

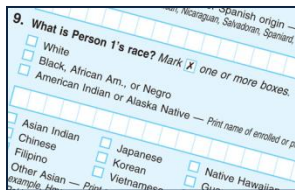
# Find and Use Census Data in ArcGIS

**Washington GIS Conference  
April 20, 2010  
Tacoma, WA**

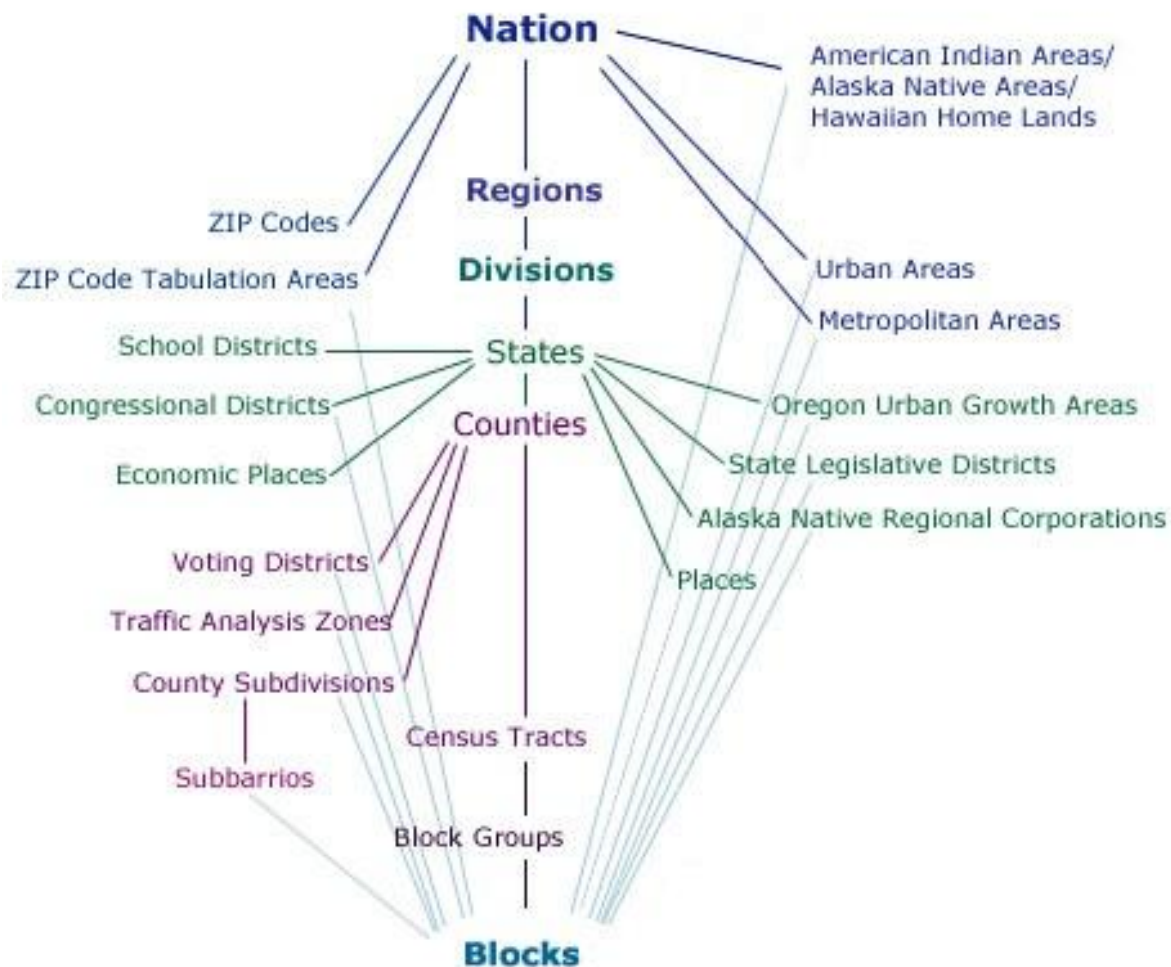
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Chris De Sisto

U S C E N S U S B U R E A U



# Census Geography



# Census Data Products

9. What is Person 1's race? Mark  one or more boxes.

White

Black, African Am., or Negro

American Indian or Alaska Native — Print name of enrolled or principal ancestor

Asian Indian

Chinese

Filipino

Other Asian — Print name of race

Japanese

Korean

Vietnamese

Native Hawaiian or Other Pacific Islander

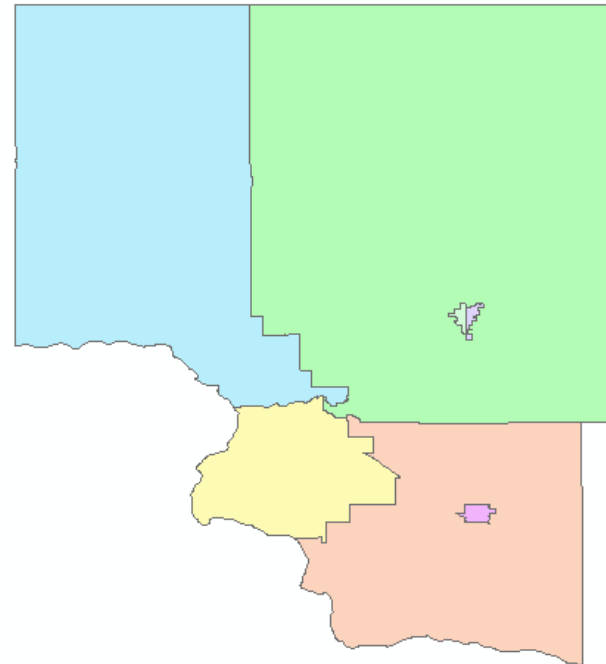
Spanish origin — Print name of race

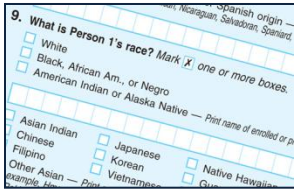
## Statistical

Figure 2-5. **Geographic Header Record—Con.**  
**Summary File 1 Final National File—Con.**

Field	Data dictionary reference name	Field size	Starting position	Data type
Metropolitan Area Central City Indicator.....	MACCI	1	115	A/N
Primary Metropolitan Statistical Area.....	PMSA	4	116	A/N
New England County Metropolitan Area.....	NECMA	4	120	A/N
New England County Metropolitan Area Central City Indicator.....	NECMACCI	1	124	A/N
New England County Metropolitan Area Size Code..	NECMASC	2	125	A/N

## Spatial





# American FactFinder

**“Your source for population, housing, economic, and geographic data”**

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

U S C E N S U S B U R E A U

9. What is Person 1's race? Mark (X) one or more boxes.

White

Black, African Am., or Negro

American Indian or Alaska Native — Print name of enrolled or principal blood quantum

Spanish origin — Print name of enrolled or principal blood quantum

Asian Indian

Chinese

Filipino

Other Asian — Print name of enrolled or principal blood quantum

Japanese

Korean

Vietnamese

Native Hawaiian or Other Pacific Islander — Print name of enrolled or principal blood quantum


# TIGER/Line®

## Topologically Integrated Geographic Encoding and Referencing system

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**TIGER®, TIGER/Line® and TIGER®-Related Products**

**TIGER**

Topologically Integrated Geographic Encoding and Referencing system

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**Latest TIGER/Line® Shapefile Release**

- TIGER/Line® Shapefiles are spatial extracts from the Census Bureau's [MAF/TIGER](#) database, containing features such as roads, railroads, rivers, as well as legal and statistical geographic areas.
- TIGER/Line® Shapefiles are made available to the public for no charge and are typically used to provide the digital map base for a Geographic Information System or for mapping software.
- TIGER/Line® Shapefiles are designed for use with geographic information system (GIS) software. The TIGER/Line® Shapefiles do not include demographic data, but they contain geographic entity codes that can be linked to the Census Bureau's demographic data, available on [American FactFinder](#)

[2009 TIGER/Line® Shapefiles Main Page](#) -- Released **October 1, 2009**. **NEW!**

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

U S C E N S U S B U R E A U

# Find and Use Census Data in ArcGIS

## Combining Census data tables with spatial products



### How to Download American FactFinder data:

1. Visit <http://factfinder.census.gov>
2. Click 'DATA SETS' from the left pane.
3. Select a Census/Survey and the data you would like to download.
4. Select the geography and location, ranging from national to block level.
5. Select the data tables to download, up to 50 tables per download.
6. View the results of your query and use the Print/Download button to open the download page.
7. Select which format you would like to download. For novice users a zip file is recommended because it contains the geographic codes needed for use in ArcGIS.



Figure 1. American FactFinder homepage <http://factfinder.census.gov>

### How to Access TIGER/Line Shapefiles:

1. Visit <http://www.census.gov/geo/www/tiger/>
2. Click the link to the Latest TIGER/Line® Shapefile Release.
3. Click the link to Download the TIGER/Line Shapefiles Now.
4. On the right, select the state geography to download or select the national shapefiles on the left. Be sure your geographic location and level match your American FactFinder query for proper use in ArcGIS.
5. After choosing the geography to download (down to county level), select the shapefiles to download. Note: if linking tabular data from American FactFinder, Census Tracts and/or Block shapefiles for the data vintage will need to be selected.
6. Download the shapefiles.

To learn more about the TIGER/Line shapefiles see the documentation section found after clicking on Download TIGER/Line Shapefiles Now.

## TIGER/Line®

### Topologically Integrated Geographic Encoding and Referencing system

- Free geographic shapefiles of US and territories
- Contains hydrography, railroads, legal and statistical areas, and detailed street information including address ranges
- Based on Census geography and linkable to American FactFinder data
- TIGER/Line® has current boundaries as of 1/1/09, and has releases back to 1990

## American FactFinder

"Your source for population, housing, economic, and geographic data"

- Create and download maps
- Go beyond demographics, the Census collects statistics on the economy, housing, and government
- Learn about the data with detailed descriptions about surveys and censuses
- View and download Census data for specified geography in various formats

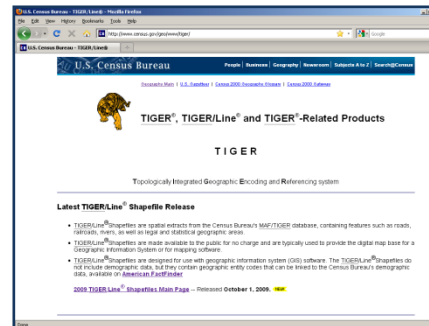


Figure 2. TIGER/Line® homepage <http://www.census.gov/geo/www/tiger/>

### How to Use American FactFinder Data with Shapefiles in ArcGIS

1. Unzip the TIGER/Line Shapefiles and American FactFinder data to a local folder.
2. Start a new ArcMap session and add the TIGER/Line Shapefiles and American FactFinder data.
3. Join the American FactFinder data to the TIGER/Line Shapefiles based on the matching "FP" field in the shapefile and GEO\_ID2 field in the table, see Figure 3. The number string is based on the two digit state code, three digit county code, six digit census tract number, and four digit block number (e.g. Block 3089 in Census Tract (2000) 980600 in Clallam County (009), WA (53) would have a BLKIDFP00 in the shapefile and a GEO\_ID2 in the American FactFinder table of 530099806003089).
4. Export the joined data and shapefile into a

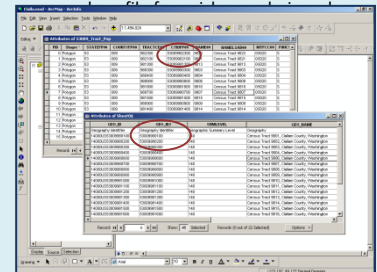


Figure 3. Joining the shapefile to the data based on geography.

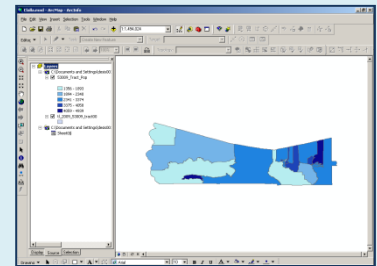


Figure 4. Map symbolized to show shapefile joined to population data.

## **TIGER/Line<sup>®</sup>**

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

## **American FactFinder**

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

## **Census Bureau Geography**

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

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