# **Boundary and Annexation Survey TIGERweb Quick Guide**

A Quick Guide for Reviewing Boundaries using TIGERweb





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### **TABLE OF CONTENTS**

Introductioniii			
Chapter 1	Reviewing a Boundary using TIGERweb1		
Chapter 2	Reviewing a Boundary Using TIGERweb REST Services4		
2.1 A	dding TIGERweb Data in ArcGIS Pro4		
2.1.1	Adding TIGERweb Data in ArcGIS Pro5		
2.1.2	Adding TIGERweb Data in QGIS5		
LIST OF TABLES			
Table 1: Direct Links to REST Services for BAS related Geographies			
	LIST OF FIGURES		
Figure 1: TIGERweb Application after Initial Launch			
	igure 2: Layer Tab with Select Vintage Dropdown Menu		
Figure 3: B	gure 3: Boundary Layers		
Figure 4: Query Tool Icon2			
Figure 5: Q	ure 5: Query Tool Dialog Box		
Figure 6: T	web Task Results and Map with Basemap Selection Icon		
Figure 7: A	gure 7: Add Data Menu in ArcGIS Pro5		
Figure 8: A	ata From Path in ArcGIS Pro5		
Figure 9: Create ArcGIS Map Server Connection in QGIS6			
Figure 10: Browser Pane Showing TIGERweb Data6			

### **INTRODUCTION**

TIGERweb is a web-based system that allows users to visualize the U.S. Census Bureau's Topologically Integrated Geographic Encoding and Referencing (TIGER) database and provides a simple way to view TIGER data without geographic information system (GIS) software and without downloading data. For more details on TIGERweb that are not included in this BAS-specific material, refer to the comprehensive <u>TIGERweb User Guide</u>.

### CHAPTER 1 REVIEWING A BOUNDARY USING TIGERWEB

- Launch TIGERweb at <a href="https://tigerweb.geo.census.gov/tigerweb/">https://tigerweb.geo.census.gov/tigerweb/</a>>.
  - a. Once loaded, a map appears in the center of the screen with a vertical menu on the left side.

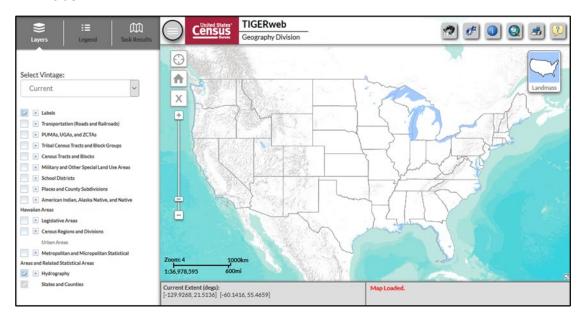


Figure 1: TIGERweb Application after Initial Launch

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

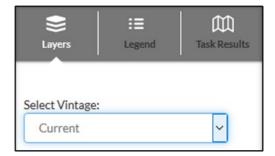


Figure 2: Layer Tab with Select Vintage Dropdown Menu

- 3. Select 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 (Figure 3).
  - b. Other layers, such as Transportation and Hydrography (water), can be toggled off and on while reviewing your boundary.

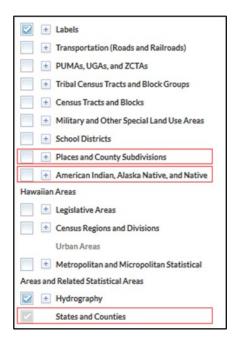


Figure 3: Boundary Layers

- 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 corner of the map to open the **Query** tool (Figure 4).



Figure 4: Query Tool Icon

- b. From the **Query dialog box** that opens (**Figure 5**), 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.
  - 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 <<u>www.census.gov/geo/partnerships/bas/</u>>, or on the BAS Code Lists on the BAS website at <<u>www.census.gov/programs-surveys/bas/technical-documentation/code-lists.html</u>>.
  - ii. Enter the name of your government in the Enter Name of Feature box.
- f. Select the **Submit** button.

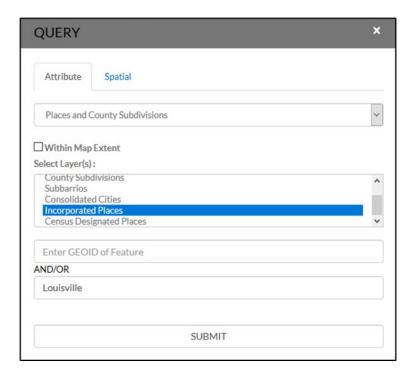


Figure 5: Query Tool Dialog Box

- 5. Zoom to the government and view the boundary.
  - a. From the vertical menu on the left side, select the **Task Results** tab and then select the **Query Results** (**Figure 6**). 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 **Basemap Selection** icon in the upper right corner of the map.

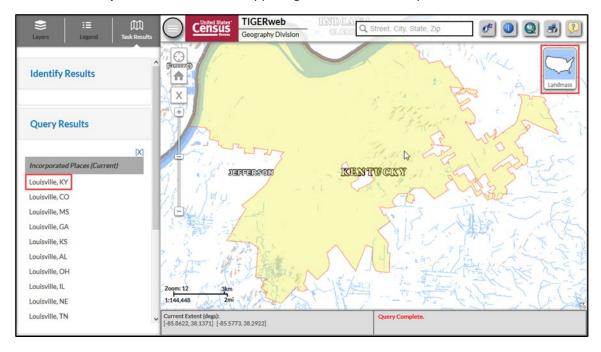


Figure 6: TIGERweb Task Results and Map with Basemap Selection Icon

## CHAPTER 2 REVIEWING A BOUNDARY USING TIGERWEB REST SERVICES

### 2.1 Adding TIGERweb Data in ArcGIS Pro

While TIGERweb was designed for use without a GIS, the data within TIGERweb can be brought into a GIS software through Representational State Transfer (REST) Services. Table 1 lists the direct links to common BAS geographies. Additional levels of geography can be added from the main TIGERweb REST page

<a href="https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb">https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb</a> restmapservice.html>. The instructions provided in this section of the guide cover adding the REST Services data to ArcGIS Pro and QGIS, sections 2.1.1 and 2.1.2, respectively.

IMPORTANT:

These files 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. Refer to the BAS website <<u>www.census.gov/programs-surveys/bas.html</u>> for information on submitting changes to BAS.

Table 1: Direct Links to REST Services for BAS related Geographies

Geography	REST Services Link
Tribal Areas (American Indian, Alaska Native, and Native Hawaiian Areas)	<a href="https://tigerweb.geo.census.gov/arcgis/rest/services/TIGERweb/AIANNHA/MapServer">https://tigerweb.geo.census.gov/arcgis/rest/services/TIGERweb/AIANNHA/MapServer&gt;</a>
States and Counties	<a href="https://tigerweb.geo.census.gov/arcgis/rest/services/TIGERweb/State_County/MapServer">https://tigerweb.geo.census.gov/arcgis/rest/services/TIGERweb/State_County/MapServer</a>
Incorporated Place, County Subdivision, Consolidated City, and/or CDP	<a href="https://tigerweb.geo.census.gov/arcgis/rest/services/TIGERweb/Places CouSub ConCity SubMCD/MapServer">https://tigerweb.geo.census.gov/arcgis/rest/services/TIGERweb/Places CouSub ConCity SubMCD/MapServer</a>
Labels	<a href="https://tigerweb.geo.census.gov/arcgis/rest/services/TIGERweb/Labels/MapServer">https://tigerweb.geo.census.gov/arcgis/rest/services/TIGERweb/Labels/MapServer</a>

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.

#### 2.1.1 Adding TIGERweb Data in ArcGIS Pro

- 1. Open your local boundary data in ArcGIS Pro.
- 2. From the **Map** tab in the **Layer** group, select the **Add Data** button, then select **Data From Path** (**Figure 7**).

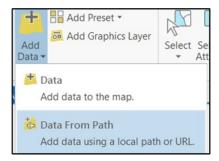


Figure 7: Add Data Menu in ArcGIS Pro

3. Enter the desired REST Services link from **Table 1** and select **Add (Figure 8)**. The data will be added to the bottom of the Contents Pane in your ArcGIS Pro project and is ready to use.

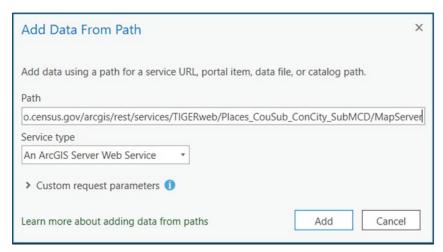


Figure 8: Add Data From Path in ArcGIS Pro

- 4. Repeat the process to add other levels of geography to reference.
- 5. Review the local boundary data with the TIGERweb data to ensure accuracy.

### 2.1.2 Adding TIGERweb Data in QGIS

- 1. Launch QGIS. On the left side in the Browser pane, right-click on **ArcGisMapServer** and select **New Connection**.
  - a. If a Browser pane is not visible, activate it by selecting the **View** menu then **Panels** and selecting the box next to **Browser**.
- 2. In the Name field, provide a name for the service (e.g., TIGERWeb–Places) that will be easy to identify. In the URL field, copy and paste the REST Services link for desired geography from Table 1. Select OK (Figure 9).

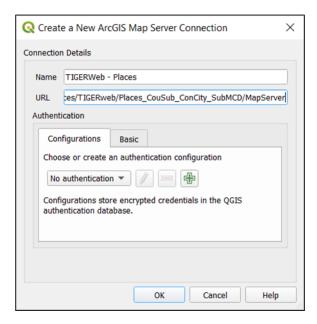


Figure 9: Create ArcGIS Map Server Connection in QGIS

3. Expand the **ArcGisMapServer** option in the Browser pane to see the new connection. Expand the new connection to see all the layer options (**Figure 10**).

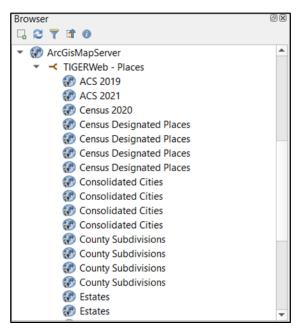


Figure 10: Browser Pane Showing TIGERweb Data

- 4. Find the level of geography 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 American Community Survey (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. Add multiple levels or even all levels to the canvas to ensure visibility. View more specific information about each layer by using the **Data Source Manager** window.
- 5. Review the local boundary data with the TIGERweb data to ensure accuracy.