# Safe Streets and Roads for AllAAPreparing Your Spatial Data File

## Purpose of this Job Aid

This document provides step-by-step instructions on how to create a spatial data file required in the SS4A <u>Notice of Funding Opportunity (NOFO)</u>. This file will be used in coordination with other parts of the SS4A Grant application. It will help the SS4A Grant Program team better understand the location(s).

- Acceptable file types are Shapefile, GEOJSON, or KML/KMZ. This file must be uploaded to Valid Eval, the grant submission platform, along with the other required application components.
- Applicants can only submit **one spatial data file** as part of their application. These can be zipped folders or a KML file.
- Applicants may use any GIS software or a publicly available online mapping tool, for example, <u>Google</u> <u>Earth</u>, <u>GEOJSON</u>, or <u>QGIS</u>.

## Requirements

- Internet connection
- Internet browser (such as Microsoft Edge, Google Chrome, or Firefox)
- The location of any jurisdiction(s) included in the application.
- A list of project location(s) for Implementation projects and strategies and/or demonstration projects. Please be as specific as possible about project location(s). Example scenarios are listed on page 2 of this document.

# About this Job Aid

- USDOT does not have a preferred GIS software. Applicants may use any software that can produce a Shapefile, GEOJSON, or KML/KMZ. For the purposes of this Job Aid, Google Earth and Google Chrome will be used. **USDOT does not specifically endorse Google. This is just one example of how an applicant could create a project location file.**
- The screenshots and icons taken from Google are for informational purposes only and are not an endorsement of Google Maps nor an indication of any partnership with Google.

# What should be included in the spatial data file?

These are examples of common scenarios that applicants may encounter as they develop the spatial data file required by the <u>FY25 SS4A NOFO</u>.

Project area(s) identified in the project location file should be **as specific as possible at the time of application submittal.** 

The SS4A Grant Program recognizes that not all projects will be able to identify exact project sites. The project location file should represent any geographic locations under consideration for the project.

## Scenario 1 – Application Jurisdiction(s)

**Scenario 1**: All applications must include the jurisdiction(s) included in the application (e.g., town, city, county, region).

- **If your project spans an entire county**, the file should include the entire county or multiple counties if applicable.
- **If your project spans an entire city/town/community**, the file should include the entire city/town/community boundary or several city/town/community boundaries if applicable.

There are numerous resources available for mapping entire counties, cities, towns, and communities. For example, you may wish to reference the <u>FCC U.S. County Overlays for Google Earth site</u> or the <u>U.S. Census</u> <u>Bureau Mapping Files site</u>. You can also draw polygons to represent approximate boundaries using the guide starting on page 3 of this job aid.

### Scenario 2 – Single Project Location

**Scenario 2:** A project that has **one known, specific physical location** such as an intersection, street, facility, or other infrastructure.

• The file should indicate the specific location of the project. Draw a polygon around the location.

#### Scenario 3 – Several Project Locations

**Scenario 3:** A project that has **several known, specific physical locations** such as intersections, streets, facilities, or other infrastructure.

• The Project Location File should indicate all of the specific locations. If there is more than one location, draw a polygon around each location on the same map.

#### Scenario 4 – Unknown Sites

**Scenario 4**: A project that has specific physical sites, but the precise sites are not known at the time of application submittal.

• The file should represent all geographic locations under consideration for the project. This could include a project location file with roadway, neighborhood, community, town, city, county, or State boundaries. Be as specific as possible.

# How to Create a Project Location File

**Note:** USDOT does not have a preferred GIS software. Applicants may use any software that can produce a Shapefile, GEOJSON, or KML/KMZ. For the purposes of this document, Google Earth and Google Chrome will be used. USDOT does not specifically endorse Google. This is just one example of how an applicant could create a project location file.

#### Task 1: Navigate to Google Earth Online

- 1. Open your internet browser and enter <u>https://earth.google.com</u> into the search bar.
  - Refer to the Google Earth *support page* if you run into technical issues.
- 2. A loading screen for Google Earth will appear.
  - This loading screen may take a few minutes to appear, depending on your internet speed.
  - Zoom to your project location on the map with your mouse or select the Search Icon in the left menu to type in your location.

#### Task 2: Create a new KML Project File

3. Click on the triple bar icon  $\Xi$  on the left-side menu.



- 4. Click on **Projects** 🕺
- 5. Click on **Create**
- 6. Click on Create KML File. A new KML project page will be created and titled "Untitled Project."
  - Google Earth **automatically saves** your progress. Any changes you make to your project will be saved, including changes to the name of the project and any locations added to your map. We encourage you to create your project location file in one sitting.

- 7. Select the **pencil icon** *i* to the right of "Untitled Project" to change the name of your project. You do not need to enter a project description unless desired.
  - Note: the project name you select will become the name of the downloadable file.

#### Task 3: Add Project Location(s)

For each jurisdiction or project location, you should do the following:

- 8. In the same menu, select **New feature** and use the **Draw line or shape** tool . This option allows you to draw an outline around your jurisdiction(s) and/or project location(s).
  - All other options in the "New Feature" menu should not be used.
- 9. Draw your shape. Remember to be as specific as possible. Approximate boundaries are sufficient. Remember, this file will be used in coordination with other project location information required in the SS4A application.
- 10. Click the back arrow at the top of the menu.
  - As a reminder, Google Earth automatically saves, and there is not a "save" button. Once you add a location, it will be part of your project location file unless you delete it.
  - Repeat steps 8 through 10 for all locations, if applicable.

#### Task 4: Check Your Work

11. Ensure that your project is mapped correctly and there are shapes (not single placemarks) around each jurisdiction or project location. Refer to the images below for an example.



**Instead**, the location should be a shape.



## Task 5: Save Your KML File

12. Select the triple dots on the right side of the left menu.



- 13. Select "Export as KML file."
- 14. Your file will now be downloaded and saved in your preferred location.
  - We recommend checking your Downloads, Desktop, or Documents folders if you are unable to locate where it saved.
- 15. Your file is complete. It can now be uploaded to Valid Eval as part of your SS4A Grant Application package.

#### Optional: Check your KML File

- 16. On Google Earth, select the New Project option in the right menu.
- 17. Select "Import KML File from Computer."
- 18. Select your created KML file.
- 19. Your file will appear on Google Earth, and you can check on the map to make sure it looks accurate.
- 20. If you notice errors, repeat the steps above.