

The Working with TIGER/Line Shapefiles series is an overview of how to access and use the US Census Bureau's TIGER/Line Shapefiles. Each pamphlet is a quick how-to guide for accessing and using TIGER/Line Shapefiles as well as joining data from the US Census Bureau to the TIGER/Line Shapefiles.

## WHAT SHAPEFILES ARE AVAILABLE?

3 and 5-digit ZIP Code Tabulation Areas  
Alaska Native Regional Corporations  
American Indian/Alaska Native/Native Hawaiian Areas  
American Indian Area Tribal Subdivisions  
Blocks  
Block Groups  
Census Tracts  
Combined New England City and Town Areas  
Combined Statistical Areas  
Congressional Districts  
Consolidated Cities  
Counties and equivalents  
County Subdivisions  
Landmarks (Point and Area)  
Metropolitan/Micropolitan Statistical Areas  
Metropolitan Divisions  
Military Installations  
New England City and Town Areas  
New England City and Town Area Divisions  
Places  
Public Use Mircodata Areas  
Roads, Rails, etc. (in All Lines file)  
School Districts – Elementary, Secondary and Unified  
States and equivalents  
State Legislative Districts – Upper and Lower Chambers  
Urban Areas  
Voting Districts  
And Many, Many More

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## Working with TIGER/Line Shapefiles Series:

1. Downloading TIGER/Line Shapefiles
2. Opening TIGER/Line Shapefiles into ArcGIS
3. Downloading Data from American FactFinder to use with TIGER/Line Shapefiles
4. Joining Census Data to TIGER/Line Shapefiles
5. Creating a Thematic Map

## Questions about TIGER/Line® Shapefiles?

Visit:

<http://www.census.gov/geo/www/tiger>

E-mail:

[geo.tiger@census.gov](mailto:geo.tiger@census.gov)

Call:

(301) 763-1128

## Don't have ArcGIS™?

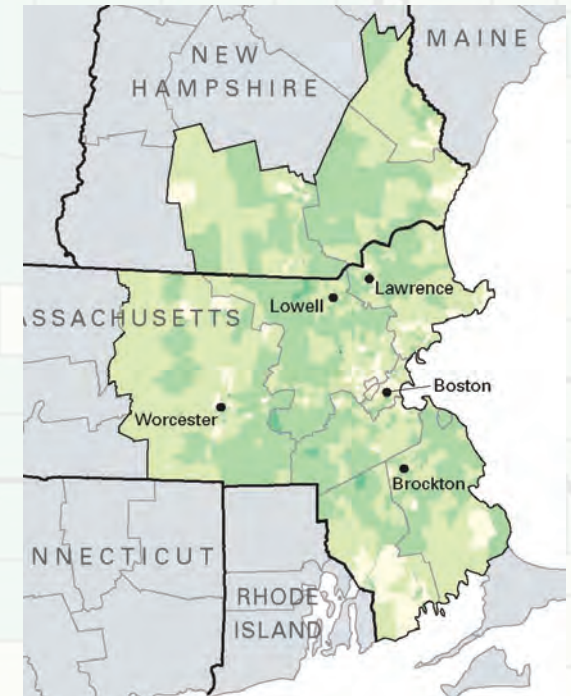
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<http://www.esri.com/software/arcgis/explorer>



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Geography Division  
US Census Bureau  
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## WORKING WITH TIGER/LINE SHAPEFILES

*Downloading Data from  
American FactFinder to use  
with TIGER/Line Shapefiles*



# GETTING STARTED

In order to download data from American FactFinder for use in conjunction with the TIGER/Line Shapefiles you will need an Internet browser and an utility to unzip files.

# WHAT DATA ARE AVAILABLE

The data most commonly used with the TIGER/Line Shapefiles are those from the Decennial Census, the American Community Survey, the Population Estimates, and the Economic Census. Data from all of these programs are on the American FactFinder website. To access the data visit <http://factfinder.census.gov>.



In the middle of the page is a list of the different programs with detailed data in American FactFinder. There are links to a description of the program and to access the detailed data.

**Getting Detailed Data**

**Decennial Census** - taken every 10 years to collect information about the people and housing of the United States.  
[learn more](#) | [get data](#)

See the **Civil Question Resolution Program** for information on Census 2000 count corrections.

**American Community Survey** - an ongoing survey that provides data about your community every year.  
[learn more](#) | [get data](#)

**Puerto Rico Community Survey** - the equivalent of the American Community Survey for Puerto Rico.  
[learn more](#) | [get data](#) | [accessible](#)

**Population Estimates Program** - population numbers between censuses.  
[learn more](#) | [get data](#)

**Economic Census** - profiles the U.S. economy every 5 years.  
[learn more](#) | [get data](#)

**Annual Economic Surveys** - data from the Annual Survey of Manufactures, County Business Patterns and Nonemployer Statistics.  
[learn more](#) | [get data](#)

The description includes an overview of the program as well as the types of data that can be found and the types of geography available. Visit this overview to determine what program and what vintage of the data to use.

# GET THE DATA

After identifying what program to get data from, select the "get data" link under the program name. Each program offers slightly different products to display their data. The example in this brochure is for Census 2000 Summary File 1 data.

In general it is preferable to use the detailed tables option to join data with the TIGER/Line Shapefiles. The detailed tables option generally also includes the most in depth data.

**Census 2000 Summary File 1 (SF 1) 100-Percent Data**

Summary File 1 presents counts and information [age, sex, race, Hispanic/Latino origin, household relationship, whether residence is owned or rented] collected from all people and housing units.

Select from the following

- Detailed Tables**
- Geographic Comparison Tables
- Quick Tables

# SELECTING GEOGRAPHY

To start, the geographic areas of interest need to be selected. In American FactFinder multiple levels of geography can be selected at a time, but, to join the data with the TIGER/Line Shapefiles, it is easier if one geographic level, such as county, is selected at a time.

With the TIGER/Line Shapefiles, whole pieces of geography, such as states, counties, or census tracts can be mapped. While data from American FactFinder is often available for partial pieces of geography, such as the part of Chicago (place) in Lake County, IL (county), they are not easily mapped.

There are five methods for finding geography in American FactFinder. Up to 7,000 geographic areas can be selected at a time.

Choose a selection method

**list** name search address search map geo within geo

The default search method is "list" but usually the best option is "geo within geo." In this method, you can select all of the geographic entities inside another entity such as all counties in the nation. Select the entities of interest and add them to the selection box.

# SELECTING TABLES

Selecting tables is similar to selecting geography. There are three options for selecting tables. If you know the table numbers, "show all tables" is the best option. If you are interested in a specific subject use the "by subject" method to see a list of pre-defined terms or the "keyword" method to type in a search term.

Choose a table selection method

by subject by keyword **show all tables**

Up to 50 tables can be selected at a time. Select the tables of interest and add them to the selection box. The tables will then be retrieved and displayed.

# THE RESULTS

The results are displayed vertically, one table after another. Each table has a title, headnotes, the data, and footnotes. If more than 10 geographies are selected there will be a "next" button on the top of the table to see additional data.

# DOWNLOADING DATA

To use the data in conjunction with the TIGER/Line Shapefiles, the tables need to be downloaded with the geographic codes.

Print / Download

Print

Download

Load Query

Save Query

Using the menus along the top of the table results, select "Download" from the "Print/Download" menu.

Database compatible (data rows only) - the download file is a zip file containing one or more data files and a geographic content file. Geographic codes are included in the database compatible download.

- Microsoft Excel (.xls)
- Comma delimited (.txt)
- Pipe delimited (.txt)

Near the bottom of the screen is an option for a Database compatible file. This file contains the data elements and geographic codes needed to join to the TIGER/Line Shapefiles. This file contains the data elements in the table and excludes the headnotes, and footnotes, from the data so it can be immediately imported to a database or joined to the TIGER/Line Shapefiles. Uncheck the box "include descriptive element names." The Microsoft Excel format is the easiest format to use with ArcGIS.

The file that is download is a zip package named output.zip. Inside the package are several files including readmes, the data, and a geography file. The data file contains the geographic codes and data needed to join the information to the TIGER/Line Shapefiles.

The data file contains a column with the Census Bureau's unique code, a column with the geographic identifiers (FIPS, Census, and/or ANSI which are the fully qualified identifiers needed to join data to the TIGER/Line Shapefiles), the geographic summary level, the name of the geographic entity, and the data elements from the tables.

# NEXT STEPS

The downloaded data contains all of the information needed to join it to the TIGER/Line Shapefiles. Take note of the vintage of the data downloaded so that the same vintage of the TIGER/Line Shapefiles are used.

You are now ready to take the information to a GIS program and spatially visualize the data.