where people can access the project instead of the entire project, such as:

- An off-street bike path that can only be accessed via entrances that are far apart from each other.

- A commuter bus that has a few stops at either end but has long freeway-running sections with no stops.
- Other limited-stop transit service with stops spaced far apart (e.g., LRT stations).

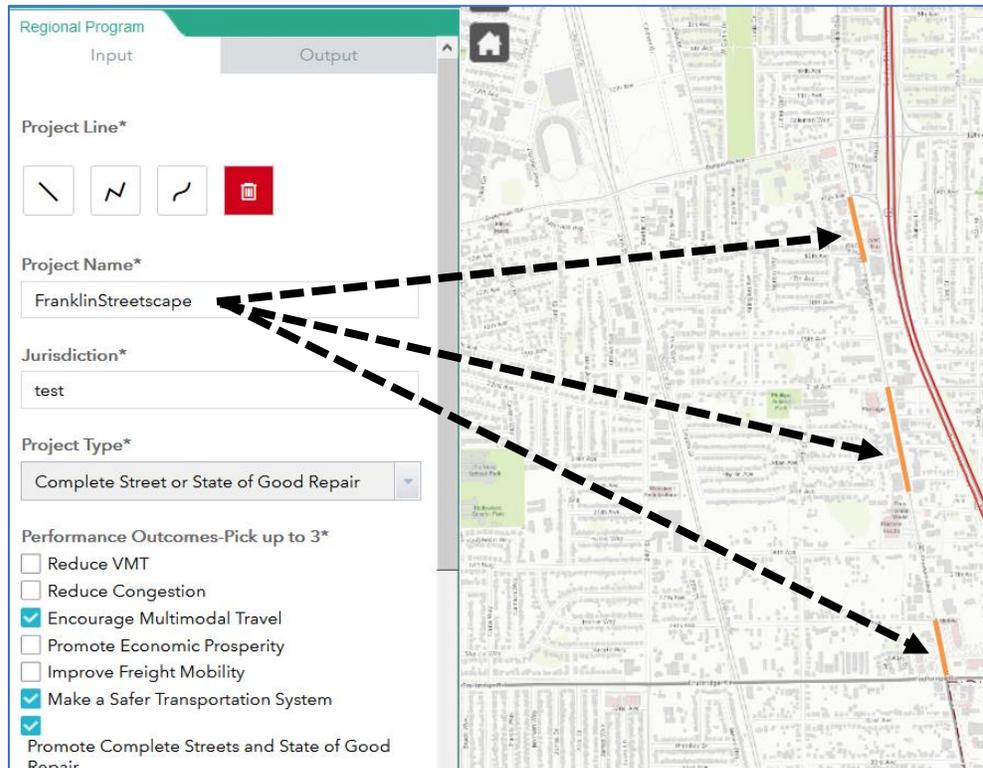
If you believe your project, like the examples above, may be more appropriately represented as separate access points rather than as a single line, then draw in lines that only represent the portions of the project at which there are access points. If your project has multiple access points, draw them as described below in [“Analyze Multiple Locations as a Single Project”](#).

Analyze Multiple Locations as a Single Project

Example scenarios

- Multiple intersection locations that you want to analyze as a single project
- A discontinuous bike path project that comprises multiple, disconnected segments that you want to analyze as one project
- You want to code in just the access points of a [limited access project](#).

Example multi-location project



How to represent in the tool

1. Draw the first part of the project as normal.
2. After drawing the first project part, click again on the type of line that you want to draw as if you were drawing a new line (do *not* click the delete/trash button).
3. Draw the second part of your project.
4. Repeat steps 2 and 3 for all other portions of your project.
5. After drawing all pieces of your project, fill out the remaining tool fields and run the tool. The resulting report will have maps and numbers representing your multiple project pieces as one project.

Drawing Projects to Represent a Parallel Facility

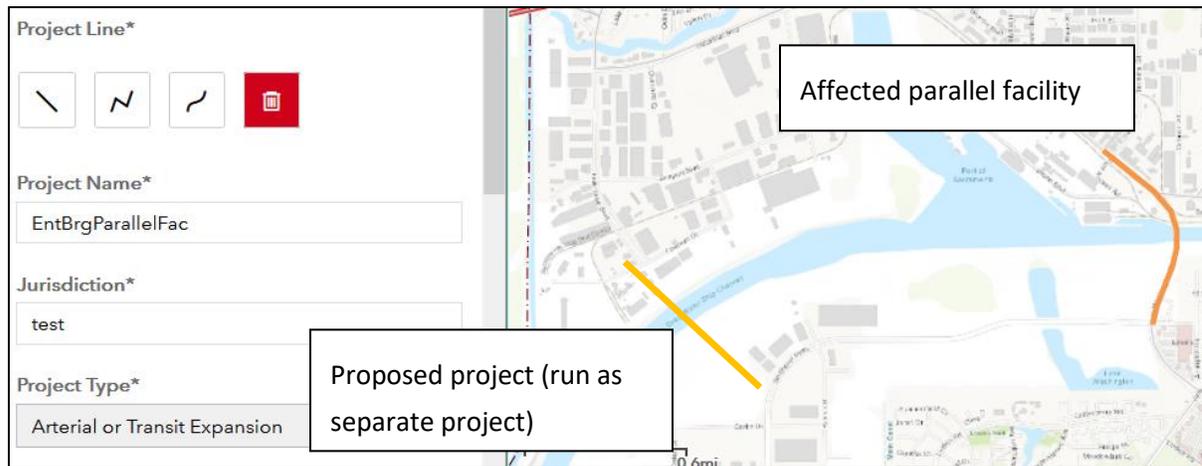
Example situations

- Widening or building a new arterial or freeway facility to relieve congestion on a nearby parallel facility
- Building a new off-street bike or pedestrian path to provide people an alternative to biking or walking on what may be a dangerous or uncomfortable street.

How to represent in the tool

1. Draw your project at its actual location and run the tool as normal.
2. After running the tool for the actual project location, clear your first project line.
3. Draw a new project line on the parallel facility that your project is intended to improve or complement. Update the project name, ADT, speed limit, and PCI to reflect the parallel facility.
4. Rerun the tool.

Example of representing parallel facility



Deciding which outputs to use in your application

To help you and reviewers best evaluate your project's benefits to a parallel facility, we recommend compiling your report outputs in the following manner in your application:

- Include the title page for BOTH runs in your application
- If you selected any of these performance outcomes, include their pages from BOTH runs in your application:
 - Reduce congestion
 - Improve safety
- For all other performance outcomes, only include their pages for your PROJECT location run.

Choosing your Project Type

Freeway projects

Choose if your project is on or part of a limited-access, high-speed freeway facility. This includes auxiliary lanes, HOV lanes/managed lanes, on/off ramps, interchanges, etc.

Arterial and transit expansion

Categorize your project as an arterial or transit expansion project if it is adding new *non-freeway* capacity to the transportation system for any mode. Examples include:

- Physically widening an existing arterial to accommodate increased motorized vehicle throughput (e.g. widening to accommodate new general-purpose lanes, new turn lanes, or new transit lanes). This applies even if the widening project includes adding new bike lanes along with the new motor vehicle capacity.

- Constructing a new arterial.
- Building a new separated bike/ped path/trail. This does not include adding sidewalks to an existing street that does not currently have them.
- Adding new transit service either through a new route or more service on an existing route.

Complete Streets and State of Good Repair

Choose this if your project is not on a freeway and does not add any capacity for any motorized mode. Examples include:

- Restriping or reconfiguring an existing arterial to include bus-only lanes *without* physically widening the right-of-way and *without* increasing service frequency. If the project increases transit service frequency, categorize it as “arterial and transit expansion.”
- Adding sidewalks or on-street bike lanes to an existing street without adding motor vehicle capacity.
- Rehabilitating an existing non-freeway road without any capacity changes.

Choosing A Project Type for Off-Street Bike Paths

In most cases, SACOG staff recommend users categorize off-street bike path projects as “arterial/transit expansion” projects for the following reasons:

- Most off-street bike path projects are new construction, rather than rehabilitation.
- Complete streets metrics, and particularly the Complete Streets Index, are meant to evaluate the potential of an existing, car-accessible street to become a street that better accommodates and encourages all travel modes. In contrast, a new bike path inherently is for bike and pedestrian use only and is a new facility rather than an existing one.

Entering Project Data

Entering Your Project’s Average Daily Traffic (ADT)

Average Daily Traffic (ADT) is most important for the following three metrics:

- Collision rate per 100 million VMT.
- Estimating how many people are affected by current maintenance conditions at the project location.
- Giving reviewers an idea of how many people are affected by congested conditions at the project location.

Estimating ADT may be challenging. Use the guidelines below to help you estimate ADT for several well-known difficult situations.

- *ADT varies significantly along the project length*
 - If your project segment is long and, per observed traffic counts, has significant variety in its ADT (e.g., ADT at the start is much higher than ADT in the middle but lower than ADT at the end), use your best judgement to provide a single, reasonably representative average ADT for the entire project based on what share of the project's length has each ADT value.
- *Project covers multiple locations*
 - If your project covers multiple locations that are far apart from each other, such as different intersections or separated segments that are far apart from each other on the same street, we recommend keeping the ADT at the zero default and not incorporating it if your application does *not* cite safety as one of its primary performance outcomes.
 - If, however, you have a multi-location project that has safety as a primary performance outcome, we recommend you run the tool separately for each location of the project to ensure the ADT values are representative of each project location, which in turn will result in more accurate collision rates.
- *If your project is a new road, off-street bike path, or off-street transit project*
 - For new construction projects, you may keep the default ADT value of zero.
- *If your project is supposed to relieve congestion on a parallel facility*
 - If one of your project's goals is to help divert traffic from an existing facility, follow the directions for [parallel facility analysis](#) as described above.

Entering Speed Limit

Like ADT, the posted speed limit may vary along your project, especially if you have a long project or your project covers multiple locations. Below are several approaches to reconciling a project that has multiple speed limits within its extent.

- *Leave speed limit as zero if you do not have a complete streets project* - While the speed limit appears on the cover page of the PPA report, it is only used in an evaluative sense to calculate the [complete streets index](#). Therefore if you are not including complete streets or state of good repair in your performance outcomes, then you may leave the speed limit at the default value of zero.
- *Enter a reasonably representative typical speed limit* – if complete streets/state of good repair is one of your project's outcomes, enter the most reasonable speed limit that captures the “average” speed limit for all locations within your project's extent, if the speed limits are reasonably close (e.g., within +/-10mph).

- *Run separate project reports* – if the speed limits within your project’s extent vary significantly (more than +/- 10mph), then consider running separate reports to capture the significant variation in your project’s locations. Even if you submit different reports with your application your project will still be evaluated as a single project.
- *Entering current vs. future speed limit* - If your project would change the speed limit, then enter the speed limit that would be in effect if the project were completed.

Entering Pavement Condition Index

- *If PCI varies significantly within the project extent* – Similar to handling ADT or speed limits that vary within the project extent, use your best judgement to provide an approximate average PCI for the project. If your project has a few specific locations whose PCI you wish to highlight, please do so in your application narrative.
- *Road maintenance projects without a PCI score* – If your project is a non-surface maintenance project (e.g. bridge structure), leave the PCI as its default zero value and use the narrative section to highlight the other maintenance needs your project will fulfill.
- *Transit projects* - Transit state of good repair projects do not use the PPA, so transit expansion projects using the PPA tool can leave the default zero value in the PCI box. This will not affect any transit outcomes. Transit maintenance projects use the separate Transit Asset Management indicators.

What Does My Complete Street Index Value Mean?

The complete street index evaluates a street’s potential to benefit from complete streets treatments that allow it to better accommodate a diverse set of road users, and a higher score means the street has more potential to benefit from projects that provide complete street treatments.

Figure 1 through Figure 3 below show some example locations and their corresponding complete street score to give a sense of what a given complete street score may look like on the ground. The [supplemental indicator methodology appendix](#) contains more details on the index’s calculation and policy underpinnings.

Figure 1 - West Capitol Ave near Merkley Ave, West Sacramento

Complete street score: 16.4



Figure 2 - K Street at 12th Street, Sacramento.

Complete street score: 326.4



Figure 3 – Main Street at Railroad Avenue, Winters.

Complete street score: 18.1



Viewing Reports without Excel

The tool output is currently only available in Excel format. If you do not have Excel, we recommend viewing the report through Excel Online, which is available if you have or create an Outlook Online or Office 365 account.

The report can also be viewed through Google's spreadsheet viewer, and even opened as a Google spreadsheet, but doing the latter may cause some of the report's charts to display incorrectly.

Collision Data Seem Wrong

Total number of collisions seems wrong

If you think you may not be capturing all collisions on your project segment, check how accurately you drew your line by zooming in on it in the user interface. The tool only counts collisions whose geocoded location is within 75 feet of your project line, so to ensure you are accurately capturing collisions on your project segment, be sure to draw as accurately as possible. Zooming closer in makes it easier to draw accurately.

Collision rate per 100 Million VMT seems wrong

The collision rate is based on the total number of collisions found for the project and the average daily traffic (ADT) you entered. If the collision rate seems unreasonably high or low, double check to make sure you entered the most reasonable ADT estimate available.