

## 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:

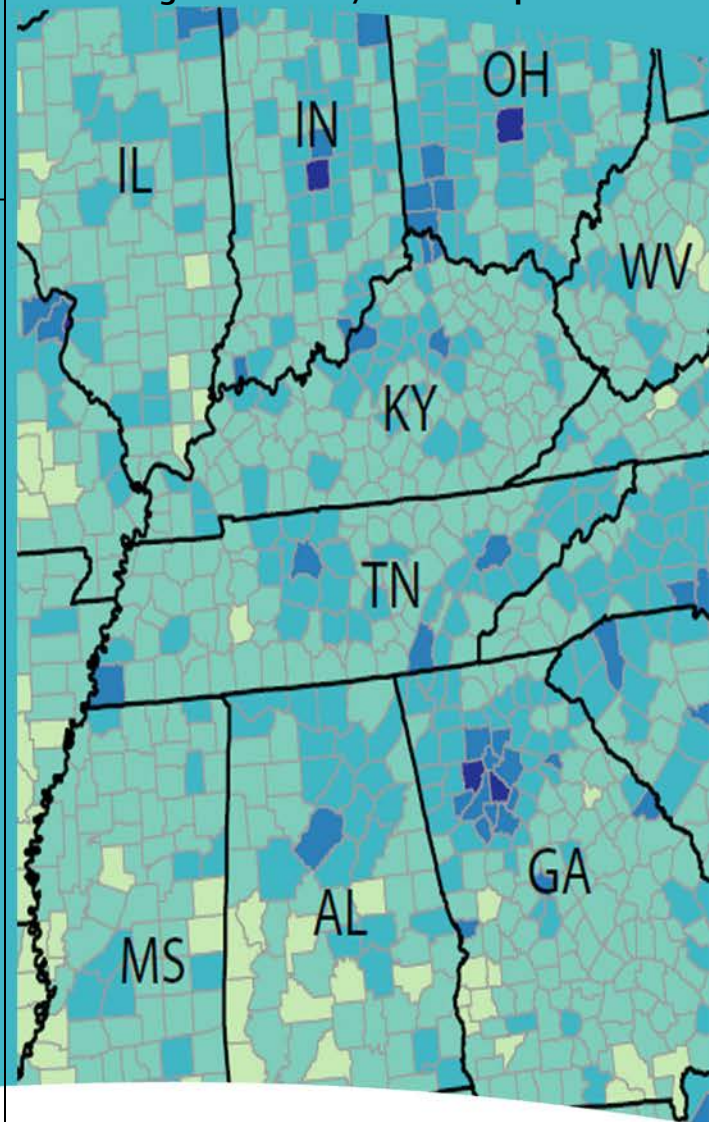
[geo.tiger@census.gov](mailto:geo.tiger@census.gov)

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

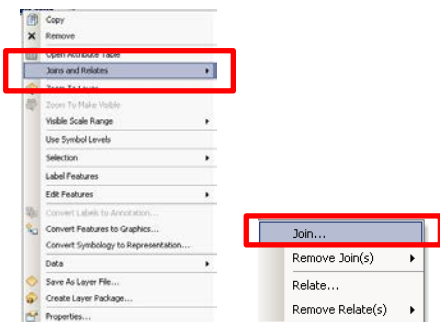
Open ArcMap and add the TIGER/Line shapefiles for the area of interest to the map using the “Add Data” icon or “File – Add Data – Add Data.”



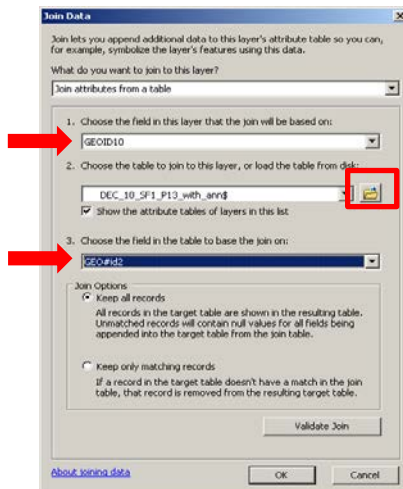
## CREATING THE JOIN

Both the data file and the TIGER/Line Shapefile 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 census tract shapefile the field is GEOID10 (uniquely identifies the census tract within the nation). The TIGER/Line Shapefiles technical documentation has more information on the record layouts and definition of each field.



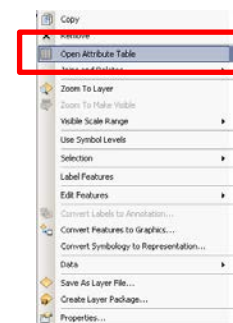
The next step is to select the data file. Use the browse (open folder icon) option to navigate to the data file. This is the Microsoft Excel Workbook file you created.

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,

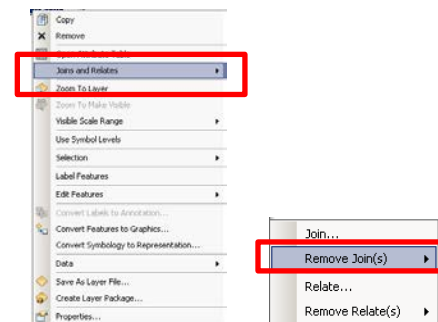
open the attribute table for the shapefile by right clicking on the shapefile name and select “Open Attribute Table.”



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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