US Census Data & American Fact Finder

Topic Overview

Why Use Census Data?

- US Census provides a detailed snapshot of demographic information
 - population (number of people)
 - general social characteristics
 - statistical abstract of the US
- Provides useful information to inform the decision-making process

More About the Census

- What is the purpose of the US Census?
 - Public Law: data collected and released that is necessary for voting district configuration
 - (Over 18 years old; total population; race)
- Decennial Census
 - data collected every 10 years
 - households, income, education, home ownership, etc.
 - United States, Puerto Rico and Island Areas
 - summary files provide levels of detail at different scales
- Other surveys conducted more frequently
 - American Community Survey, Economic Census
 - population estimates program
 http://www.census.gov/main/www/surveys.html
 updated link: http://www.census.gov/aboutus/surveys.html

Summary Files

- Summary File 1 (SF 1) and 2 (SF 2)
 - census short form (100% entire population)
- Summary File 3 (SF 3) and 4 (SF 4)
 - census long form (sample of the population)
- SF 1 and SF 3: data on a larger set of topics
- SF 2 and SF 4: vast data on population subgroups

Content of Data

Public Law (P.L.) Data

- Population, total and over 18 (voting)
- Race and ethnicity

SF1

- Age & sex
- Race & ethnicity
- Household relationships
- Housing units & tenure data;vacancy characteristics
- Group quarters data
- Urban/rural

More Detailed Forms

SF3 - Population

- Age
- Race & ethnicity
- Marital Status
- Employment & Income
- Language spoken at home, ancestry & migration
- Military service
- Farm residence
- Disability
- Grandparents as caregivers
- School enrollment & educational attainment

SF3 – Housing

- Heating fuel & fuel cost
- Number of rooms & bedrooms
- Occupation, industry, class of worker; work status in 1999
- Year structure built & units in structure
- Telephone service
- Plumbing & kitchen facilities
- Utilities, mortgage, taxes, insurance
- Value of home/monthly rent paid
- Vehicles available
- Year moved into residence

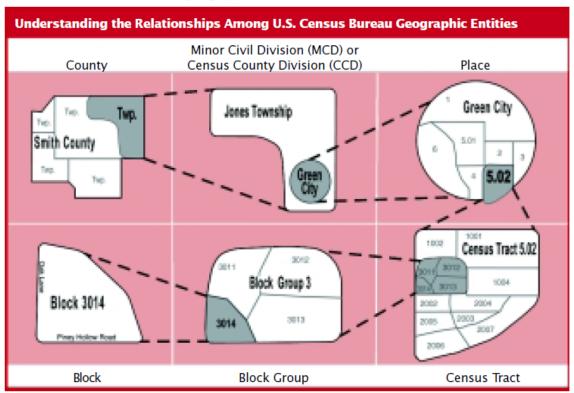
A Note on Important Distinctions

- Race vs. Ethnicity
 - Race is a physiological construct whereas ethnicity is a sociological one. They are not interchangeable terms.
- Household vs. Family
 - A household is an occupied housing unit. A family is that, also, but in addition, the occupants must be related to one another.
 The category "family" is a subset of the category "household."
- Metropolitan vs. Urban
 - Metropolitan and urban are not interchangeable terms but rather have distinct definitions in Census-speak. With the new emphasis on commuting patterns in the definition of "corebased" areas, metropolitan areas can include quite rural segments.

Geographic Areas

Census data is broken up into geographic areas

Census Small-Area Geography



Geographies

Geographies are created on a basis of population density:

- tracts≈ 1,000 people
- block groups≈ 500 people
- blocks≈ 100 people

So size will vary from urban (small) to rural areas (large).

Note About Sample data (more detailed SF 3 information)

- It is less reliable at very small levels of geography.
- Consequently, the lowest level of geography in Summary File 3 is the block group rather than the block.
- This also helps protect the confidentiality of respondents.

ZIP Code Tabulation Areas (ZCTAs)

- ZCTAs are <u>not</u> the same as ZIP Codes
 - statistical geographic entity produced by the US Census Bureau for tabulating summary statistics (used in 2000 and 2010 Census)
 - generalized area representations of US Postal Service ZIP Code service areas
 - aggregate of Census blocks
- Items available for ZCTA
 - boundaries and shapefiles, relationship files (future), plus other items
- Census Bureau is tabulating 2010 Census data by ZCTA
 - NO Postal Service ZIP Code data is available for the 2010 Census

Tabular Census Data

- Tabular Data
 - by Summary File
 - Large data sets
 - see instructions from Census.gov and with downloaded files for instructions on using the data in various software packages
 - two files may be required to accurately view and use the data (appropriate files and instructions are included in the zip file data downloaded from AFF)

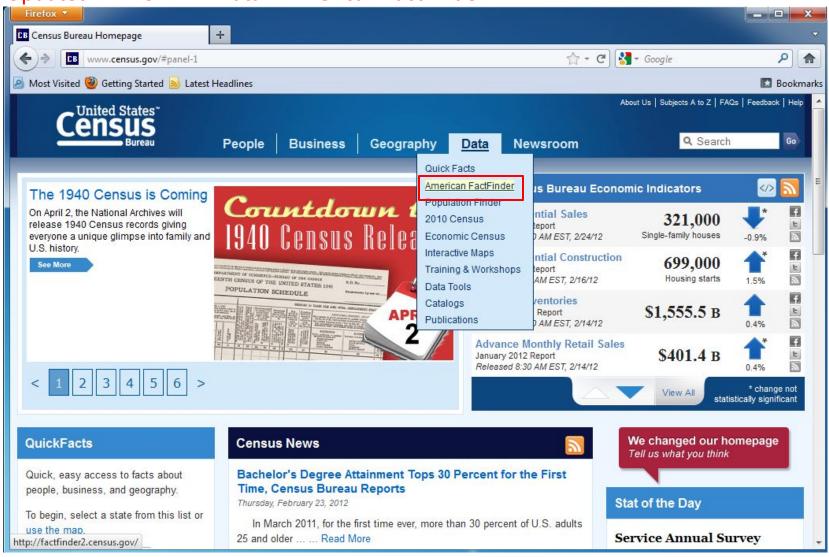
Spatial Data

- Relate tabular data to spatial data for display
 - TIGER Line shapefiles (Census)
 - ESRI data
 - NCSU Libraires
 - provides links to these national datasets and many NC local government subsets
- Scale of data for display
 - Census Tract, Block Group, Block
 - What data are you displaying?
 - remember, SF1, SF3 summaries collect data at difference scales

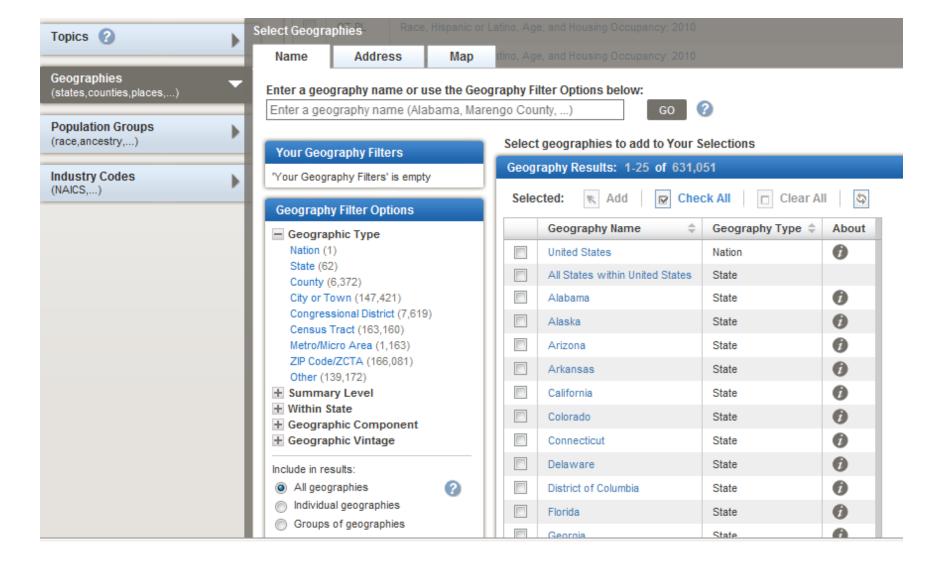
Advanced Geospatial Analytics

http://www.census.gov/

Updated link for AFF: Data > American FactFinder



Advanced Geospatial Analytics



Data Access

- American Factfinder
 - filter data that you are interested in using
 - download tabular data
- NCSU Libraries
 - starting location to fine spatial data relevant to your tabular information to display
- What Year?
 - data is archived and available historical reference / comparison (...1990, 2000, 2010)
 - Check metadata, Census Bureau information for details on changes to the process, data collected, boundary changes, etc.

Thank You