

AHSC Round 8 Project Area Mapping Guide

This Mapping Guide provides detailed instructions for AHSC applicants to develop and submit the required Project Area Map, using Google Maps. For an instructional video detailing these steps and all content related to guidelines, be sure to view the [AHSC Guidelines](#) page. Applicants who wish to use ArcGIS, instead of Google Maps, to submit the Project Area Map, must still upload a KML/KMZ file along with their application.

Note: Defined terms are **bolded** throughout the document. Refer to Appendix A in [AHSC Round 8 Guidelines](#) for complete definitions.

Contents

| | |
|---|----|
| Summary | 1 |
| Set up Google Maps Project..... | 2 |
| Download Template..... | 2 |
| Create Your Own | 3 |
| General Instructions for Mapping Components | 4 |
| How to map and name a line | 4 |
| How to map and name a point | 5 |
| How to measure distances..... | 6 |
| Map Project Components | 6 |
| Edit Radius Layer (Optional)..... | 6 |
| Edit Base Layer | 7 |
| Edit AHSC-funded Components Layer: | 8 |
| Finalize and upload | 10 |

Summary

Use Google maps to document the location of all proposed projects for which you are seeking AHSC funding. The map should include two required layers and one optional layer with the following information:

- Base layer: Affordable Housing Development (AHD) location, Qualifying transit station/stop location, and path from the **AHD** to the qualifying **Transit Station/Stop**.
- AHSC-funded Components Layer: traffic calming measures, bikeways and walkways, local bus improvements, transit projects, key destinations within a half (0.50) mile of **AHD**, and key destinations within 0.25 and 0.50 miles of bikeways and walkways.
- Radius Layer (Optional): 1 or 2 mile radius around **AHD** as appropriate for the **Project’s Project Area Type**.

Set up Google Maps Project

Applicants may choose to either download a template to start mapping or create their own map from scratch. There are instructions for both methods.

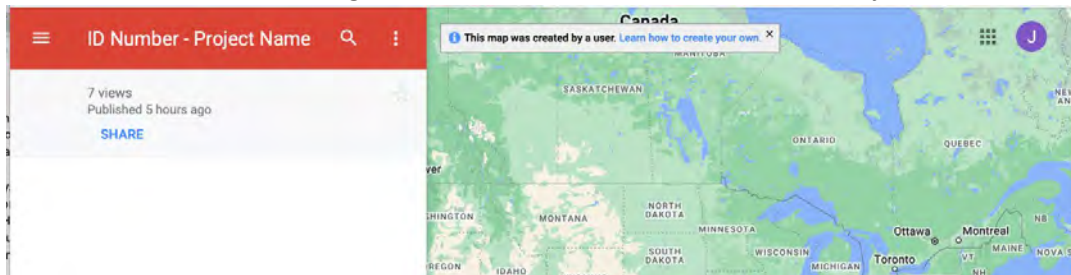
Download Template

Open your browser and paste the following link into your browser. It is recommended to use Chrome, but any browser works:

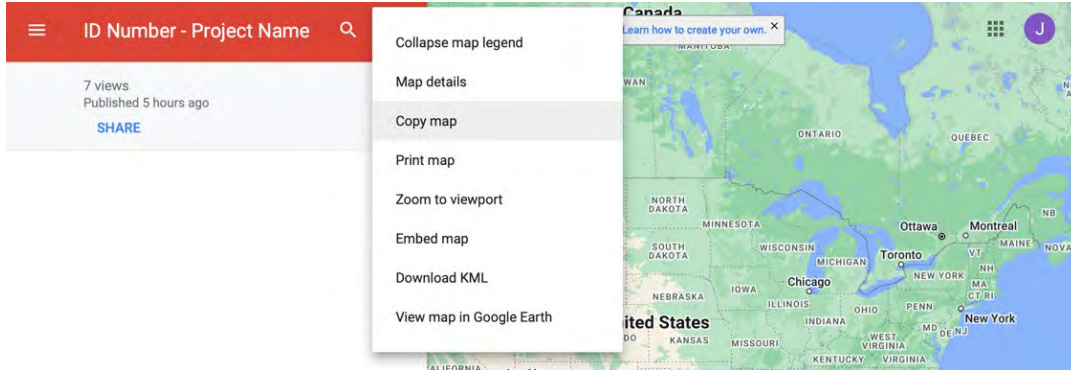
<https://www.google.com/maps/d/u/0/edit?mid=14M2MBoF70LzjYYmU-Fbed9a60xndUAY&usp=sharing>

If signed in, skip this step. If not already signed in, click on the “Sign In” button on the right side of the window and log into your google account. This will open a window of the map with your google account logged in (icon on right side will be in place of “sign in” button).

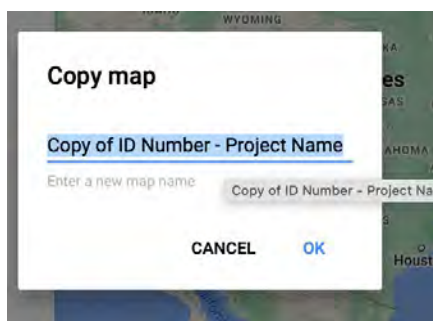
Press the three dots to the right of the title. The title is “ID Number – Project Name”



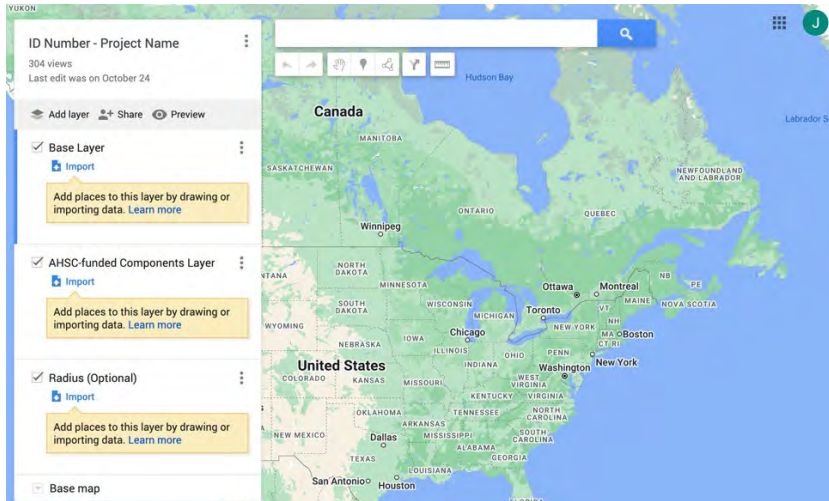
Pressing the three dots, will bring up a separate window. Press “Copy Map” (the third option).



This will bring up a separate pop-up window. Type in the ID number of your project, then the name of your project as listed in the AHSC Workbook, “[ID Number] – [Project Name]”. Then press “OK”.

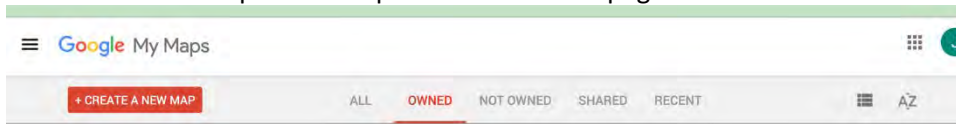


This will open the template in the applicant’s Google My Maps Account. It should have three layers: Base Layer, AHSC-funded Components Layer, and Radius (Optional).

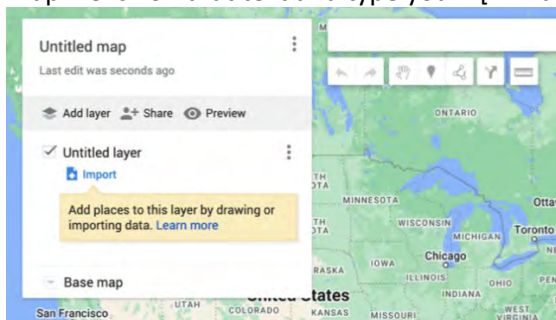


Create Your Own

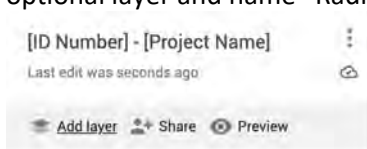
First open Google MyMaps – find it by googling “Google MyMaps”. Then sign-in or create a free account to access Google MyMaps home page. Make sure the window is expanded. Click on the button titled “+Create a New Map” at the top left corner of the page.



It will then bring you to a page with a map and on the left side will be a box with the name “Untitled Map”. Click on that text and type your “[ID Number] – [Project Name]”.



The Project Area Map will have two or three layers. The first layer is pre-populated and appears as “Untitled Layer”. Click on that text and type “Base Layer”. Then click on the “add layer” button under “[ID Number] – [Project Name]” and name “AHSC-funded Components Layer”. Repeat and add the third optional layer and name “Radius (optional)”.



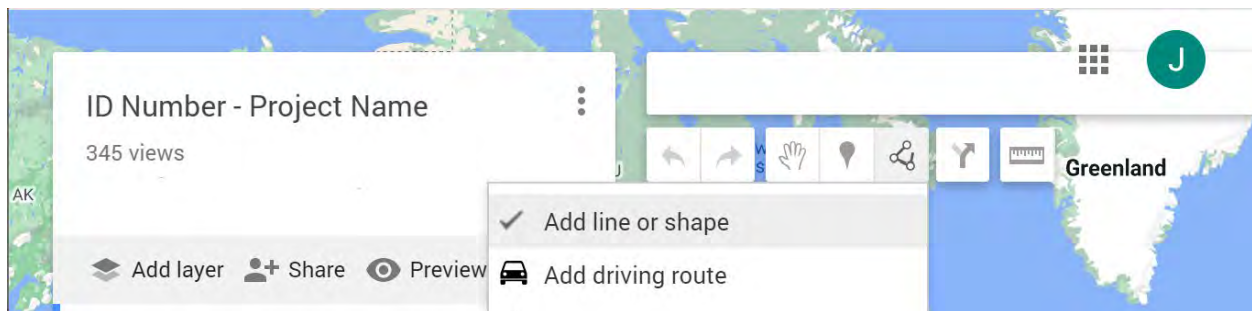
General Instructions for Mapping Components

All project components can be mapped using lines and points. The first three sections provide instruction on creating lines and points and using the measuring tool on GoogleMyMaps. [The last three sections](#) provide additional information for what to map and how to name project-specific components.

How to map and name a line

Some projects may have multiple segments of improvements. Map each at a time. First, locate the starting point for the improvement for the first segment. You could do this by moving the map to that location or entering the closest intersections in the address bar.

After locating the starting point, click the “Draw a line” button, which is the 5th square button to the right under the address search bar. Click on “Add a line or shape” from the drop down (default color for the line is black).



Then click the location of the starting point for the improvement. If the segment is a straight line, you can drag the line along the improvement until you reach the end point, then *double click* to end the segment. If the segment is along multiple blocks that connect but don't follow a straight line, drag the line along the first block then click *once*. Then drag the line along the next block (it is fine to drag it left or right). Continue until you reach the end of your segment then *double click* to end that line segment.

Example of a non-linear segment. Each white dot represents clicking *once*, except for the last dot, where an applicant would click *twice* to end the segment.

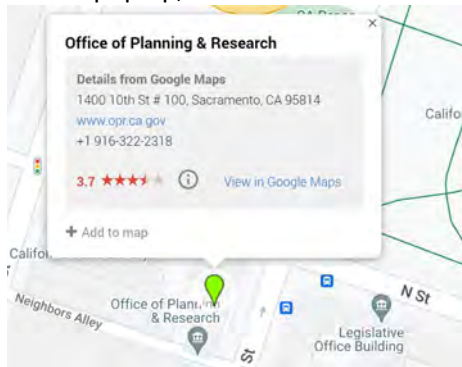


When you *double click* and end that segment a pop-up box should appear with the name “Line [#]”. Click on that text and rename as specified for that scoring section.

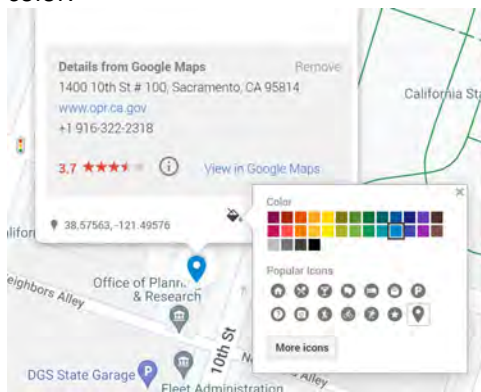
Repeat and name the segments as needed.

How to map and name a point

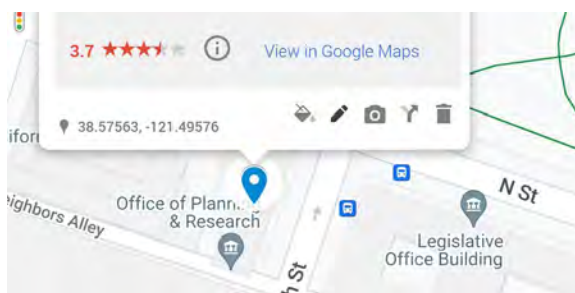
To map a point, type in the address or coordinate of the component and click search. A green location bubble will appear at the address/name you inputted. Click on the bubble. A box with more information should pop up, at the bottom left it should say “+Add to map”. Click on “+Add to map”.



Once the point is added to the map, it will change to blue. If requested to change the color of the icon, at the bottom right-hand side there should be a paint bucket icon. Click on it. Select a more noticeable color.



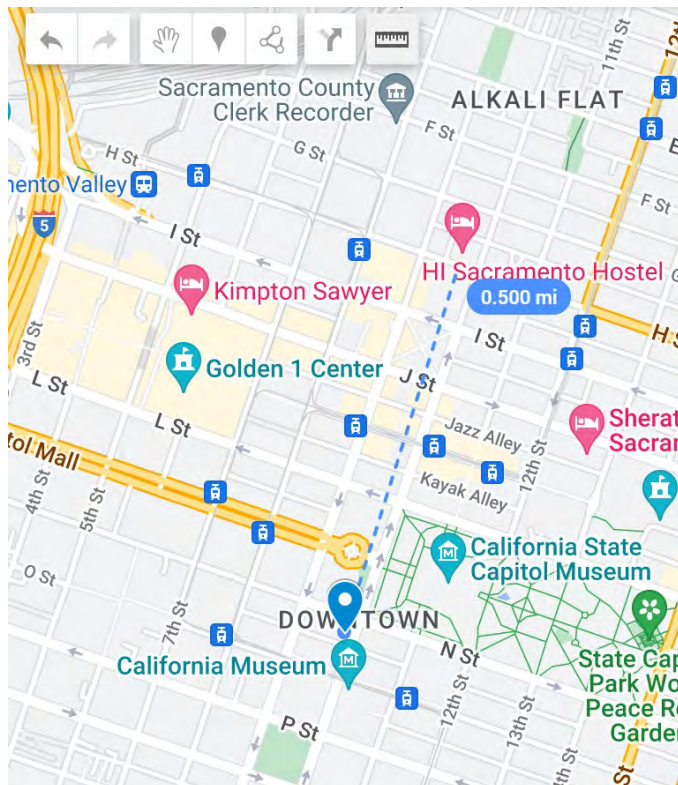
Then click on the edit button (pen icon), which is the second button to the right on the bottom right-side. Clicking the edit button will allow you to edit the name. Rename to the requested name. Then press “Save”



How to measure distances

Click on the ruler icon under the address search bar to use the “measure tool”. Click the middle of the **AHD** icon and drag the line directly up until the number displayed in the blue bubble at the top is the desired measurement. Then double click. The dotted blue line should still remain. The applicant can then map a line over it, if desired. This can be helpful when creating the optional radius or when checking the distances for **Key Destinations**.

Example:



Map Project Components

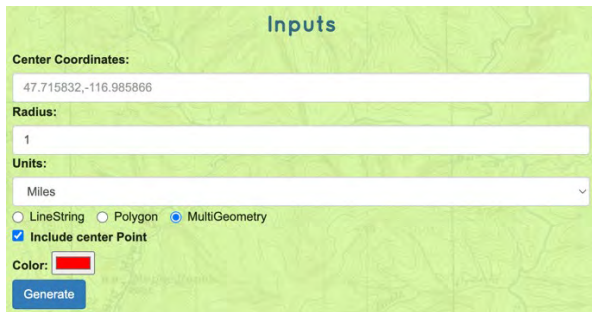
Edit Radius Layer (Optional)

For **TOD Project Areas** and **ICP Project Areas**, the radius must be no greater than a one (1.0) mile. For **RIPAs**, the radius must be no greater than a two (2.0) miles. To create the appropriate radius for your project, first paste the following link in your browser:

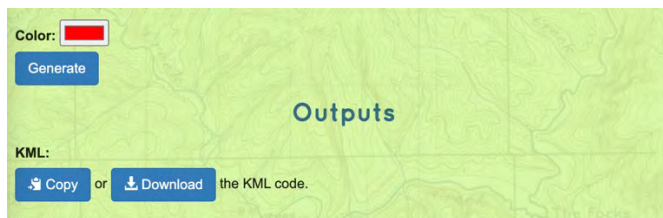
<https://www.scottmurray.me/kml/circle/index.php>

Go to the “Inputs” section. Under “Center Coordinates” enter the GPS coordinates for the **AHD** site. Applicants may choose to have the center point of the circle be any point/coordinates within the **AHD** site. To find the coordinates of the **AHD**, input the address in [Google Maps](#). Zoom into the site then right click the location of the center point desired (must be within **AHD** site boundaries). Coordinates should appear in a pop-up box. Take note of the numbers as written.

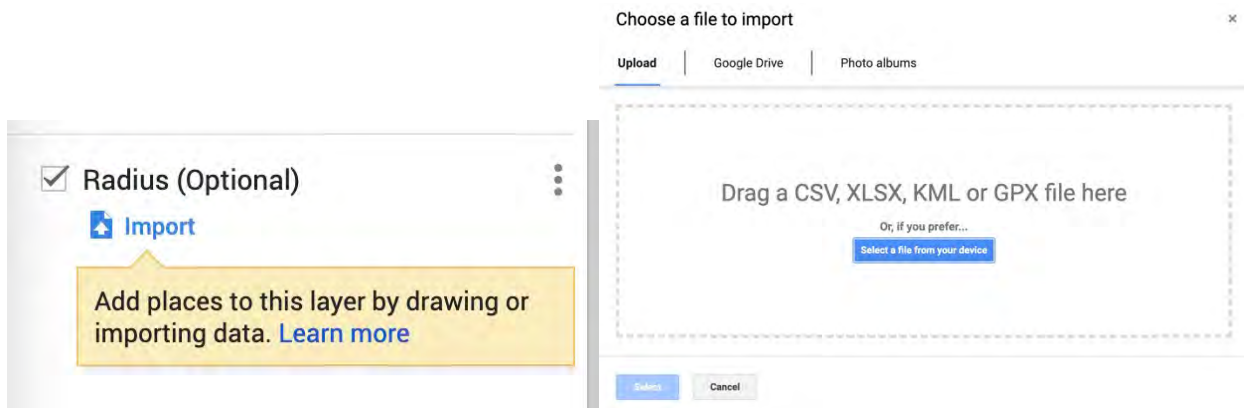
Then under “Radius” enter the number for the respective distance, which would be “1” for **TOD/ICP Project Areas** and would be “2” for **RIPAs**. Next under “Units”, select “Miles” from the drop down. After that, click the “Generate” Button.



Clicking “Generate” will open a new section below called “Outputs”. Under that section, select “Download”.



Then go to the GoogleMap already set up. Under the “Radius (Optional)” layer click the “Import” button. Then upload the file downloaded from the Circle Generator website.



Edit Base Layer

1. Select the Base Layer by clicking right below the title of the layer.
2. [Use the instructions on mapping and naming a point](#) to map the **AHD**. Name the point “AHD: [Project Name]”. Change the color of the icon to a more noticeable color.
3. [Use the instructions on mapping and naming a point](#) to map the **Qualifying Transit Station/Stop**. Name the point “Qualifying Transit Station (or Stop)”. Change the color of the icon to a more noticeable color (different from the **AHD** color).
4. [Use the instructions on mapping and naming a line](#) to map the current or planned **Pedestrian Access Route**. Start from any one point along the perimeter of the **AHD** parcel to the pedestrian entrance to the qualifying **Transit Station/Stop** for the respective **Project Area Type**.

Edit AHSC-funded Components Layer:

Select the AHSC-funded Components layer by clicking right below the title of the layer. Then map the following components.

Traffic Calming Measures

[Use the instructions on mapping and naming a point](#), to map an AHSC-funded traffic calming measure within a 0.50 mile of the **AHD**. Name each point as follows: “AHD Traffic Calming Measure: [Type of measure]”. Eligible traffic calming measures are listed in the Round 8 Guidelines.

Mapping Bikeways

[Use the instructions on mapping and naming a line](#) to map all AHSC-funded bikeways. Follow the naming conventions listed below.

1. For Bikeways in the Active Transportation tab of the GHG Benefits Calculator Tool: Name each line to reflect the project type and names listed in the GHG Benefits Calculator Tool. (e.g., “Class [X] Bikeway - GHG [improvement name]”)
2. **Context Sensitive Bikeways** for Section 107 QPS (a)(1) points: Map the **Lane Miles** of bikeways by mapping each lane mile individually (i.e., 1 line for each side of the street). The cumulative distance should match the distance listed in the STI-TRA Quantification Form. If it is the same bikeway as listed in number 1, add “CSB” to the beginning of name (e.g. “CSB Class [X] Bikeway - GHG [improvement name]”). If not, name “CSB Class [X] Bikeway – [Street Name]”
 - a. Note: For a Class III bikeway to be a **Context Sensitive Bikeway (CSB)** it must combine all the following traffic calming measures: signs, pavement markings, speed and volume management measures, and infrastructure for safe and convenient crossings of busy arterials (5,000+ AADT or more). [Use the instructions on mapping a naming a point or line](#) to map the Traffic Calming Measures. Rename to “Bikeway Traffic Calming Measure: [Type of Measure]”.
 - b. Please map Class I and Class IV paths by mapping each lane mile individually (i.e., 1 line for each direction if the bikeway is bidirectional). Like on-street bikeways, scoring for CSB and walkway lengths will be based on the distance entered into the Application Workbook and supported by the Project Area Map and STI-TRA Quantification form.
3. AHSC-funded bikeways: If number 1 or 2 does not apply, name the bikeway “Non-CSB Class [X] bikeway – [Street Name]”
4. Bikeway Connectivity - Section 107 QPS(a)(2) points: Map the portion of the existing bike network that intersects with an AHSC-funded **Context Sensitive Bikeway**. Rename that line to “Existing Bikeway: [Street Name]”.

Mapping Walkways

[Use the instructions on mapping and naming a line](#) to map all AHSC-funded walkways. Follow the naming conventions listed below:

1. Pedestrian walkways listed in the Active Transportation tab of the GHG Benefits Calculator Tool: Name each line to reflect the project type and names listed in the GHG Benefits Calculator Tool. (e.g., [Street] - Walkway: GHG [improvement name]”)
2. **Safe and Accessible Walkways (SAW)** for Section 107 QPS (a)(3) points: Map the cumulative distance of the pedestrian routes that will be improved as line(s), not each individual improvements. If it is the same walkway listed in 5.a., add “SAW” to the beginning of the name (e.g. “SAW [Street] - Walkway: GHG [improvement name]”). If not, name “SAW [Street] – Walkway”

3. Pedestrian Network Connectivity (“Gap Closure”) under Section 107 QPS(a)(4) points: Map the segment of continuous linear feet of new pedestrian facilities where none exist at time of application submission that the **Project** creates. To be considered ‘continuous’, the distance of the new facility should be represented by one singular, unbroken, unduplicated line on the **Project Area** Map. If it is the same walkway listed in either number 1 or 2 add “Gap Closure” to the beginning of the name (e.g. “*Gap Closure* [Street] – Walkway [...]”)”
4. AHSC-funded walkways: If none of the above apply, name the walkway “Additional Walkway – [Street Name]”

Mapping Transit Improvements

[Use the instructions on mapping and naming a line](#), if mapping a linear transit improvement (e.g., A bus line, rail track extension). [Use the instructions on mapping a naming a point](#) if mapping a non-linear transit improvement (e.g., signal priority installation). If a linear transit improvement is too long to map, applicants may submit a KML/KML version of the proposed transit project, or as a last resort submit a PDF illustration of the proposed project. Follow the naming conventions listed below:

1. For transit improvements in the Transit Inputs tab of the GHG Benefits Calculator Tool: Name each line or point to reflect the project type and names listed in the GHG Benefits Calculator Tool. (e.g., “[Transit Project Type]: [improvement name]”)
2. For Local Bus Improvements - Section 107 QPS (a)(5)(A)- (F): If the same improvement in 6.a. add “Local Bus” to the beginning of the name (e.g. “*Local Bus* [Transit Project Type]: [improvement name]”). If not, name “Local Bus – [name of strategy]”.

Mapping Key Destinations

[Use the instructions on mapping and naming a point](#) to map **Key Destinations**:

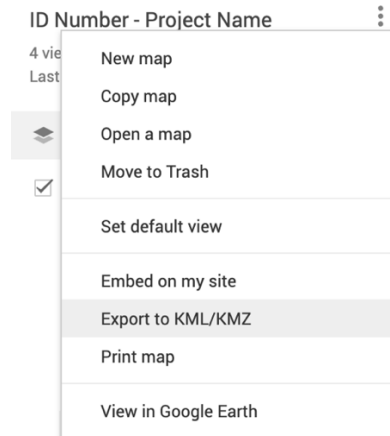
1. Map the **Key Destinations*** (see the *Note for more information) within 0.25 and 0.50 mile of each bike and pedestrian project listed in the Active Transportation tab of the GHG Benefits Calculator Tool. If you would like to double check the distance between the **AHD** and **Key Destination**, [use the instructions on how to measure distances](#). The number of key destinations around each improvement should match with the number of destinations in the in the Benefits Calculator Tool. Name as each key destination as follows: “GHG [Key Destination Category]: 0.25 miles or 0.50 **or** 0.25 and 0.50 - [Location Name]”. (e.g., “GHG Pharmacy: 0.25 and 0.50 – CVS”).
2. If applicant is seeking points Section 107 QPS (d)(1): Map **Key Destinations*** within 0.50 miles of **AHD**. If you would like to double check the distance between the **AHD** and **Key Destination**, [use the instructions on how to measure distances](#). If the same destination as number 1, then add “QPS” to the beginning of the name (e.g. “QPS GHG [Key Destination Category]: [...]”). If not, name “QPS [Key Destination Category]: [Location Name]” (e.g., “QPS Pharmacy: CVS”).
3. *Note: Applicants may find the complete list and definitions of **Key Destinations** in Appendix A of the AHSC Round 8 Guidelines (pg. 63). Links that may help applicants confirm a **Key Destination’s** eligibility are listed out here (this is not the full list of **Key Destinations**):
 - a. Grocery Store: [SNAP Retail Locator tool](#)
 - b. Medical Clinic: [Medi-Cal Managed Care Health Care Options](#)
 - c. Licensed childcare facility: Department of Social Services (DSS) [link to search for licensed child care facilities](#)
 - d. Public elementary, middle, high school: [California Department of Education School Directory](#)
 - e. Post office: [United States Postal Service Locator tool](#)

Finalize and upload

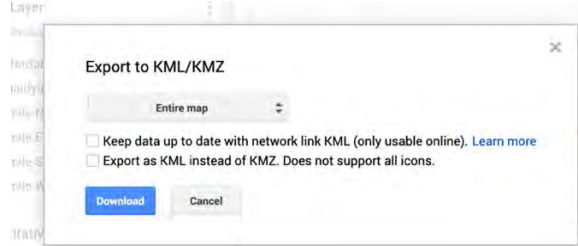
Once you have finalized your map and mapped all relevant components, download the file. To do so, click the three dots to the right of the Map title



This should then bring a pop-up window. Click “Export to KML/KMZ”.



Clicking will bring up another pop up. Then click download.



The file name should match the title of your map (e.g., “[ID number] – [Project Name].kmz”). Then upload that file to the portal.