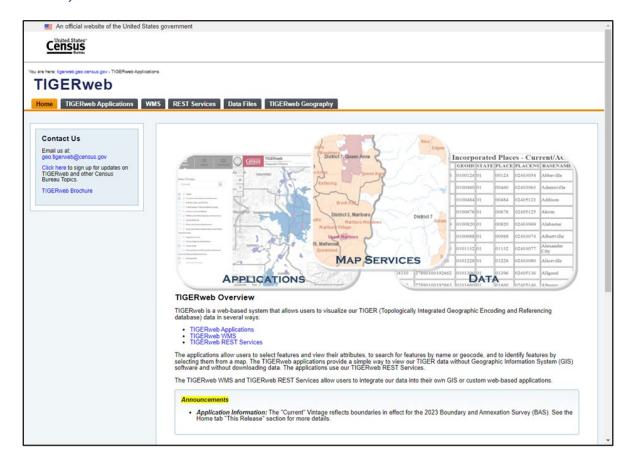
TIGERweb User Guide

February 2023





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U.S. Census Bureau TIGERweb User Guide

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INTRODUCTION

TIGERweb is a web-based system that allows users to visualize the U.S. Census Bureau's Master Address File (MAF)/Topologically Integrated Geographic Encoding and Referencing (TIGER) database (MTDB) in three ways:

- 1. TIGERweb Applications.
- 2. TIGERweb Web Mapping Service (WMS).
- 3. TIGERweb Representational State Transfer (REST) Services.

All three are accessible from the TIGERweb main homepage:

https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb_main.html>.

Note: Cross references are shown in **bold**, **blue font** in this guide. Users may use the CTRL key on the keyboard in conjunction with the left mouse button to select the cross references and follow the link in the guide.

The spatial data within TIGERweb covers the 50 states, the District of Columbia, the Commonwealth of Puerto Rico, and the Island Areas. TIGERweb includes attribute information from the Decennial Census, Economic Census, and the American Community Survey (ACS).

TIGERweb Applications, described in **Chapter 1**, is a web-based mapping tool that allows users to view TIGER data without geographic information system (GIS) software and without downloading data. It uses the TIGERweb REST Services to provide an online method for reviewing the TIGER data. It provides a simple way to select and view features and their attributes, to search for features by name or geocode, and to identify features by selecting them from an on-screen map.

Both the TIGERweb WMS and TIGERweb REST Services allow users to integrate TIGER data into their own GIS or custom web-based applications. Both permit users to create maps containing TIGERweb layers combined with layers from users' own data or other web services. Nation-based, state-based, and county-based tabular HTML data files, available for download from the Data Files tab, contain the same attribute data found in the TIGERweb map service application choices. Lastly, the TIGERweb Geography tab includes geographic entity descriptions for entities in TIGERweb and TIGERweb Decennial map service applications as well as a link to a glossary for geographic attributes. These four tabs are discussed in Chapter 2.

IMPORTANT:

Images/screen captures used in the tables and figures are current as of December 2022. Corresponding content in TIGERweb may differ based on the release schedule for TIGERweb and the update schedule for this guide. Additionally, layer names that appear in the tables of this guide are generalized. Details regarding the version or year of the layer are available when using the specific application. Contact the Census Bureau by email at <geo.tigerweb@census.gov> if questions arise about TIGERweb or this material.

CHAPTER 1 TIGERWEB APPLICATIONS

TIGERweb Applications currently supports Microsoft Edge, Mozilla Firefox, and Google Chrome internet browsers. If users encounter problems, confirm the internet browser version prior to seeking assistance from the Census Bureau.

From the TIGERweb main homepage, choose the TIGERweb Applications tab (Figure 1).



Figure 1: TIGERweb Applications Tab

The direct link to TIGERweb Applications is

https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb apps.html>.

1.1 Identifying the Map Service Application Choices and Associated Vintages

There are three map service application choices in TIGERweb Applications: TIGERweb, TIGERweb Decennial, and TIGERweb Economic Census. For a visual of the three choices, see **Figure 2**.

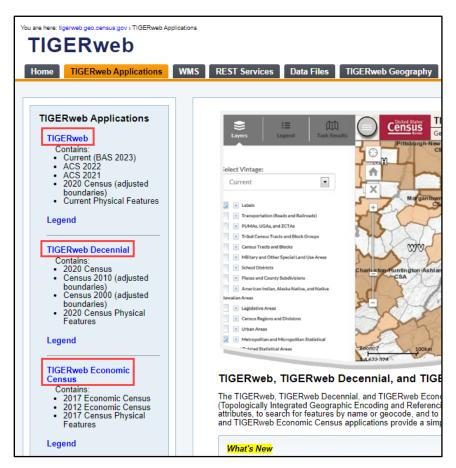


Figure 2: TIGERweb Applications - Three Map Service Application Choices

To view boundaries/data related to the ACS, use TIGERweb. To view the Decennial Census boundaries exactly as they were in each of the last three decennial censuses, use the TIGERweb Decennial. To view specific geography and data associated with the Economic Census, use the TIGERweb Economic Census.

These map service applications reference TIGER benchmarks or snapshots of the TIGER data in the MAF/TIGER System. The Geography Division and Decennial Information Technology Division (DITD) create two benchmarks each year, in May and September. The May benchmark supports statistical surveys such as the ACS and the Population Estimates Program. The September benchmark supports the annual Boundary and Annexation Survey (BAS) conducted by the Geography Division. Each of the three map service applications contain vintages applicable to the specific choice (TIGERweb, TIGERweb Decennial, or TIGERweb Economic Census).

Note: Because of their link to the benchmarking process, the available vintages in each of the three map service applications update with each benchmark and when a decennial census or an economic census is completed. The screenshots in this material are current as of December 2022.

The TIGERweb map service application choice contains four vintages (Figure 3). The most recent geographic data is the Current vintage. Other vintages may include the American Community Survey (ACS), Boundary and Annexation Survey (BAS), or decennial census vintages. Review Appendix A for more information on the vintage and available map layers within each.

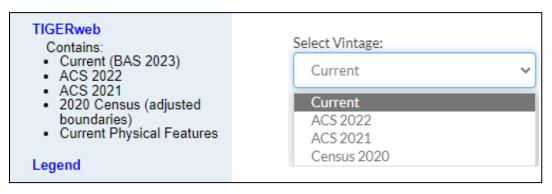


Figure 3: Vintages in the TIGERweb Map Service Application

The TIGERweb Decennial map service application choice contains three vintages: Census 2020, Census 2010, and Census 2000 (Figure 4). Review Appendix B for more information on the vintage and available map layers within each.

IMPORTANT: This map service application only uses Census 2020 data. The Census 2010 and Census 2000 have adjusted boundaries.

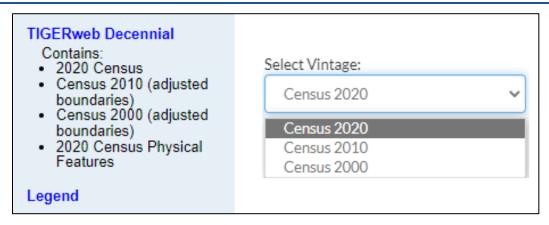


Figure 4: Vintages in the TIGERweb Decennial Map Service Application

The TIGERweb Economic Census map service application choice contains two vintages: 2017 and 2012 (Figure 5). Review Appendix C for more information on the vintage and available map layers within each.

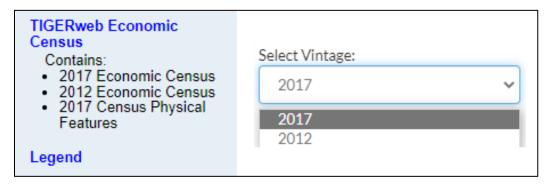


Figure 5: Vintages in the TIGERweb Economic Census Map Service Application

1.2 Understanding the Main Display: Layers, Legend, and Task Results Tabs

After selecting one of the three map service application choices, a separate browser window opens. Located along the upper-left side of the window in the main display of the application are the tabs to select the Layers, Legend, or Task Results (Figure 6).



Figure 6: TIGERweb Map Service Application - Main Display Tabs

The Layers tab (Figure 7) is the default tab. It allows the user to select the vintage of data and the data layers to view on the map screen and includes all census geographies in separate map services.

Use it to turn the map layers on and off, change the transparency of individual map layers, and view the symbology for each map layer. Users can view the relationship between different geographic areas by selecting the map layers. The number of selectable layers is unlimited, but each layer has a range of zoom levels in which it will display.

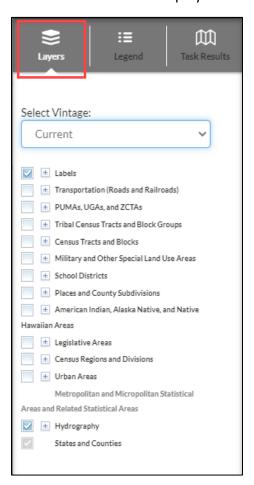


Figure 7: Layers Tab in the TIGERweb Map Service Application

The Legend tab (Figure 8) reveals the legend and the layers displayed within the application. At the national level, the default level, only the Hydrography and States and Counties layers appear.

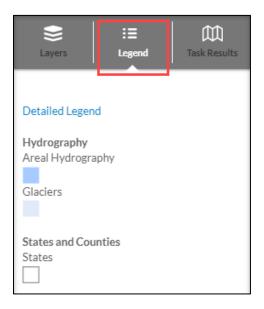


Figure 8: Legend Tab in the TIGERweb Map Service Application

For more detail on map layer content, scaling, and symbology, choose the Detailed Legend link. See **Figure 9** for a visual of the detailed legend. The Symbol Scales and Label Scales fields above depict the range of map scales at which the layers and corresponding labels are available (i.e., can be viewed), hovering the mouse over an individual circle will display the scale as a representation fraction. Reference Scales portray the relative position of the scales in the zooming spectrum.

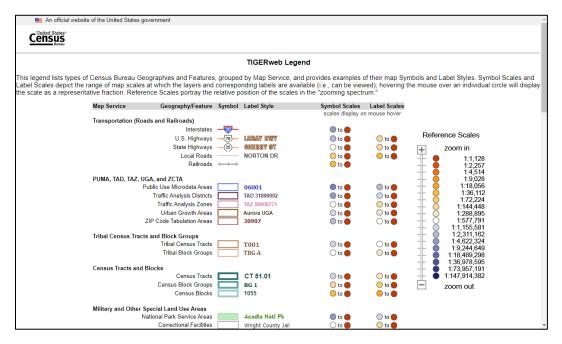


Figure 9: Detailed Legend in the TIGERweb Map Service Application

Lastly, the Task Results tab (**Figure 10**) displays the Identify Results, Query Results, and Geocoder Results after using other tools within application. The results of each appear beneath the respective heading. Use the results returned to view attribute information, to search for geographic entities, and to use the geocode function.

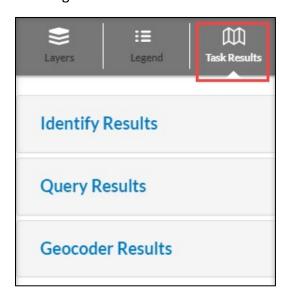


Figure 10: Task Results Tab in the TIGERweb Map Service Application

U.S. Census Bureau TIGERweb User Guide

1.2.1 Using the Layers Tab

The Layers tab includes legal, administrative, and statistical boundaries as well as roads, railroads, and hydrography. TIGERweb organizes the layers into separate map services, or groupings, based on the geographic type. Grouping the layers into a map service instead of individual layers makes rendering the layers more efficient and reduces the layer drawing time. The Labels, Hydrography, States, and Counties groupings are enabled by default as shown in Figure 11.

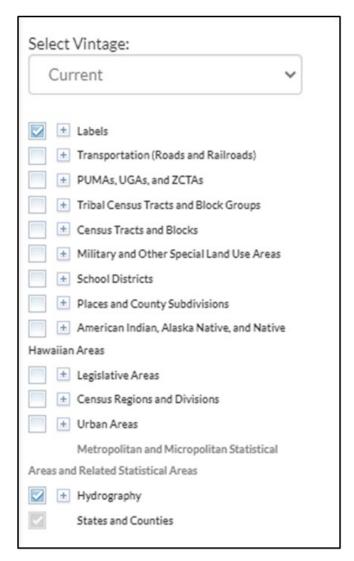


Figure 11: Layers Tab - Map Services/Groupings and Defaults

Users expand each by choosing the plus sign [+] (Figure 12) next to the grouping to see the available layers. To minimize the expanded groupings, choose the minus sign [-] that replaced the [+].

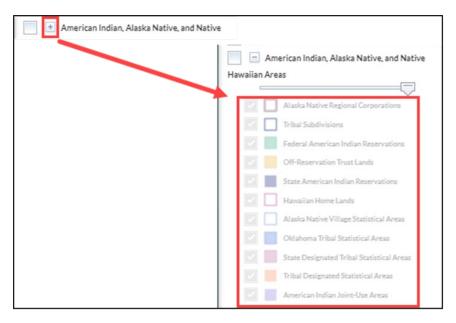


Figure 12: Expanding a Grouping to Reveal Map Layers

To enable, or turn on, a particular grouping or layer within a grouping, select the box next to the grouping heading (to the left) so that a checkmark appears in the box (Figure 13). Disable, or turn off, the grouping by removing the checkmark.

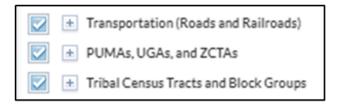


Figure 13: Enabled Groupings (Turned On/Visible in Map Display)

Note: States are viewable for all zoom levels. Other layers are visible only at certain zoom levels.

Additional data layer options, with a greater level of detail, are available when zoomed in closer on the map. If a specific layer does not appear in the legend, zoom in or out on the map for the feature to appear.

Users can limit the amount of data on the map by enabling only the desired layers. For example, to view boundaries representing Incorporated Places within the Places and County Subdivisions grouping, disable, or turn off, the other types for place geographies by unchecking the box to the left of the feature type. **Figure 14** shows only the Incorporated Places feature type checked.

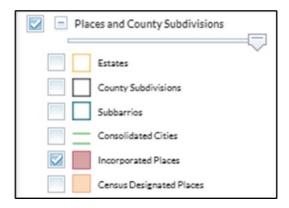


Figure 14: Expanded Grouping and Layers with Slider Tool

Note: If TIGERweb has the layers enabled, the user must uncheck the layers if they do not want these layers to display.

When multiple layers are displayed on a map simultaneously, one layer may obscure another. To allow one layer to be more prominent than another, the transparency of the layer can be adjusted by using the slider, which is available once the layer is expanded by selecting the plus sign [+] left of the layer name. Move the slide bar, shown just beneath the grouping name, to the left or right to adjust the transparency of the selected layer on the map.

1.2.2 Understanding Layer Availability

Because some geographies are only available in certain map service applications, refer to **Table 1** for the list of the layers within the most recent vintage available in each map service application. Refer to **Appendix A**, **Appendix B**, and **Appendix C** for additional details on each of the three map service applications. The three appendices include the layer groupings, layers, and all vintages available in each map service application.

Note: The presence of a layer, denoted by the presence of a checkmark, in **Table 1** is based upon the most recent vintage for the specific map service application. This corresponds to the "Current" vintage for TIGERweb, the "Census 2020" vintage for TIGERweb Decennial, and the "2017" vintage for TIGERweb Economic Census.

Table 1: Available Groupings and Layers in the Three TIGERweb Map Service Applications

Layer Groupings and Layers	TIGERweb	TIGERweb Decennial	TIGERweb Economic Census
American Indian, Alaska Native, Native Hawaiian Areas			
Alaska Native Regional Corporations	✓	✓	_
Alaska Native Village Statistical Areas	✓	✓	_
American Indian Joint-Use Areas	✓	√	_
Federal American Indian Reservations	✓	✓	_
Hawaiian Home Lands	✓	√	_
Off-Reservation Trust Lands	✓	✓	_
Oklahoma Tribal Statistical Areas	✓	✓	_
State American Indian Reservations	✓	✓	_
State Designated Tribal Statistical Areas	✓	✓	_
Tribal Designated Statistical Areas	✓	✓	_
Tribal Subdivisions	✓	✓	_
American Indian Areas			
American Indian Reservations and/or Off-Reservation Trust Lands	_	_	✓
Tribal Statistical Areas	_	_	✓
Census Tracts and Blocks			
Census Block Groups	✓	✓	_
Census Blocks	✓	✓	_
Census Tracts	✓	✓	_
Census Regions and Divisions			
Census Divisions	✓	✓	_
Census Regions	✓	✓	_

Layer Groupings and Layers	TIGERweb	TIGERweb Decennial	TIGERweb Economic Census
Economic Places			
Balance of County	I		✓
Census Designated Places	I		✓
Consolidated Cities			✓
Incorporated Places/Minor Civil Divisions	_		✓
Hydrography			
Areal Hydrography	✓	✓	✓
Glaciers	✓	✓	✓
Linear Hydrography	✓	✓	✓
Legislative Areas			
Congressional Districts	✓	✓	_
State Legislative Districts (Lower)	✓	✓	_
State Legislative Districts (Upper)	✓	✓	_
Voting Districts	_	✓	_
Metropolitan and Micropolitan Statistical Areas and Related Statistical Areas			
Combined New England City and Town Areas	_	✓	_
Combined Statistical Areas	_	✓	✓
Metropolitan and Micropolitan Statistical Areas including Metropolitan Divisions, Metropolitan Statistical Areas, and Micropolitan Statistical Areas.	_	√	√
New England City and Town Areas including New England City and Town Divisions, Metropolitan New England City and Town Areas, and Micropolitan New England City and Town Areas.	-	√	_
Principal Cities		_	✓

Layer Groupings and Layers	TIGERweb	TIGERweb Decennial	TIGERweb Economic Census
Military and Other Special Land Use Areas			
College and Universities	✓	✓	✓
Correctional Facilities	✓	✓	✓
Military Installations	✓	✓	✓
National Park Service Areas	✓	✓	✓
Places and County Subdivisions			
Census Designated Places	✓	✓	_
Consolidated Cities	✓	✓	_
County Subdivisions	✓	✓	_
Estates	✓	✓	_
Incorporated Places	✓	✓	_
Subbarrios	✓	✓	_
Planning Regions			
Planning Regions	_	_	✓
PUMAs, UGAs, and ZCTAs			
Public Use Microdata Areas	✓	✓	_
Urban Growth Areas	_	✓	_
ZIP Code Tabulation Areas	✓	✓	_
School Districts			
Elementary School Districts	✓	✓	_
Secondary School Districts	√	√	_
Unified School Districts	√	✓	_
States and Counties			
States and Counties	✓	✓	✓

Layer Groupings and Layers	TIGERweb	TIGERweb Decennial	TIGERweb Economic Census
Transportation (Roads and Railroads)			
Local Roads (includes multiple layers that activate based on scale dependency)	✓	✓	✓
Primary Roads (includes multiple layers that activate based on scale dependency)	✓	✓	✓
Railroads	✓	✓	✓
Secondary Roads (includes multiple layers that activate based on scale dependency)	✓	√	✓
Tribal Census Tracts and Block Groups			
Tribal Block Groups	✓	✓	_
Tribal Census Tracts	✓	✓	_
Urban Areas			
Urban Areas	✓	✓	_

Note: Decennial vintages within the TIGERweb application (i.e., Census 2020 vintage) and TIGERweb Decennial application (i.e., Census 2000, Census 2010, Census 2020 vintages) include the geographic areas that the Census Bureau uses to tabulate and publish decennial census results. This results in a disconnect between metro/micro areas and urban areas. The Census Bureau publishes decennial census data for the metro/micro areas that were in existence at the time of the decennial census. However, the Office of Management and Budget defines metro/micro areas based on the urban areas that were delineated as a result of the previous decennial census and, as stated earlier, the urban areas included in the decennial vintages represent urban areas that are defined based on the results of the decennial census. Therefore, the 2020 metro/micro areas were initially defined based on the 2010 urban areas and modified throughout the decade while the 2020 urban areas were defined based on the results of the 2020 Census.

1.3 Using TIGERweb Applications

The TIGERweb Applications window (Figure 15) shows the map display with the various sections and tools labeled. This section of the guide describes each.

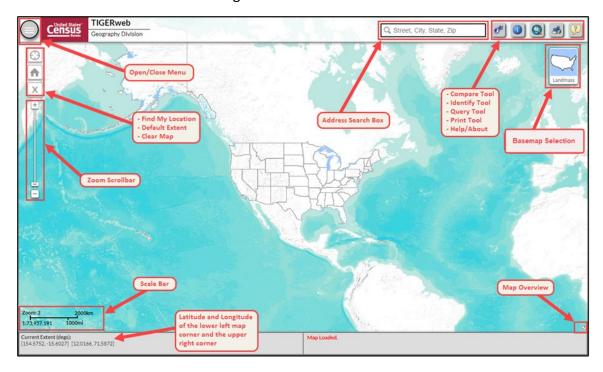


Figure 15: TIGERweb Applications - Map Display with Sections and Tools Labeled

1.3.1 Navigating the Map Display

The tools appearing along the far left of the map display are used to navigate the map display or provide details about the map display. Each is detailed below with corresponding images.

1.3.1.1 Open/Close Menus

This tool, presented in **Figure 16**, allows the user to display (open) or hide (close) the left-hand taskbar of Layers, Legend, and Task Results. Hiding the taskbar allows for more map to display.

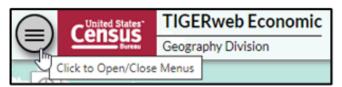


Figure 16: Open/Close Menus

1.3.1.2 Find My Location

This tool allows TIGERweb to know the user's location to assist with searches in the user's local area. After the user approves sharing their location, TIGERweb determines the computer's location using the IP address and zooms to the corresponding location in the map display. Both the tool and subsequent permission window are shown in **Figure 17**.



Figure 17: Find My Location

1.3.1.3 Default Extent and Clear Map

These two tools manipulate the appearance of the map display by either returning the map display to the original map extent before any panning and/or zooming occurred (default extent tool) or clearing all previous map selections (clear map tool). Figure 18 highlights both tools.

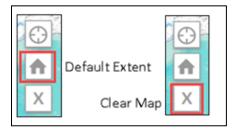


Figure 18: Default Extent and Clear Map

1.3.1.4 Zoom Scrollbar

This tool, highlighted below in **Figure 19**, adjusts the zoom level of the map display. Dragging the slider control up and down increases or decreases the amount of detail on the map in the same fashion as use of the plus [+] or minus [-] signs on the tool. Selecting the plus sign zooms the map in while the minus sign zooms the map out. The scroll wheel on a computer's mouse mimics the functionality of this tool as well.



Figure 19: Zoom Scrollbar

1.3.1.5 Scale Bar

This map element (Figure 20) appears in the bottom left of the map display window and shows the scale of the current map display. Users can compare the zoom level of the map display with the information in Table 2 to know the layers that first display at the various zoom levels.

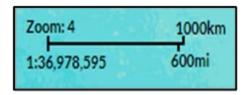


Figure 20: Scale Bar

Table 2: Summary of Map Display Zoom Levels

Zoom Level	Map Services (Layers) that First Display at Zoom Level	Zooming Scale Spectrum
3	Maximum outward zoom; States and Areal Hydrography	1:73,957,191
5	American Indian Areas	1:18,489,298
6	County	1:9,244,649
7	School Districts and Primary Roads and their Labels	1:4,622,324
8	County Labels and Secondary Roads and their Labels	1:2,311,162
9	Places, County Subdivisions, and Census Tract Boundaries	1:1,155,581
11	Linear Hydrography and Labels for Places, County Subdivisions, and Census Tracts	1:288,895
12	Block Groups	1:144,448
13	Local Roads and Block Group Labels	1:72,224
14	Railroads, Census Blocks, and Local Road Labels	1:36,112
15	Census Block Labels	1:18,056
19	Maximum inward zoom	1:1,128

1.3.1.6 Current Extent (degs)

As shown in Figure 21, the current extent information appears beneath the scale bar. It provides the two sets of latitude and longitude coordinates in decimal degrees for the current extent of the map display. The lower left map corner of the current map display is listed first followed by the coordinates for the upper right corner.

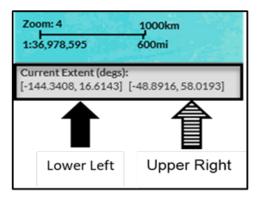


Figure 21: Current Extent (degs)

1.3.2 Using the Basemap Selection Button

There are three map background choices (Landmass, Satellite, and Terrain) programmed in the Basemap Selection button. The map display defaults to Terrain as illustrated in Figure 22.

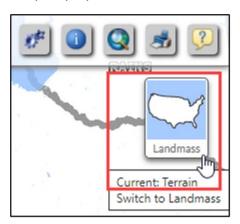


Figure 22: Basemap Selection Button

To switch the basemap, continue to select the Basemap Selection button, observing the instruction while hovering the mouse over the button. The hover message informs the user of the current display and what the display will be upon switching to the next choice.

See Figure 23 for a visual that illustrates changing between base map background choices and how the hover messages compare to what is on-screen. The image on the left shows the Basemap Selection button indicating the graphic for the Satellite selection. The hover message indicates the current selection is Landmass. The satellite imagery does not display until the button is selected again to change the display to Terrain. Terrain would not display until the return to Landmass.

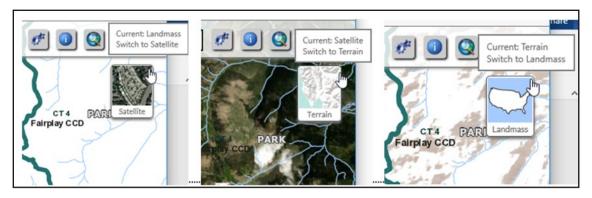


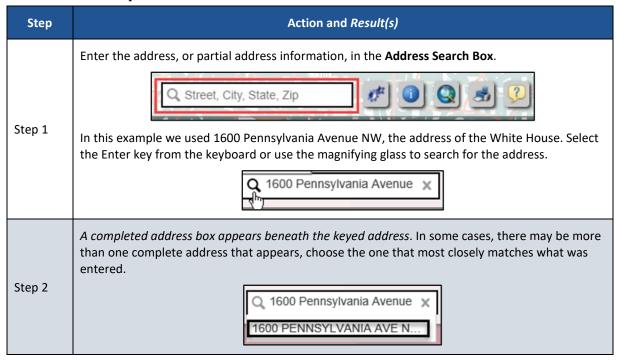
Figure 23: Basemap Background Choices with Hover Messages

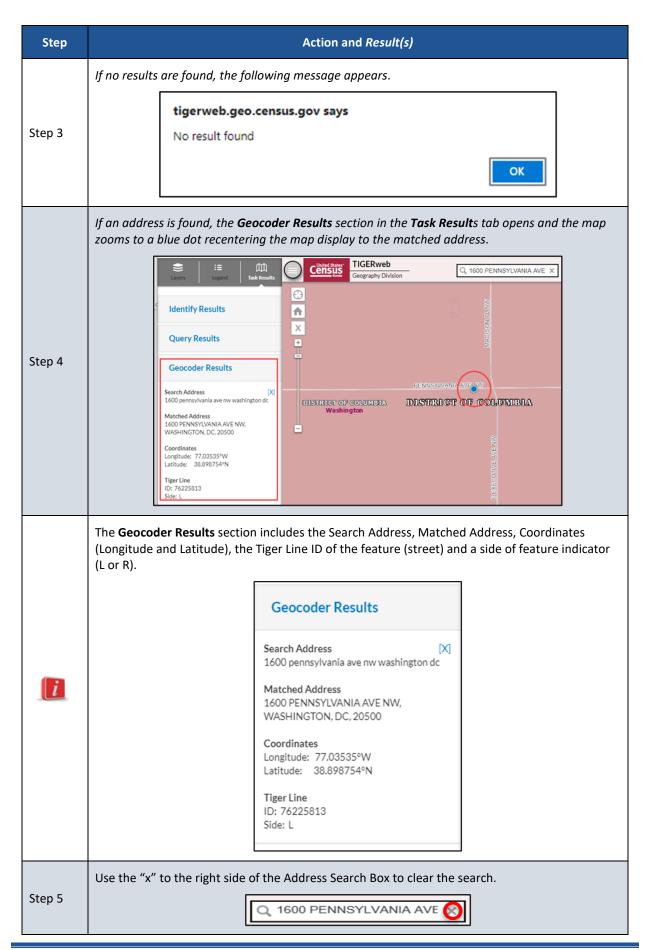
Use of satellite imagery and terrain basemap backgrounds help to identify and visualize the features on the ground and may provide valuable insight and perspective.

1.3.3 Using the Address Search Box to Geocode an Address

Users may need to determine the census geocodes (i.e., the state, county, census tract, and census block) or latitude and longitude for an address. TIGERweb Applications permits the user to enter an address in the Address Search Box for this purpose. When geocoding an address, users can enter partial address information such as Street, City and State or just the Street and Zip. More complete address information provides the greater probability of a match and therefore a more accurate geocode. Refer to **Table 3** or the steps to search for and geocode an address.

Table 3: Steps to Use the Address Search Box to Search for and Geocode an Address

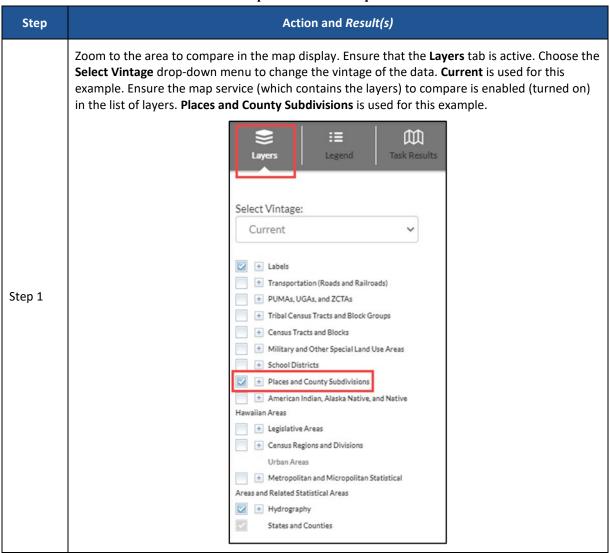


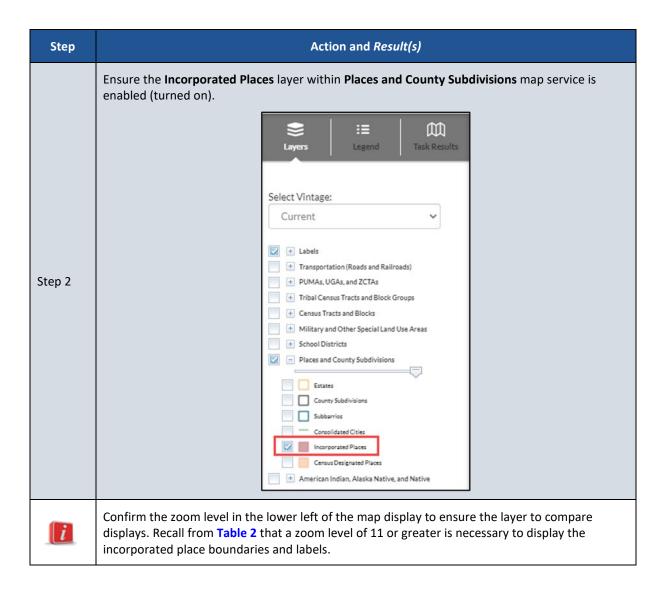


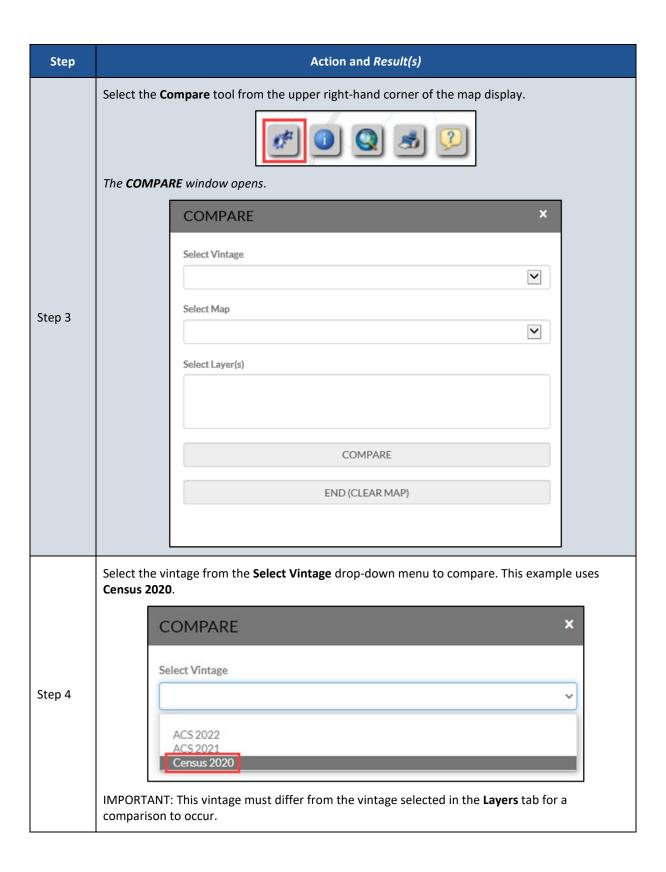
1.3.4 Using the Compare Tool

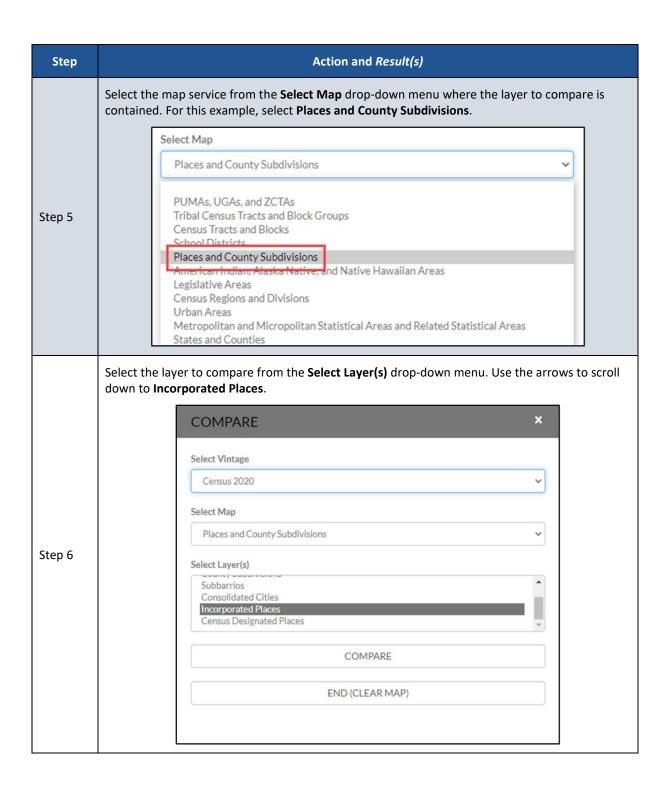
The Compare tool allows the user to compare geographic areas from two separate vintages. For example, the user may compare 2020 Census boundaries to current boundaries or compare the most current ACS or Population Estimates Program data with the previous year's data. Refer to Table 4 for the steps to use the Compare tool.

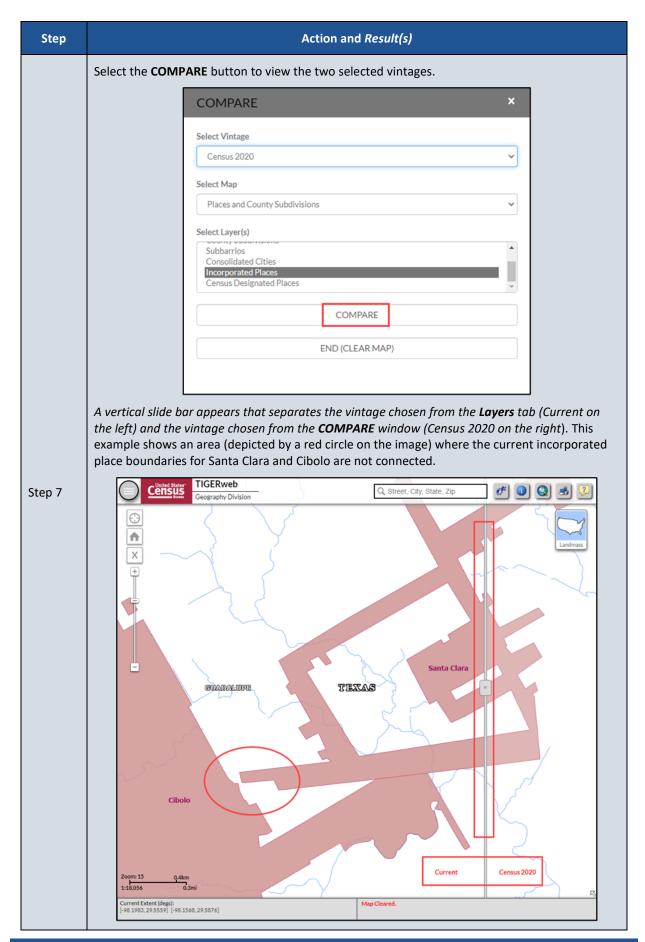
Table 4: Steps to Use the Compare Tool

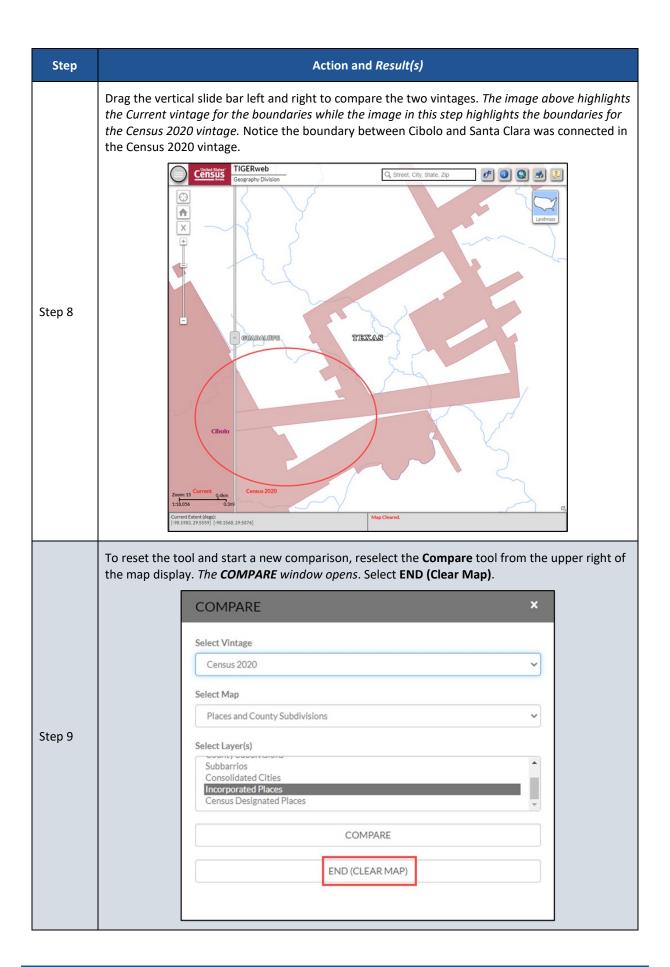










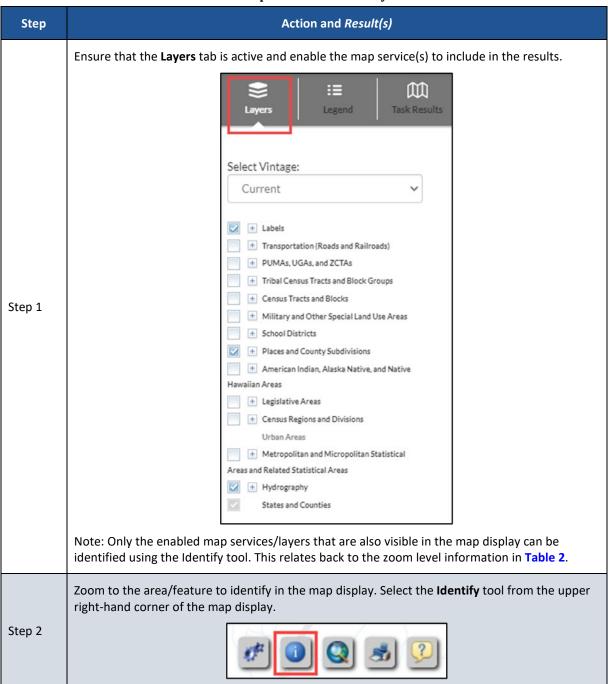


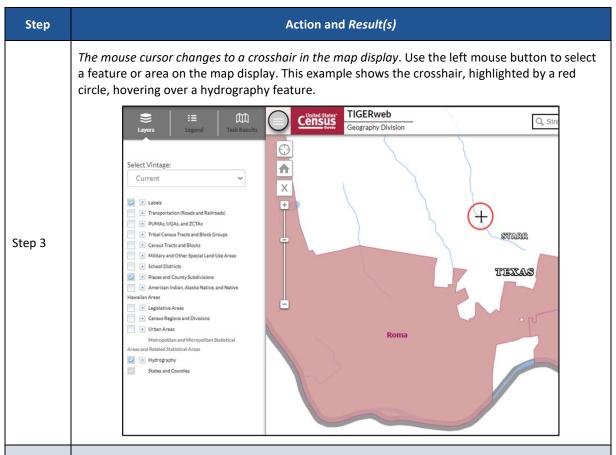
1.3.5 Using the Identify Tool

The Identify tool allows the user to discover more information about a selected feature on the map. Refer to **Table 5** for steps to use this tool.

Note: The Identify tool shows attribute information only for enabled (turned on in the Layer tab) map services and visible layers. An awareness of the layers that appear in each zoom level is beneficial when using the Identify tool.

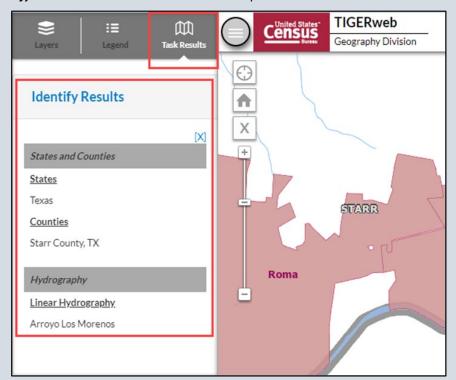
Table 5: Steps to Use the Identify Tool



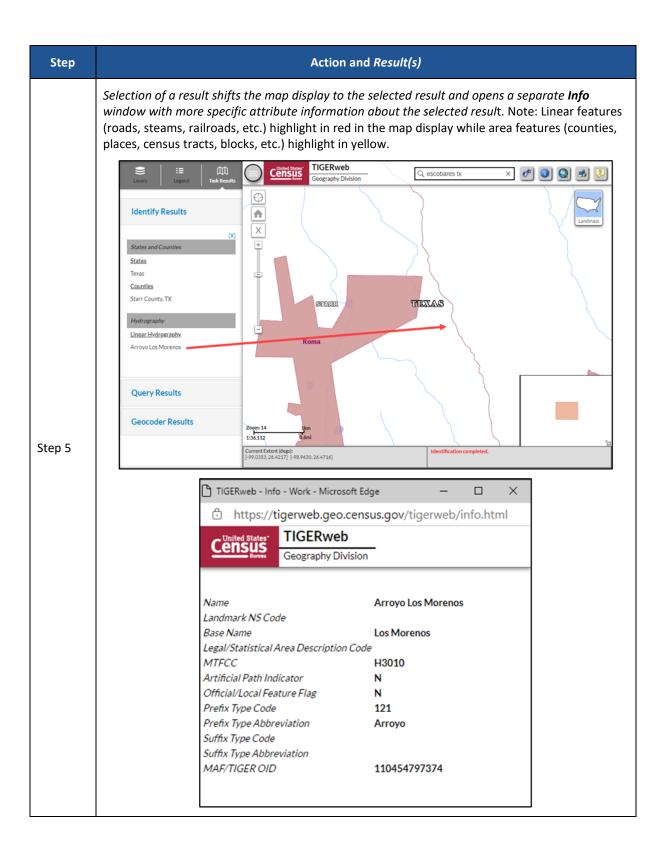


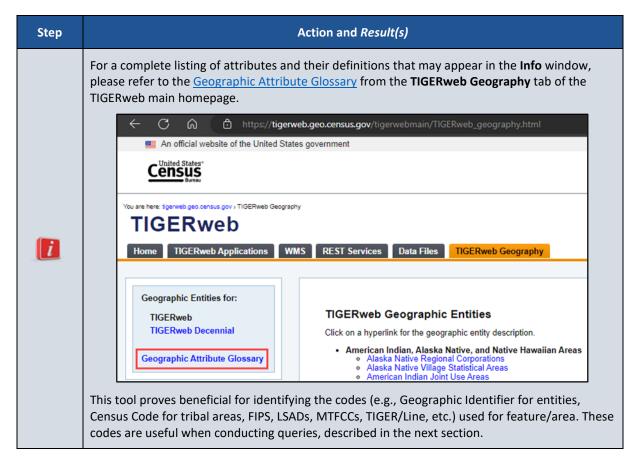
The **Identify Results** section in the **Task Results** tab opens with the results shown.

Step 4



This example yields three results: States and Counties results of Texas and Starr County, TX, and a Hydrography result of Arroyo Los Morenos. Users may select any of the results that appear.

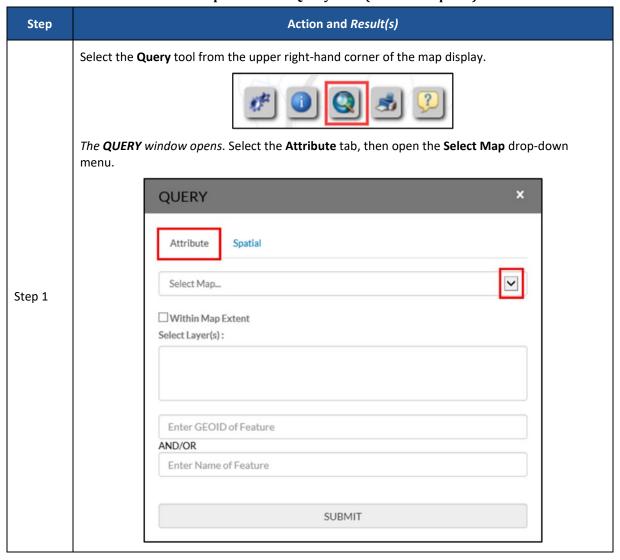


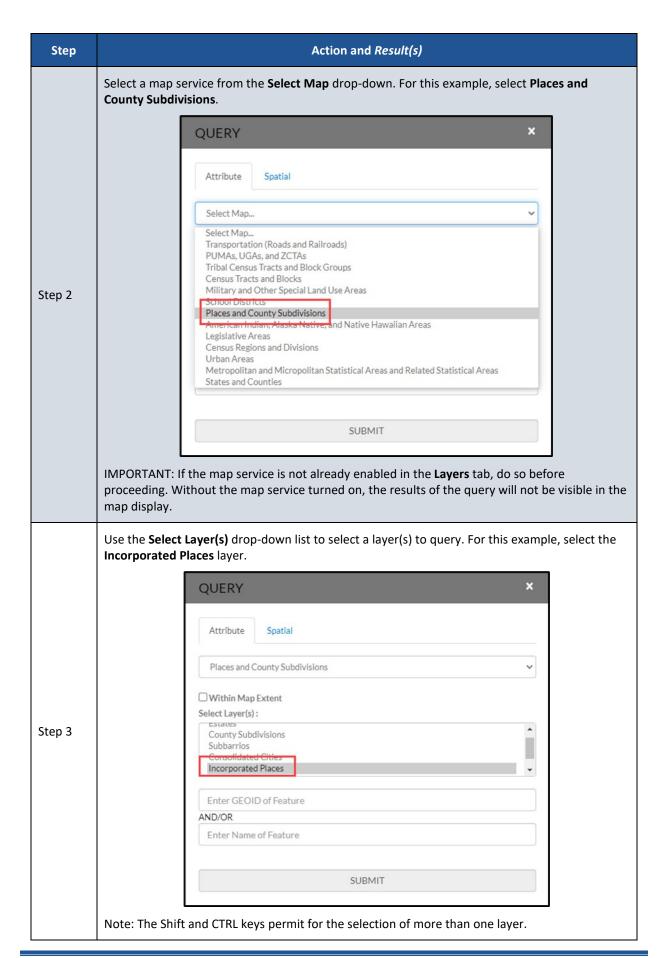


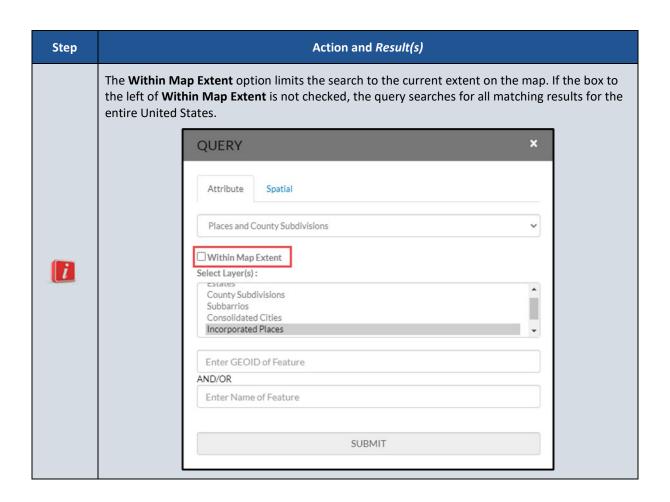
1.3.6 Using the Query Tool

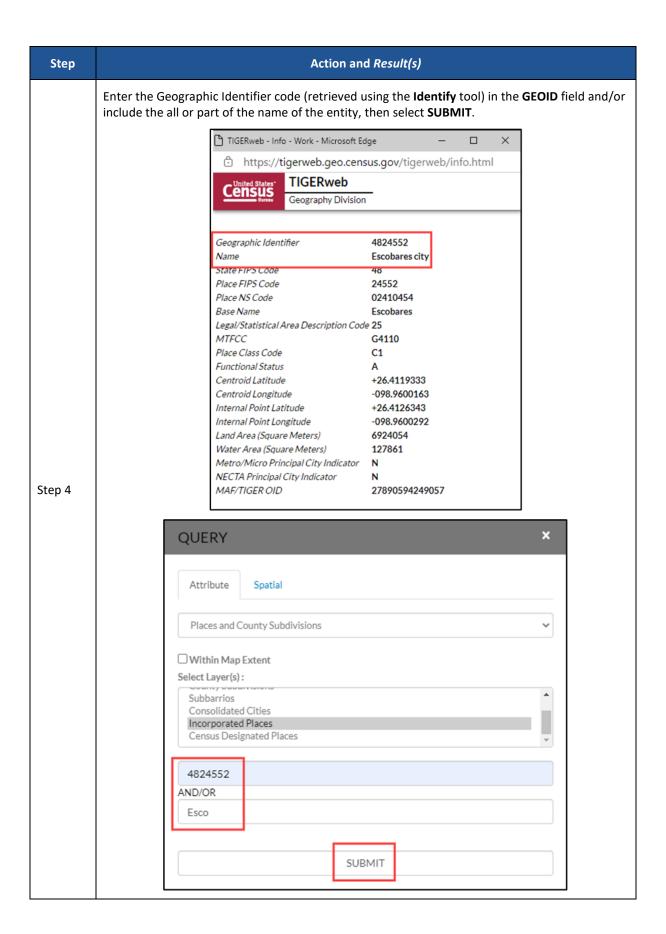
The Query tool allows users to locate an entity (or feature) by searching for the unique GEOID (numeric code) or name. This resource may be useful to locate an entity or feature within an entity. Refer to **Table 6** for steps to use the Query tool with the Attribute option and **Table 7** for steps to use the Query tool with the Spatial option. Apply the steps in these two tables to the various map services and layers to locate other geographies/entities.

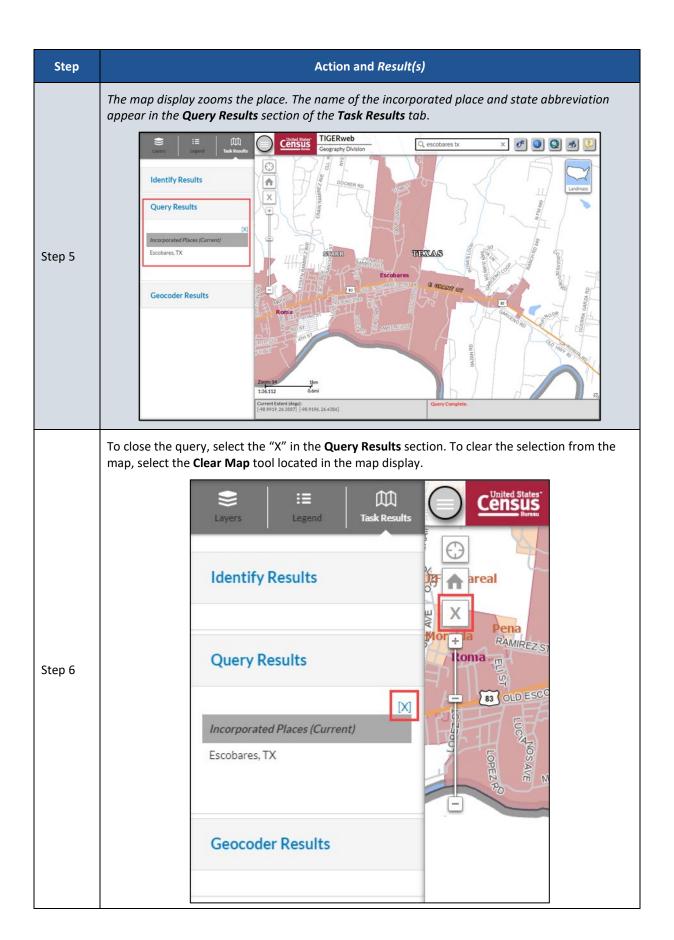
Table 6: Steps to Use the Query Tool (Attribute Option)

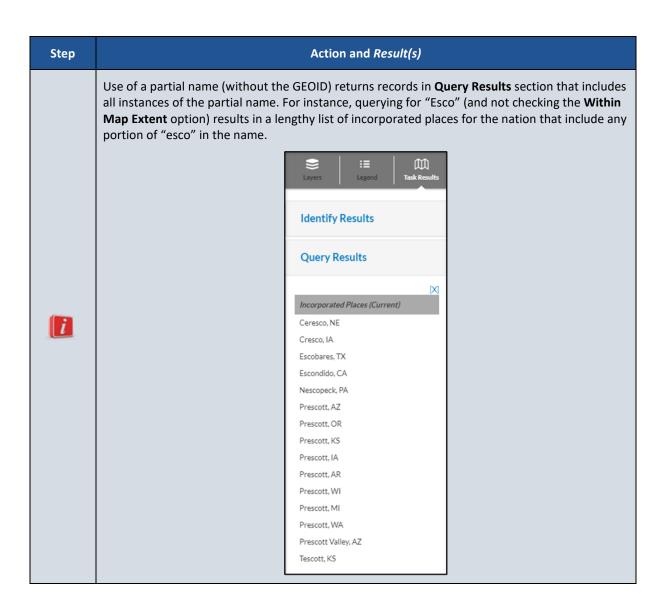






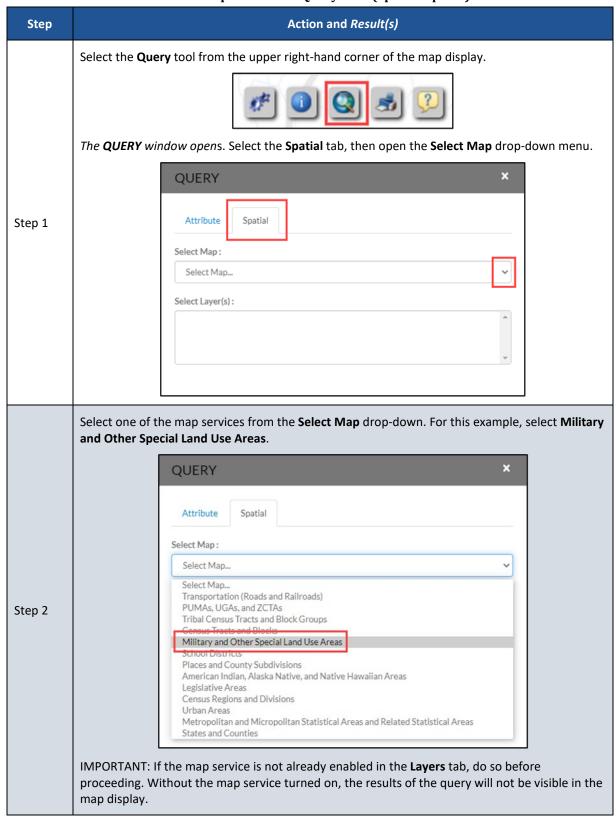


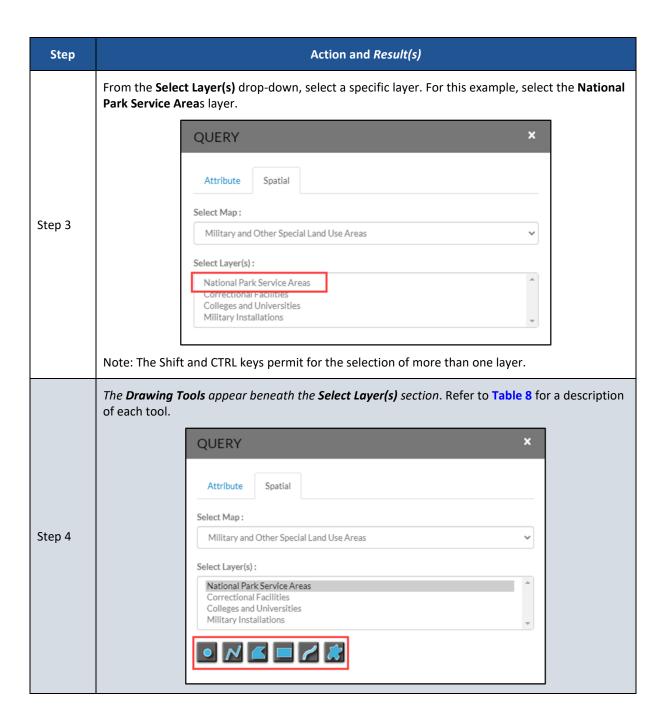


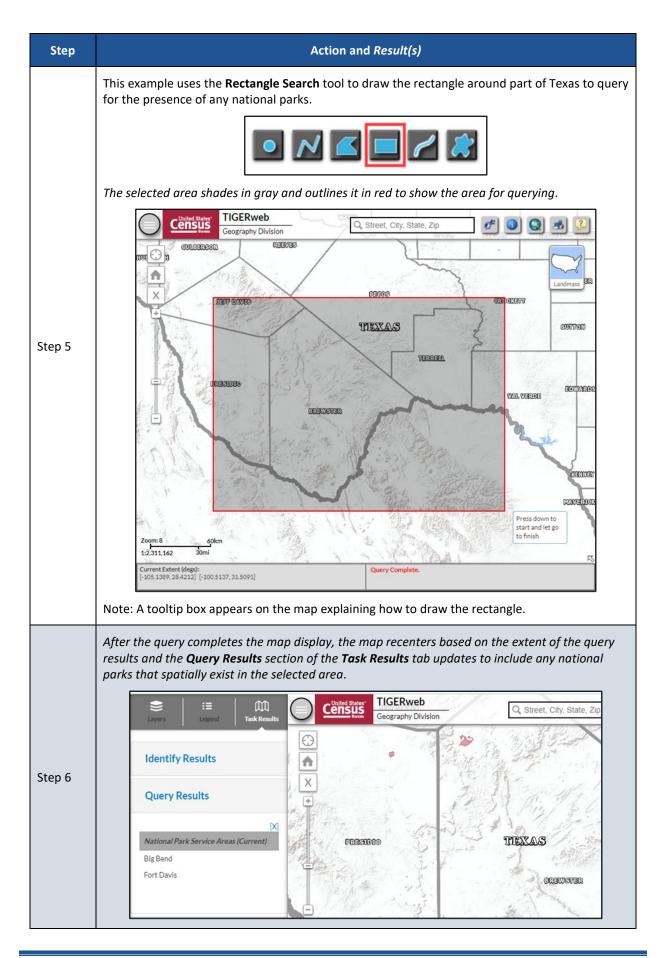


For users that wish to perform a spatial query, follow the steps in Table 7.

Table 7: Steps to Use the Query Tool (Spatial Option)







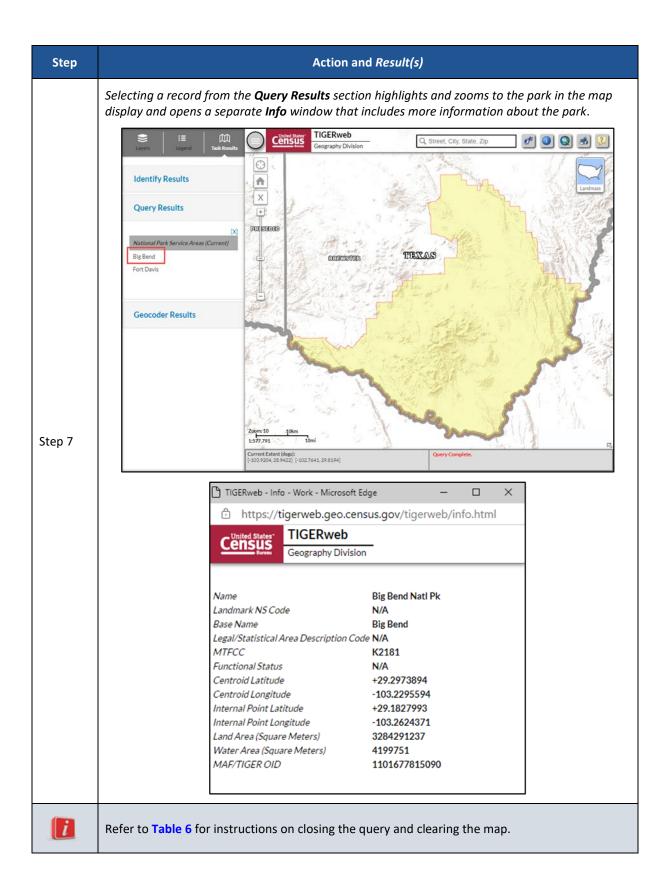


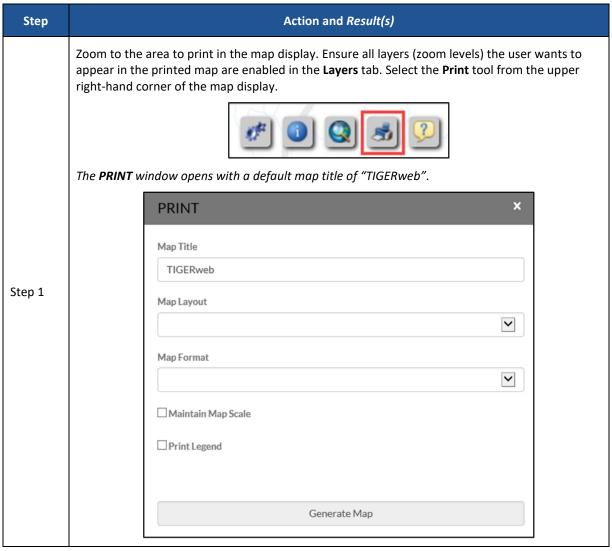
Table 8: Available Drawing Tools in the Query Tool (Spatial Option)

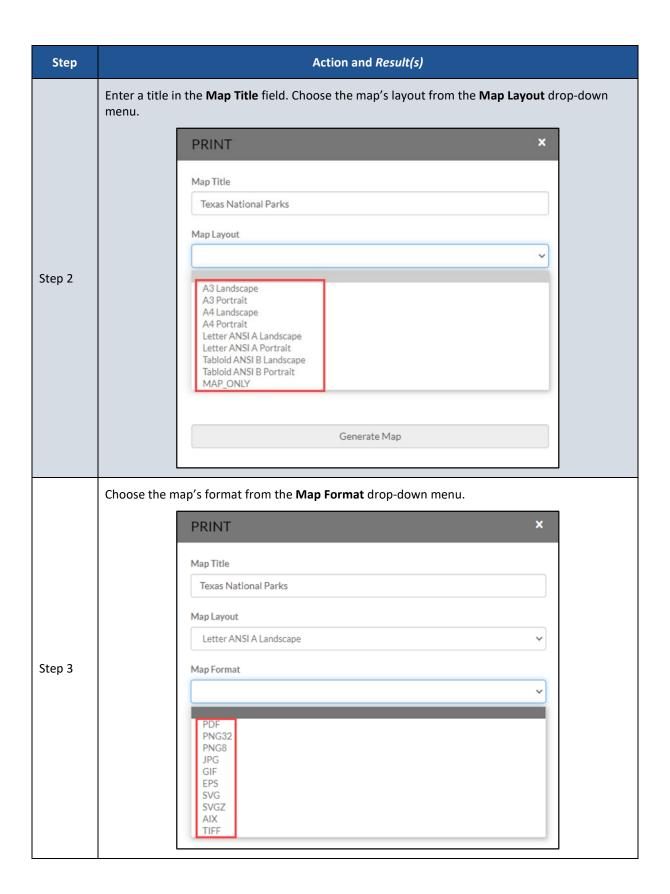
Drawing Tool	Name	Description
	Point Search	Allows user to search from a point in the map display.
N	Polyline Search	Allows user to draw straight lines in the map display to define the area to use during a spatial query.
	Polygon Search	Allows user to draw a polygon, using straight lines, in the map display to define the area to use during a spatial query.
	Rectangle Search	Allows user to draw a rectangle search area in the map display to define the area to use during a spatial query.
	Free Line Search	Allows user to free hand draw lines of any shape in the map display to define the area to use during a spatial query.
	Free Polygon Search	Allows user to free hand draw a polygon in the map display to define the area to use during a spatial query.

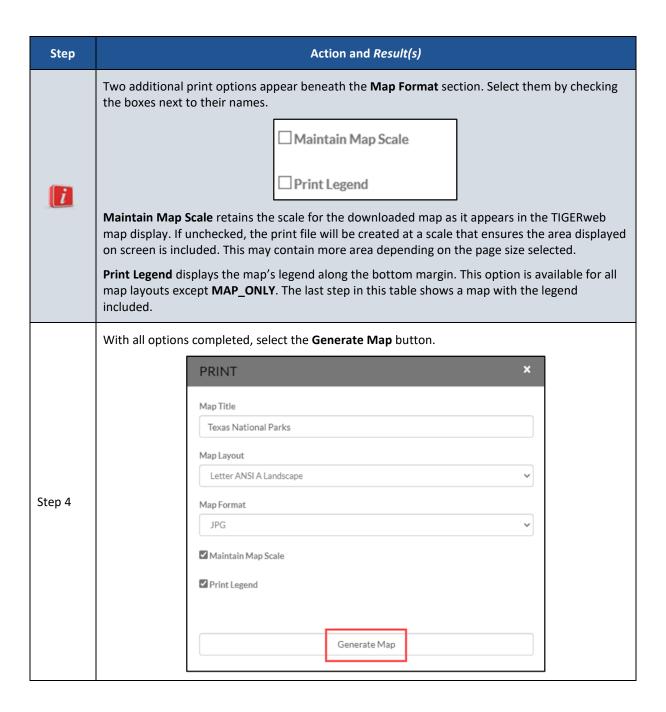
1.3.7 Using the Print Tool

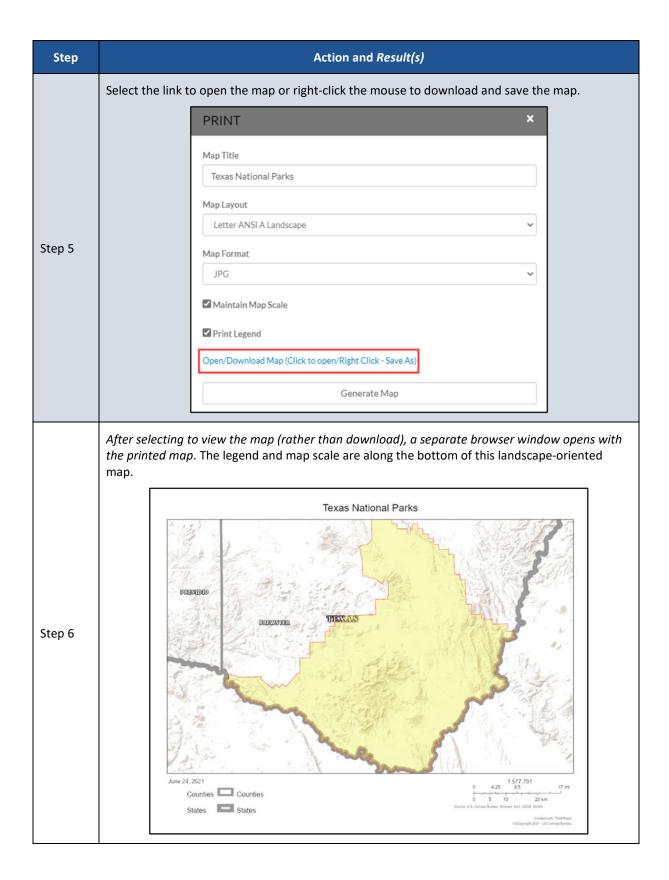
TIGERweb allows the map display to be saved for printing. Follow the steps in **Table 9** for printing.

Table 9: Steps to Use the Print Tool









1.3.8 Using the Help/About Button

The Help/About button is shown in Figure 24. Once selected, it opens a HELP/ABOUT window (Figure 25) that includes the TIGERweb version number, source of the data, general contact information, and a link to the User Guide.



Figure 24: Help/About Button

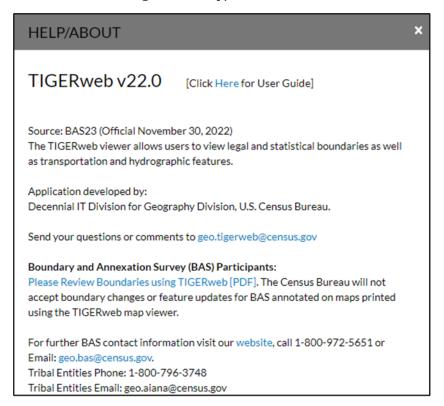


Figure 25: Help/About Window

Note: The HELP/ABOUT window may include additional information for other programs that use TIGERweb.

1.3.9 Using the Map Overview Button

The final element to discuss in TIGERweb Applications is the Map Overview button. This button (Figure 26) is represented by an outward facing arrow in the lower right corner of the map display.

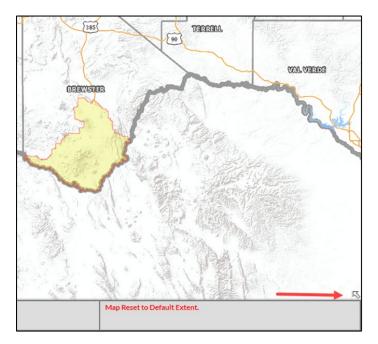


Figure 26: Map Overview Button

Selection of this button opens (expands) a small Map Overview window in the lower right corner (Figure 27) of the map display. This window displays the limit of the current map display along with the surrounding area. The pink shaded square corresponds to the extents of the map display and the inward facing arrow minimizes the window.

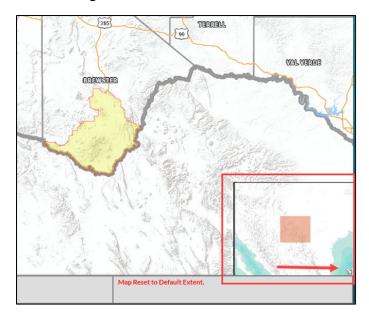


Figure 27: Map Overview Button - Expanded

CHAPTER 2 OTHER AVAILABLE TOOLS

The Census Bureau does not recommend using TIGERweb Applications to analyze data or link to data. For these tasks, the Census Bureau offers two types of web services: The Open Geospatial Consortium, Inc. (OGC) Web Map Service interface standard (WMS) and Esri's Representational State Transfer (REST) interface. Both options allow access to the TIGER data stored in the TIGERweb database.

In addition to the web services options, the Census Bureau provides a link to 508-compliant data files that contain the same attribute data found in the TIGERweb Map Services (WMS). Review the sections in this chapter for more details.

2.1 TIGERweb Web Map Service (WMS)

The OGC WMS provides a simple HTTP interface for requesting geo-registered map images from the Census Bureau's geospatial database. By gaining access to Census data through WMS, users can produce maps containing TIGERweb layers combined with layers from other servers.

Access the TIGERweb Web Map Service information from the following web address https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb wms.html > or by choosing the WMS tab from the TIGERweb main page (Figure 28).



Figure 28: WMS Tab

Both TIGERweb WMS and TIGERweb Decennial WMS connections are available in the WMS tab (Figure 29). Change the connections from the left panel of the WMS screen.

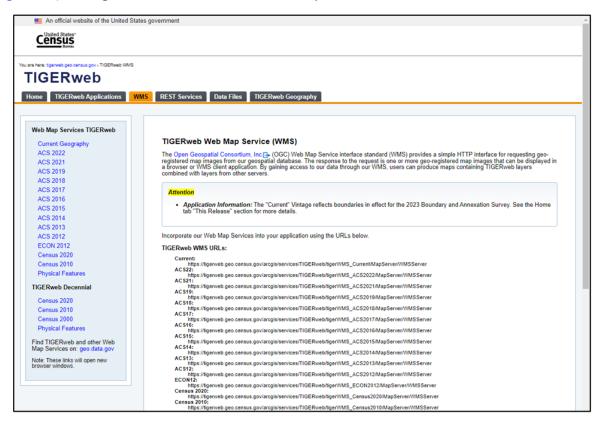


Figure 29: WMS Tab and Available Services

2.2 TIGERweb REST Services

The GeoServices REST Specification provides a way for Web clients to communicate with geographic information system (GIS) servers through Representational State Transfer (REST) technology. Access TIGERweb REST Services from the following web address https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb restmapservice.html or by choosing the REST Services tab from the TIGERweb main page (Figure 30). Once selected the tab offers the map names and links for several REST services (Figure 31).

Note: For users with a REST interface, access the map services by adding the following ArcGIS REST Services Directory to the REST interface client application https://tigerweb.geo.census.gov/arcgis/rest/services/TIGERweb>.



Figure 30: REST Services Tab

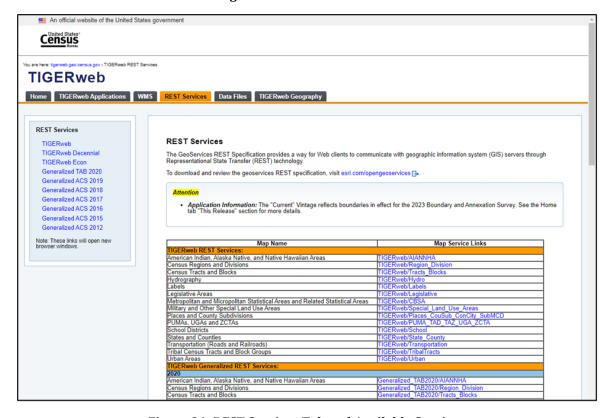


Figure 31: REST Services Tab and Available Services

2.3 Data Files and TIGERweb Geography

The Data Files tab on the TIGERweb main page (Figure 32) contains nation-based, state-based, and count-based 508-compliant HTML data files. It also includes links to the record layouts (Figure 33) for all map services and layers available from TIGERweb and TIGERweb Decennial map service applications.



Figure 32: Data Files Tab

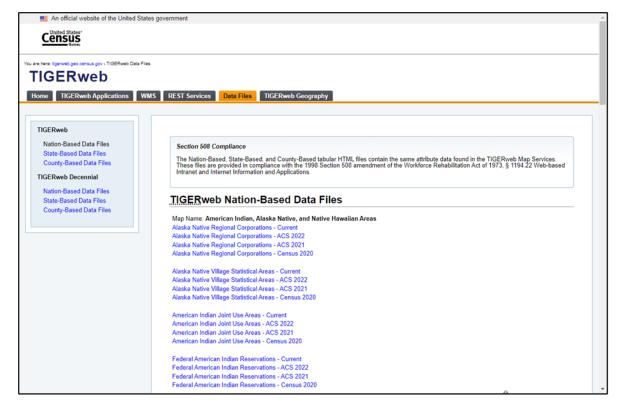


Figure 33: Data Files Tab and Available Files

The TIGERweb Geography tab, located to the right of the Data Files tab (**Figure 34**), includes hyperlinks to the geographic entity descriptions for both TIGERweb and TIGERweb Decennial map service applications. Choose the map service application option from the left side of the page. The tab also includes a link to a Geographic Attribute Glossary.

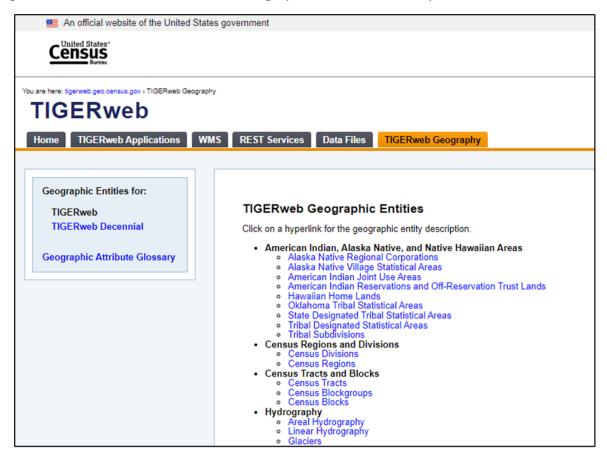


Figure 34: TIGERweb Geography Tab and Available Geographic Entities

2.4 Additional TIGER Data

Locate information regarding other TIGER data on the <u>TIGER Data Products Guide</u> page. The page contains links to the entire collection of TIGER data products including TIGER/Line Shapefiles, TIGER/Line Geodatabases, Cartographic boundary files (geodatabases, shapefiles, and KMLs) as well as a link back to TIGERweb. The Census Bureau's Partnership Shapefiles, produced to support individual geographic programs, are available from the <u>Geography Mapping Files</u> section of <u>Geographies</u> (census.gov).

APPENDICES

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APPENDIX A LAYER GROUPINGS, LAYERS, AND VINTAGES (TIGERWEB)

Table 10: Layer Groupings, Layers, and Vintages in the TIGERweb Map Service

Layer Groupings and Layers	Current	ACS 2022	ACS 2021	Census 2020
American Indian, Alaska Native, Native Hawaiian Areas				
Alaska Native Regional Corporations	✓	✓	✓	✓
Alaska Native Village Statistical Areas	✓	✓	✓	✓
American Indian Joint-Use Areas	✓	✓	✓	✓
Federal American Indian Reservations	✓	✓	✓	✓
Hawaiian Home Lands	✓	✓	✓	✓
Off-Reservation Trust Lands	✓	✓	✓	✓
Oklahoma Tribal Statistical Areas	✓	✓	✓	✓
State American Indian Reservations	✓	✓	✓	✓
State Designated Tribal Statistical Areas	✓	✓	✓	✓
Tribal Designated Statistical Areas	✓	✓	✓	✓
Tribal Subdivisions	✓	✓	✓	✓
Census Tracts and Blocks				
Census Block Groups	✓	✓	✓	✓
Census Blocks	✓	_	_	✓
Census Tracts	✓	✓	✓	✓
Census Regions and Divisions				
Census Divisions	✓	✓	✓	✓
Census Regions including Midwest, Northeast, South, and West	✓	✓	✓	✓
Hydrography				
Areal Hydrography	✓	✓	✓	✓
Glaciers	✓	✓	✓	✓
Linear Hydrography	✓	✓	✓	✓

Layer Groupings and Layers	Current	ACS 2022	ACS 2021	Census 2020
Legislative Areas				
Congressional Districts	✓	✓	✓	✓
State Legislative Districts (Lower)	✓	√	✓	✓
State Legislative Districts (Upper)	✓	✓	✓	✓
Voting Districts	_	_	✓	✓
Metropolitan and Micropolitan Statistical Areas and Related Statistical Areas				
Combined New England City and Town Areas	_	_	✓	✓
Combined Statistical Areas	_	_	✓	✓
Metropolitan and Micropolitan Statistical Areas including Metropolitan Divisions, Metropolitan Statistical Areas, and Micropolitan Statistical Areas.	_	_	√	✓
New England City and Town Areas including New England City and Town Divisions, Metropolitan New England City and Town Areas, and Micropolitan New England City and Town Areas.	_	_	√	~
Military and Other Special Land Use Areas				
Colleges and Universities	✓	✓	✓	✓
Correctional Facilities	✓	✓	✓	✓
Military Installations	✓	✓	✓	✓
National Park Service Areas	✓	✓	✓	✓
Places and County Subdivisions				
Census Designated Places	✓	✓	✓	✓
Consolidated Cities	✓	✓	✓	✓
County Subdivisions	✓	✓	✓	✓
Estates	✓	✓	✓	_
Incorporated Places	✓	✓	✓	✓
Subbarrios	✓	✓	✓	✓

Layer Groupings and Layers	Current	ACS 2022	ACS 2021	Census 2020
PUMAs, UGAs, and ZCTAs				
Public Use Microdata Areas	✓	✓	_	✓
Urban Growth Areas		ı		√
ZIP Code Tabulation Areas	√	√	✓	√
School Districts				
Elementary School Districts	✓	✓	✓	✓
School District Administrative Areas	✓	✓	_	-
Secondary School Districts	✓	✓	✓	√
Unified School Districts	√	√	✓	√
States and Counties				
States and Counties	√	√	✓	√
Transportation (Roads and Railroads)				
Local Roads (includes multiple layers that activate based on scale dependency)	✓	✓	√	~
Primary Roads (includes multiple layers that activate based on scale dependency)	✓	✓	√	✓
Railroads	✓	✓	✓	✓
Secondary Roads (includes multiple layers that activate based on scale dependency)	√	✓	√	✓
Tribal Census Tracts and Block Groups				
Tribal Block Groups	✓	✓	✓	✓
Tribal Census Tracts	✓	✓	✓	✓
Urban Areas				
Urban Areas	✓	✓	_	✓

APPENDIX B LAYER GROUPINGS, LAYERS, AND VINTAGES (TIGERWEB DECENNIAL)

Table 11: Layer Groupings, Layers, and Vintages in the TIGERweb Decennial Map Service

Layer Groupings and Layers	Census 2020	Census 2010	Census 2000
American Indian, Alaska Native, Native Hawaiian Areas			
Alaska Native Regional Corporations	✓	✓	✓
Alaska Native Village Statistical Areas	✓	✓	✓
American Indian Joint-Use Areas	✓	✓	✓
Federal American Indian Reservations	✓	✓	✓
Hawaiian Home Lands	✓	✓	✓
Off-Reservation Trust Lands	✓	✓	✓
Oklahoma Tribal Statistical Areas	✓	✓	✓
State American Indian Reservations	✓	✓	✓
State Designated Tribal Statistical Areas	✓	✓	✓
Tribal Designated Statistical Areas	✓	✓	✓
Tribal Subdivisions	✓	✓	✓
Census Tracts and Blocks			
Census Block Groups	✓	✓	✓
Census Blocks	✓	✓	✓
Census Tracts	✓	✓	✓
Census Regions and Divisions			
Census Divisions	✓	✓	✓
Census Regions including Midwest, Northeast, South, and West	✓	✓	✓
Hydrography			
Areal Hydrography	✓	✓	✓
Glaciers	✓	✓	✓
Linear Hydrography	✓	✓	✓

Layer Groupings and Layers	Census 2020	Census 2010	Census 2000
Legislative Areas			
Congressional Districts	✓	✓	✓
State Legislative Districts (Lower)	✓	✓	✓
State Legislative Districts (Upper)	✓	✓	✓
Voting Districts	✓	✓	✓
Metropolitan and Micropolitan Statistical Areas and Related Statistical Areas			
Combined New England City and Town Areas	✓	✓	_
Combined Statistical Areas	✓	_	_
Metropolitan and Micropolitan Statistical Areas including Metropolitan Divisions, Metropolitan Statistical Areas, and Micropolitan Statistical Areas.	✓	✓	_
Metropolitan Statistical Areas/Consolidated Metropolitan Statistical Areas	_	_	✓
New England City and Town Areas including New England City and Town Divisions, Metropolitan New England City and Town Areas, and Micropolitan New England City and Town Areas.	√	√	_
Primary Metropolitan Statistical Areas	_	_	✓
Military and Other Special Land Use Areas			
Colleges and Universities	✓	✓	✓
Correctional Facilities	✓	✓	✓
Military Installations	✓	✓	✓
National Park Service Areas	✓	✓	✓

Layer Groupings and Layers	Census 2020	Census 2010	Census 2000
Places and County Subdivisions			
Census Designated Places	✓	✓	✓
Consolidated Cities	✓	✓	✓
County Subdivisions	✓	✓	✓
Estates	✓	✓	_
Incorporated Places	✓	✓	✓
Subbarrios	✓	✓	✓
PUMAs, UGAs, and ZCTAs			
Public Use Microdata Areas	✓	✓	✓
Traffic Analysis Districts	_	✓	_
Traffic Analysis Zones	_	✓	✓
Urban Growth Areas	✓	✓	_
ZIP Code Tabulation Areas	✓	✓	✓
School Districts			
Elementary School Districts	✓	✓	✓
Secondary School Districts	✓	✓	✓
Unified School Districts	✓	✓	✓
States and Counties			
States and Counties	✓	✓	✓
Transportation (Roads and Railroads)			
Local Roads (includes multiple layers that activate based on scale dependency)	✓	✓	✓
Primary Roads (includes multiple layers that activate based on scale dependency)	√	√	√
Railroads	✓	✓	✓
Secondary Roads (includes multiple layers that activate based on scale dependency)	✓	√	√

Layer Groupings and Layers	Census 2020	Census 2010	Census 2000
Tribal Census Tracts and Block Groups			
Tribal Block Groups	✓	✓	-
Tribal Census Tracts	✓	✓	_
Urban Areas			
Urban Areas	✓	_	_
Urban Clusters	_	✓	✓
Urbanized Areas	_	√	√

APPENDIX C LAYER GROUPINGS, LAYERS, AND VINTAGES (TIGERWEB ECONOMIC CENSUS)

Table 12: Layer Groupings, Layers, and Vintages in the TIGERweb Economic Census Map Service

Layer Groupings and Layers	2017	2012
American Indian Areas		
American Indian Reservations and/or Off-Reservation Trust Lands	✓	√
Tribal Statistical Areas	✓	√
Economic Places		
Balance of County	✓	✓
Census Designated Places	✓	✓
Consolidated Cities	✓	√
Incorporated Places/Minor Civil Divisions	✓	✓
Hydrography		
Areal Hydrography	✓	✓
Glaciers	✓	✓
Linear Hydrography	✓	✓
Metropolitan and Micropolitan Statistical Areas and Related Statistical Areas		
Combined Statistical Areas	✓	✓
Metropolitan and Micropolitan Statistical Areas including Metropolitan Divisions, Metropolitan Statistical Areas, and Micropolitan Statistical Areas.	√	✓
Principal Cities	✓	✓
Military and Other Special Land Use Areas		
Colleges and Universities	✓	✓
Correctional Facilities	✓	✓
Military Installations	✓	✓
National Park Service Areas	✓	✓

Layer Groupings and Layers	2017	2012
Planning Regions		
Planning Regions	✓	✓
States and Counties		
States and Counties	✓	✓
Transportation (Roads and Railroads)		
Local Roads (includes multiple layers that activate based on scale dependency)	✓	✓
Primary Roads (includes multiple layers that activate based on scale dependency)	√	✓
Railroads	√	✓
Secondary Roads (includes multiple layers that activate based on scale dependency)	✓	✓