

TIGER (Topologically Integrated Geographic Encoding and Referencing) Boundary Files

This article explains what TIGER (Topologically Integrated Geographic Encoding and Referencing) boundary files can be used for, what is included in the data, how they were collected, and how they can be accessed on the RDH website.

Overview

TIGER (Topologically Integrated Geographic Encoding and Referencing) boundary files are shapefiles from the Census Bureau that are important for drawing legally compliant district maps. They are geospatial data, meaning they are designed to be used with Geographic Information Systems (GIS) software to create digital maps. The first release of TIGER files was in 1989, and they are continually updated and corrected by the Census Bureau.

What are TIGER (Topologically Integrated Geographic Encoding and Referencing) Boundary Files?

[TIGER](#) (Topologically Integrated Geographic Encoding and Referencing) files come from the US Census Bureau. TIGER files contain information about many different features such as roads, rivers, lakes, political boundaries (state, county), and census boundaries (Block, Block Group, Census Tract). However, the RDH only hosts political and census boundary TIGER files for redistricting. They are available to download as polygon boundary shapefiles.

What is included in the data?

TIGER boundary files are available at [multiple geographies](#) within a state, including Blocks, Block Groups, Census Tracts, counties, and the entire state. Here is an overview of [U.S. Census geographies from Esri](#), and [geographic hierarchy diagrams](#) from the U.S. Census Bureau. TIGER boundary files also include Voting Tabulation Districts (VTDs) and American Indian, Alaska Native and Native Hawaiian (AIANNH) boundaries for all states where applicable, as well as 2020 Zip Code Tabulated Areas (ZCTAs). TIGER files are updated by the Census Bureau every year, but it is typically [cartographic boundary files](#) that are updated. These are simplified TIGER files created for small scale thematic mapping. Block, Block Group, Census Tra  Contact us state, and VTD boundaries typically do not change between Decennial Censuses. AIANNH and zip code

boundaries may change, but this occurs infrequently. Federally recognized AIANNH boundaries are [reported](#) through the Census Bureau's Boundary and Annexation Survey (BAS) by federally recognized tribal governments. Liaisons for the decennial census appointed by state governors through the State American Indian Reservation Program and Tribal Statistical Areas Program draw state recognized AIANNH boundaries. For more information about TIGER boundary file geographies, visit this [Census Bureau document](#).

These boundary files do not contain demographic data. However, they do contain geographic entity codes (GEOIDs) that can be linked to demographic data from US Census Bureau surveys such as the decennial Census and the American Community Survey (ACS), or any other data set that is aggregated or disaggregated to a census geography.

The RDH hosts 2010 and 2020 TIGER boundary files. In addition, the 2010 boundaries on the RDH website include total population counts from the 2010 Decennial Census. Lastly, nearly all files from the census hosted by the RDH are available as shapefiles, meaning they have already been joined to the corresponding TIGER file.

What can the data be used for?

Most redistricting bodies use census blocks or other census geographies as the building blocks for drawing districts. Census place geographies and county boundary data are important in the redistricting process to draw legally compliant district maps. Some state redistricting criteria require the minimization of county and city splits in proposed districts. Therefore, having accessible and up-to-date boundary files is important for analyzing whether redistricting criteria have been met.

Another example of the importance of TIGER files in redistricting is in defining Communities of Interest. TIGER boundary data that can be used for this purpose include, but are not limited to, Zip Code Tabulated Areas (ZCTAs), and American Indian, Alaska Native and Native Hawaiian (AIANNH) boundaries.

How are the data collected and processed?

TIGER files come from the U.S. Census Bureau. The RDH acquired these files from the [US Census Bureau FTP](#). For 2010 boundaries, the RDH joined total population counts from the 2010 Decennial Census, pulled from the [Census API](#).

Where can the data be found on the Redistricting Data Hub website?

TIGER boundary files can be found on the RDH website in each state's [data download](#) page. They can be found by selecting "Boundaries" in the "Filter by Type of Data" dropdown menu.

Do you have more questions?

Our help desk team can answer your questions about redistricting data and the redistricting process. [Send a message](#) and they will respond within one business day!