

WHAT SHAPEFILES ARE AVAILABLE?

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
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 Microdata Areas
Roads, Rails, Rivers, etc.
School Districts - Elementary, Secondary,
and Unified
State and State Equivalents
State Legislative Districts - Upper and
Lower
Tribal Block Groups
Tribal Census Tracts
Urban Areas
Voting Districts
And Many More

Questions

Visit:

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

E-mail:

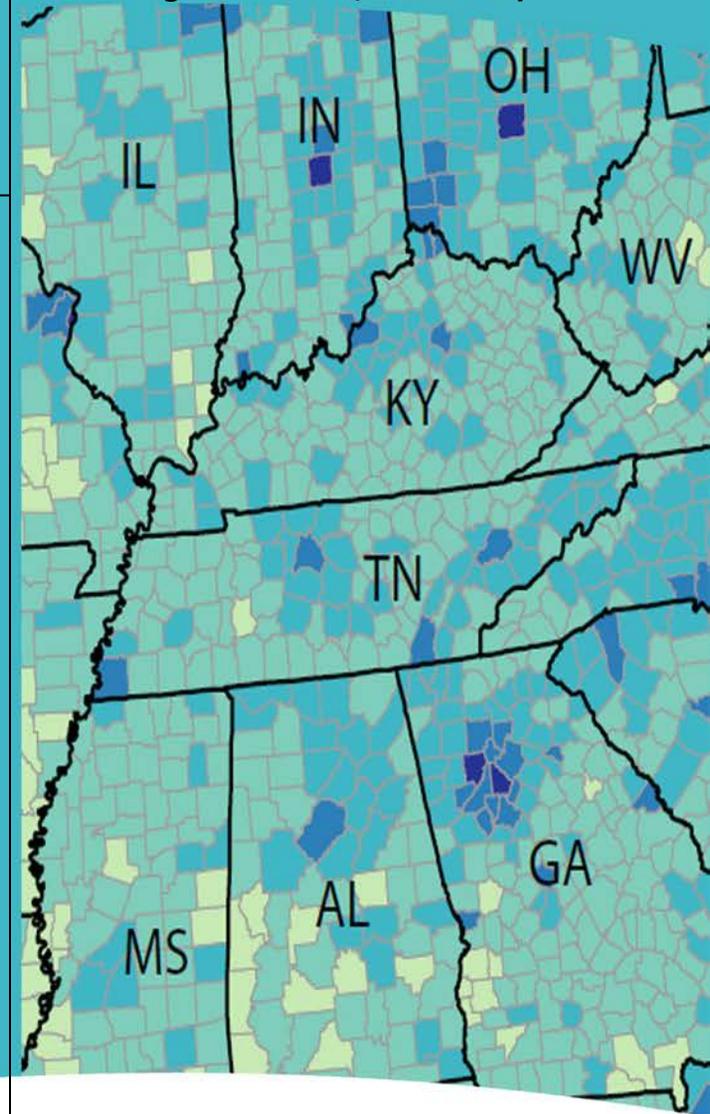
geo.tiger@census.gov

Call:

(301) 763-1128

Joining Census Data to TIGER/Line® Shapefiles

Working with TIGER/Line® Shapefiles



GETTING STARTED

The instructions are for the 10.x versions of ArcGIS.

The data from American FactFinder should be downloaded and saved in a Microsoft Excel Workbook format. See the brochure “Downloading Data from American FactFinder to use with TIGER/Line Shapefiles” for detailed steps. The corresponding TIGER/Line Shapefiles should be unzipped in a location on your computer. See the brochure “Downloading TIGER/Line Shapefiles” for detailed steps.

OPEN ARCMAP

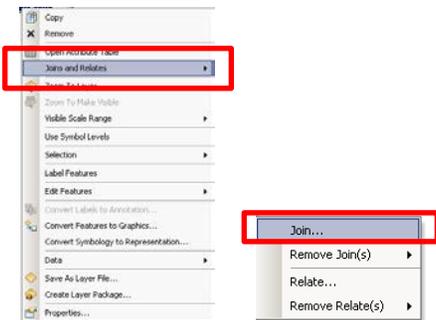
Open ArcMap and add the TIGER/Line Shapefiles for the area of interest to the map using the “Add Data” icon or “File - Add Data - Add Data.”



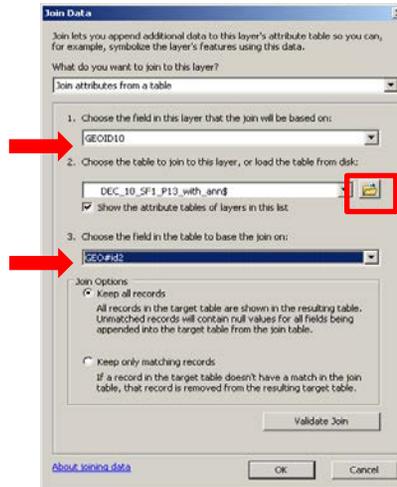
CREATING THE JOIN

Both the data file and the TIGER/Line Shapefiles contain fields that uniquely identify a geographic entity. These fields are necessary for creating a join.

In ArcMap, right-click on the TIGER/Line Shapefile that the data will be joined to. Select “Joins and Relates.” From the submenu, select “Join.”



A new screen appears where you select the field from the shapefile that will be used to join the data. You want the field with the fully qualified geographic code. In the 2010 shapefiles the field is GEOID10. In later versions of the shapefiles, the field is GEOID. The TIGER/Line Shapefiles technical documentation has more information on the record layouts and definition of each field.



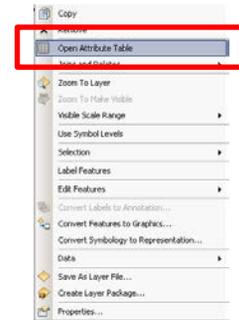
The next step is to select the data file. Use the browse (open folder icon) option to navigate to the data file. This is the Microsoft Excel Workbook file you created.

The final step is to choose the field from the data table to base the join on. The fully qualified geographic code in the American FactFinder data download is in a field named “GEO#id2” (ArcGIS changes the “.” from the original file to “#”). You have two join options: “Keep all records” or “Keep only matching records.” Click “OK.”

SEEING THE DATA

ArcMap builds a relationship between the shapefile and the data file. To see the data, open the attribute table for the shapefile by

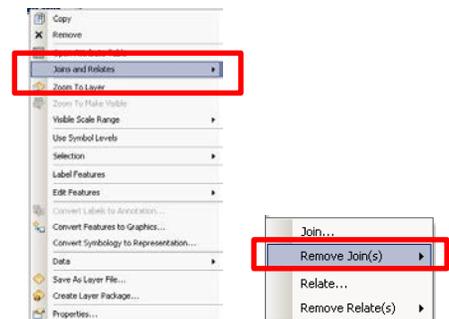
right clicking on the shapefile name and select “Open Attribute Table.”



The table now has the attributes from both the shapefile and the data table. The data can be used to create thematic maps or for other analysis. Multiple files can be joined to the shapefile.

REMOVING THE JOIN

Removing the data join is similar to creating the join. Right-click the shapefile layer that is joined to the data to be removed. Select “Joins and Relates.” This time select “Remove Joins.” Select the join to be removed or select “Remove All Joins.”



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