Boundary and Annexation Survey TIGERweb Quick Guide

A Quick Guide for reviewing your boundary using TIGERweb.

TIGERweb is a web-based system that allows users to visualize the U.S. Census Bureau's TIGER (Topologically Integrated Geographic Encoding and Referencing) System and provides a simple way to view the TIGER data without geographic information system (GIS) software and without downloading data.

Review your boundary in TIGERweb

1. Launch the TIGERweb application at <https://tigerweb.geo.census.gov/tigerweb/>.
   a. Once the webpage loads, you should see a map in the center of the screen and a menu on the left-hand side.

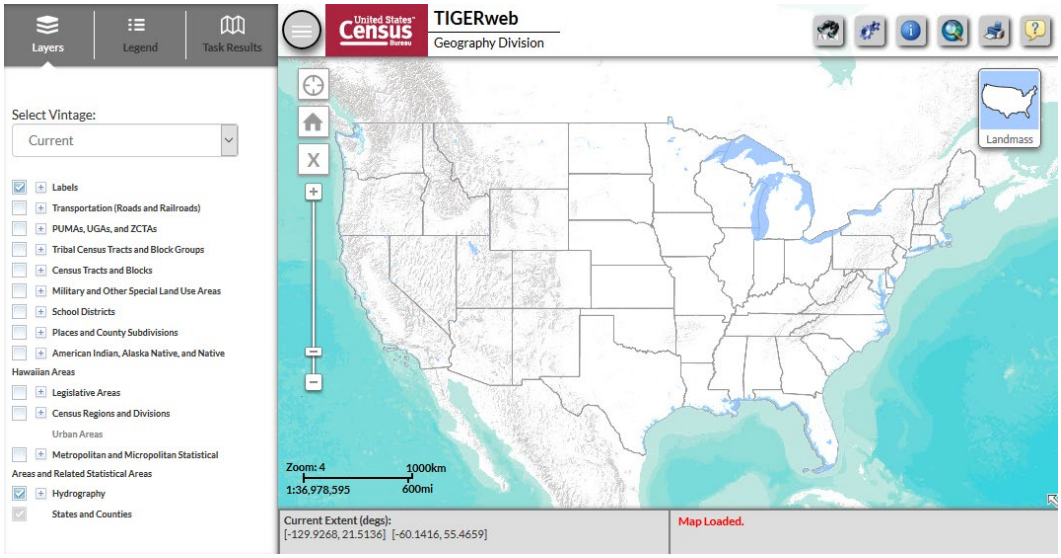


Figure 1: TIGERweb Application.

2. Select a data vintage.
   a. Ensure the **Layers** tab is selected on the left-hand side of the screen.
   b. Using the **Select Vintage** dropdown menu, choose *Current* from the list.

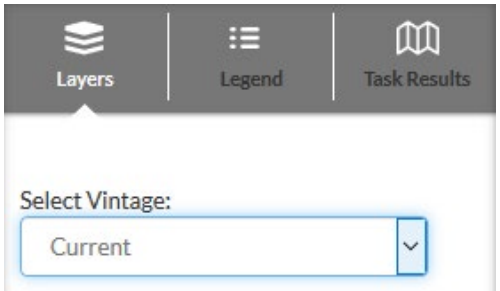


Figure 2: Select Vintage Dropdown Menu.

3. Click the check box next to the layer name that best corresponds to your government type.
   a. Layers containing legal boundaries include *American Indian, Alaska Native, and Native Hawaiian Areas*, *Places and County Subdivisions* or *States and Counties.*
      i. These layers include the legal boundaries updated during the previous year's Boundary and Annexation Survey (BAS).
   b. Other layers, such as Transportation and Hydrography, can be toggled off and on while reviewing your boundary.

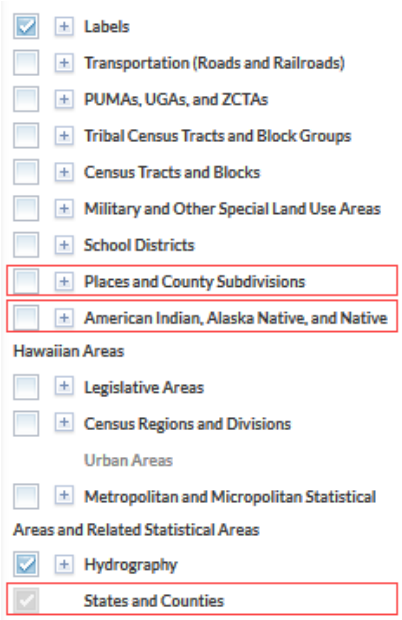


Figure 3: Boundary Layers.

4. Use the Query tool to search for the boundary of your government.
   a. Select the icon depicting a globe and magnifying glass in the upper right-hand corner to open the **Query** tool.



Figure 4: Query Tool Icon.

   b. Select the **Attribute** tab.
   c. Using the **Select Map** dropdown menu, select the option that best corresponds to your government type from the following: *American Indian, Alaska Native, and Native Hawaiian Areas*, *Places and County Subdivisions* or *States and Counties*.
   d. Under the **Select Layers** option, choose your government type.
   e. Search for your government using either the GEOID or Name.
      i. GEOID: Enter the GEOID of your government in the **Enter GEOID of Feature** box. The GEOID for your government can be found either on the Boundary Review page of the BAS Online Annual Response Form at <www.census.gov/geo/partnerships/bas/>, or on the BAS Code Lists on the BAS website at <www.census.gov/programs-surveys/bas/technical-documentation/code-lists.html>.
      ii. Name: Enter the name of your government in the **Enter Name of Feature** box.

f. Click the *Submit* button.

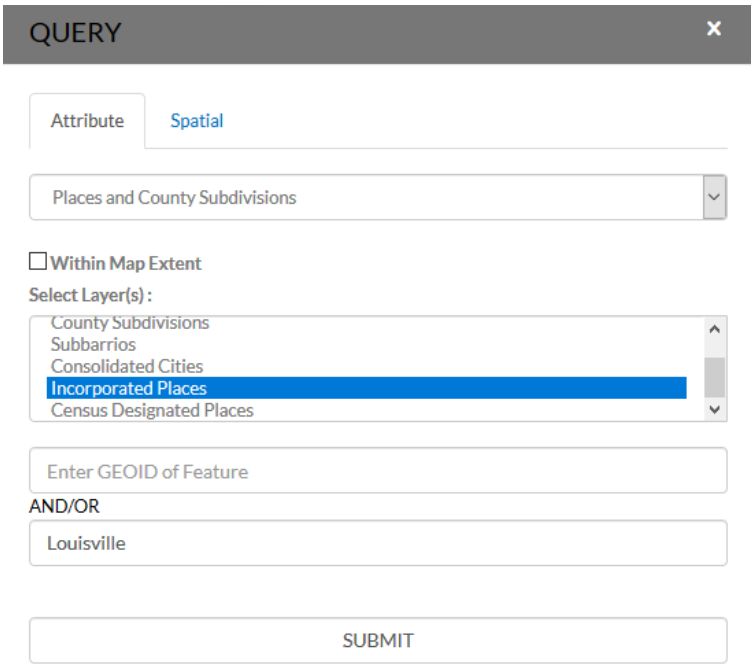


Figure 5: Query Tool Dialog Box.

5. Zoom to government and view boundary.
   a. Go to the **Task Results** tab on the upper right-hand corner of the page and select the **Query Results**. Select the name of your government to zoom to the boundary.
   b. Zoom and pan around the boundary to review by holding the left mouse button and moving the mouse.
   c. Change the map background to show terrain, landmass, or satellite imagery by selecting the background icon in the upper right-hand corner of the map.

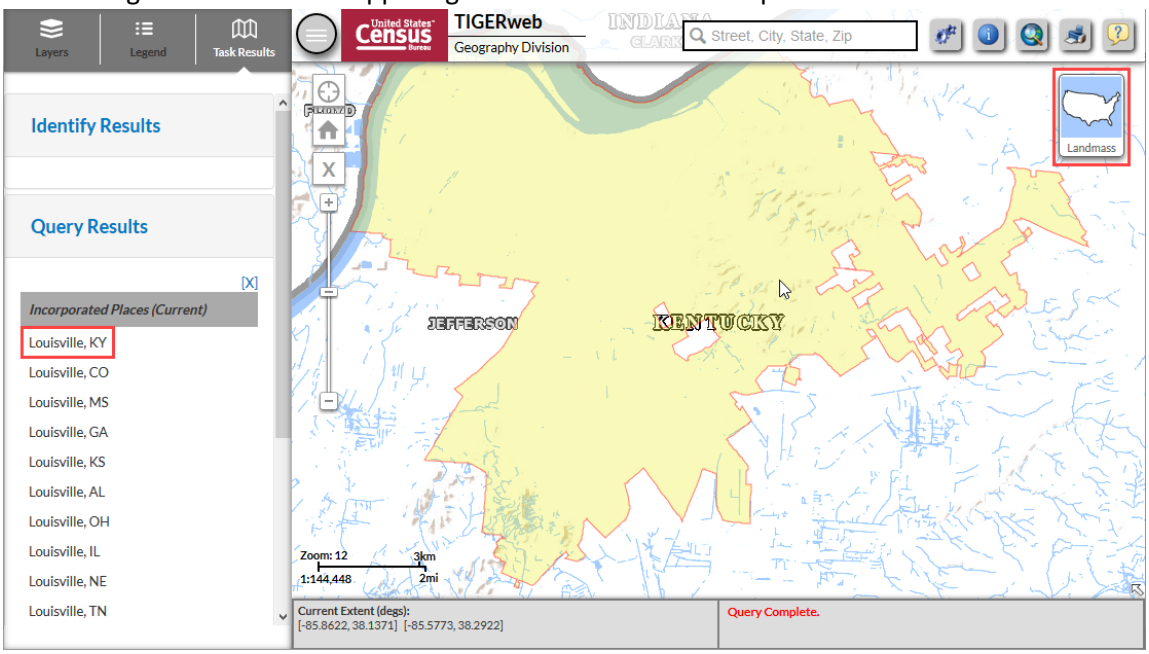


Figure 6: TIGERweb Task Results and Map.

TIGERweb REST Services

While TIGERWeb was designed for use without a GIS, the data within TIGERWeb can be brought into your own GIS software via Representational State Transfer (REST) Services. **Table 1** lists the direct links to BAS related levels of geography. Additional levels of geography can be added from the main TIGERWeb REST page <https://tigerweb.geo.census.gov/arcgis/rest/services/TIGERweb>. The instructions provided in this document will cover how to use the REST Services with ArcGIS Pro and QGIS.

Table 1: Direct links to REST Services for BAS related geography

GEOGRAPHY	REST LINK
Tribal	<https://tigerweb.geo.census.gov/arcgis/rest/services/TIGERweb/AIANNHA/MapServer>
State and/or County	<https://tigerweb.geo.census.gov/arcgis/rest/services/TIGERweb/State_County/MapServer >
Incorporated Place County Subdivision Consolidated City and/or CDP	<https://tigerweb.geo.census.gov/arcgis/rest/services/TIGERweb/Places_CouSub_ConCity_SubMCD/MapServer>
Labels	<https://tigerweb.geo.census.gov/arcgis/rest/services/TIGERweb/Labels/MapServer>

Note: Labeling information is stored in a separate service. If you want to view labels in the map, you will have to add them separately. Identify tools will show the full attribution of an entity on other REST Services.

Visit <https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb_restmapservice.html> for more information about TIGERWeb REST Services. Please note that these are not the same as the partnership shapefiles, so fields required for BAS submissions will not be present in the data if you use them for geoprocessing. View the BAS website <www.census.gov/programs-surveys/bas.html> for information on submitting changes to BAS.

View TIGERWeb Data in ArcGIS Pro

1. Open your data in ArcGIS Pro.
2. From the Map tab in the Layer group, select the **Add Data** button, then select **Data From Path**.
3. Enter the URL of the desired REST service from **Table 1** and click **Add**. The data will be added to the bottom of the Contents Pane and is ready to use.

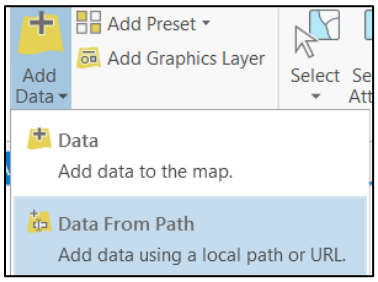


Figure 7: Add Data Menu in ArcGIS Pro

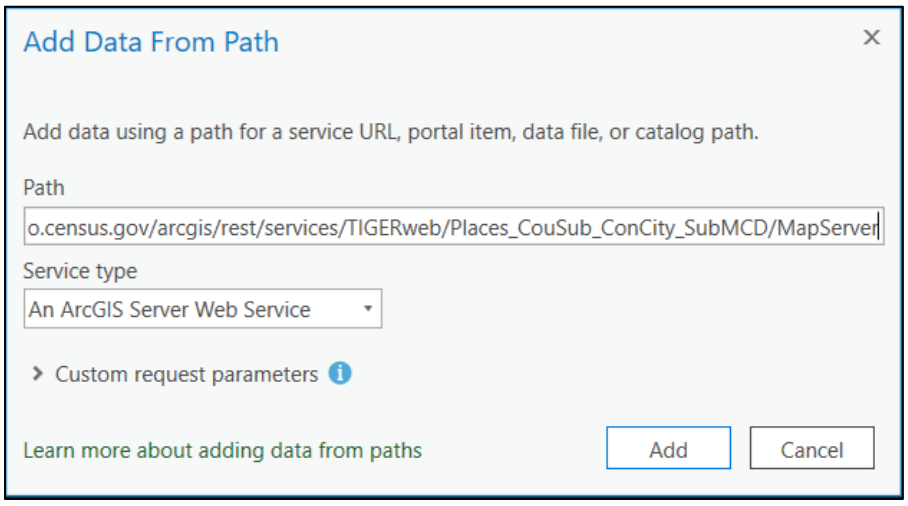


Figure 8: Add Data From Path in ArcGIS Pro

4. Repeat for any other levels of geography you want to reference.

View TIGERWeb Data in QGIS

1. Launch QGIS. On the lefthand side in the Browser pane, right click on **ArcGisMapServer** and select **New Connection**.
   a. If the Browser pane is not visible, you may need to activate it by selecting the View menu then Panels and checking the box next to Browser.
2. In the Name field, provide a name for the service (ex: TIGERWeb – StateCounty) that will be easy to identify. In the URL field, copy the URL for desired geography in **Table 1** you want to add and paste the full URL. Click **OK**.

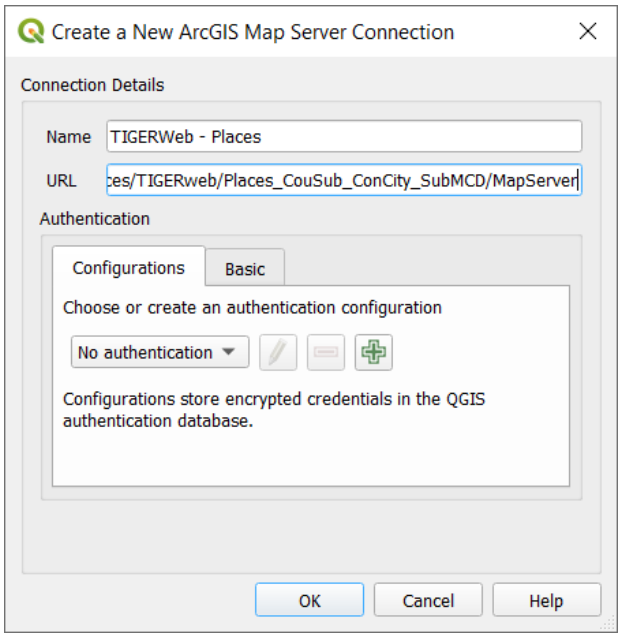


Figure 9: Create ArcGIS Map Server Connection in QGIS

3. Expand the ArcGisMapServer option in the Browser Pane to see the new connection. Then expand the new connection to see all the layer options.

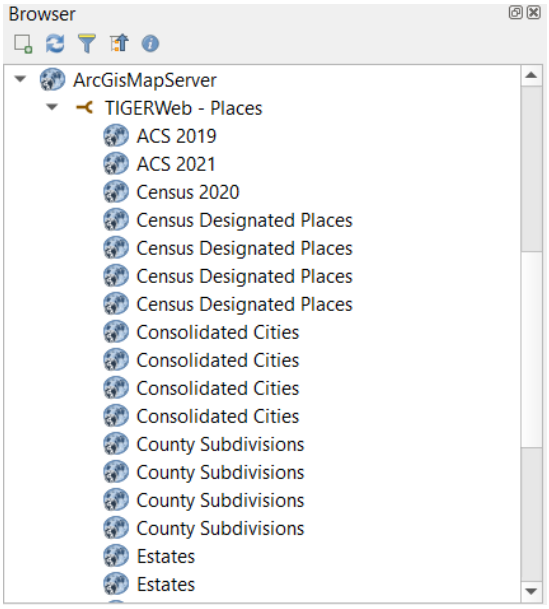


Figure 10:Browser Pane Showing TIGERWeb Data

4. Find the level of geography you want to review and add the top-most entry to the canvas by dragging and dropping or by right clicking and selecting **Add Selected Layer(s) To Canvas**.
    a. The top-most entry is the current vintage while the entries below are from earlier vintages.
    b. The ACS and Census 2020 products that appear first are generalized products and not recommended for boundary review.
    c. For State and County data, the data is sorted by zoom level, not by data vintage. You may need to add multiple/all levels to the canvas to ensure visibility. You can view more specific information about each layer by using the **Data Source Manager** window.
5. Review local boundary data with the TIGERWeb data to ensure accuracy.