Using American Factfinder

What is American Factfinder? American Factfinder is a search engine that provides access to the population, housing and economic data collected by the U.S. Census Bureau. It can be used to retrieve data from the 2000 and 2010 Census, American Community Surveys (ACS), Population Estimates, the Economic Census and other Census Bureau surveys. Some of the data from these programs may not be available for areas with low populations. Older Census (pre-2000) data is available from the National Historical GIS website (https://www.nhgis.org/).

About Census Bureau Surveys

The Census Bureau collects data on a number of different topics, including people and the economy. This data is delivered through several different Census reports, including the Decennial Census, which provides population and housing data collected every 10 years, Economic and Government censuses, which are done every 5 years, and the American Community Survey, which is a survey of a sample of the population conducted every year. Data from the Census of Agriculture is available from the U.S. Department of Agriculture. The primary Census Bureau surveys are:

Decennial Census – a survey of the *entire* population of the United States that is taken every 10 years (in years ending with 0). It is used to distribute the seats in Congress.

American Community Survey (ACS) – a survey of a *sample* of the population that is conducted continuously. This survey provides data that is more current than the **Decennial Census**, but may not provide data for all areas. Data is released in 1- and 5-year estimates, depending on an area's population. To retrieve data for areas within an entire state, such as counties in both urban & rural areas, use the 5-year estimates.

Features of American Community Survey Data

Features	1-Year Estimates	5-Year Estimates
Time Period	1 Year	5 Years (60 months)
Population Threshold	≥ 65,000	All Areas
Sample Size	Smallest	Larger
Reliability	Least reliable	Most reliable
Currency	Most current	Least Current
Uses	To analyze areas with large populations when current data is needed	To analyze areas with very small populations (rural areas), when current data is needed and 1 and 3 year data is not available

Based on US Census Bureau's *When to Use 1-year, 3-year, or 5-year Estimates*, US Census Bureau
https://www.census.gov/programs-surveys/acs/guidance/estimates.html

Economic Census – a survey of business establishments conducted every 5 years. Data is grouped by NAICS (North American Industry Classification System) code and provided for local areas, counties, states, regions and the entire country.

Census of Governments – a survey of government entities conducted every 5 years. It provides information on the number and type of government agencies, how the government is organized and government employment and payroll.

Searching for Community Facts

1. Link to **American Factfinder** (http://factfinder.census.gov)

2. Several options are offered, including a **Community Facts** option that contains a search box. This option can be used if seeking quick facts or data about a community or area, such as population, income, American Community Survey and Economic Census data.

3. Enter the name of the place of interest in the search box. A list of options might appear as text is entered. Select the option that describes your need or finish entering the place name and click **Go**. The total population for the area and a brief list of common data tables will appear. Other, less frequently requested, data options will be listed along the left side of the page. To view one of the popular tables, click on the name of the table. That table will be shown.

4. To view data on one of the other themes listed on the left side of the page (Age; Business & Industry; Education; Governments; Housing; Income; Origins & Language; Poverty; Race and Hispanic Origin or Veterans), click on that entry. The page will display a quick summary of data about that topic, a list of popular tables on the topic or offer users the option to connect to the **Guided Search** or **Quick Facts** pages. The **Quick Facts** option links to the **Census Bureau's Quick Facts** page. The **Guided Search** option provides step-by-step access to Census data.

Accessing Data through Guided Search

The American Factfinder website also contains a Guided Search system that leads users through some of the steps involved in identifying possible data tables. To use **Guided Search**:

1. Link to **American Factfinder**.

2. Click on **Guided Search** and then the **Get Me Started** button.

3. The system prompts users to identify their general data needs (people [population], housing, business & industry, a specific dataset or table number or title). Click the appropriate radio button to identify the type of data needed and click the **Next** button.

4. The next page allows users to further narrow their search topic. An alphabetical list of topics is offered for each data type. Each topic can be expanded by clicking on the **+** (plus) sign next to it, revealing an alphabetical list of sub-topics for each major topic. Clicking on a sub-topic that deals with the subject of interest will reduce the number of results. When a sub-topic has been selected, the **Your Selections** box will display the selected topics and the number of tables matching that selection. Then click on the **Next** button underneath the **Your Selections** box.
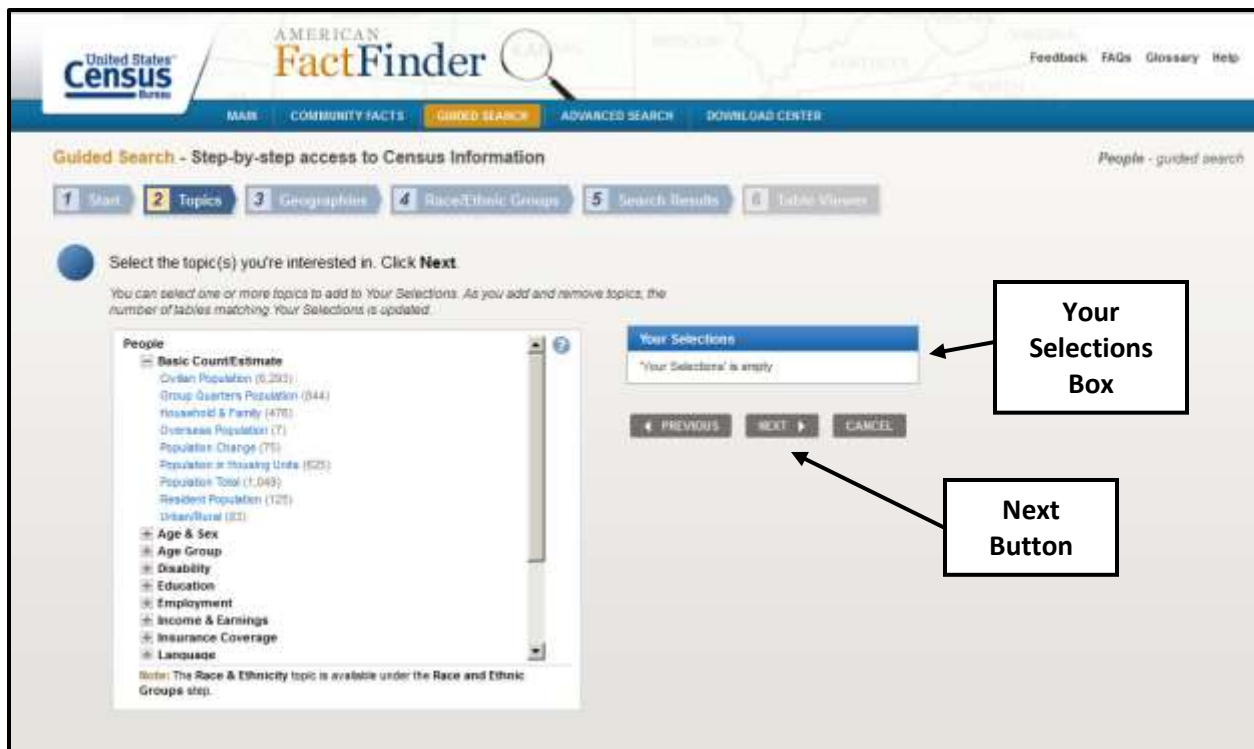
5. The next step asks users to identify information about the location for which data is needed (a place name or zip code) or type of geographic area of interest (county, county subdivision [township], census tract, etc.). This can be done by entering a place name into a search box or choosing the type of geographic area(s) of interest with a series of pull-down menus. Choose the appropriate area(s) of interest based on the following instructions:

    a) Quickly reduce the number of tables in the results by entering the name of a specific state, county, city, town or zip code in the search box at the top of the page.

OR

    a) Specify the type of geographic area of interest using a pull-down menu. The geographic area types offered are: United States, states, counties, places, county subdivisions (townships), Census tracts, Congressional Districts, Zip Code Tabulation Areas, American Indian/Alaska Native Areas & Hawaiian Home Lands and Metropolitan or Combined Statistical Areas. If another geographic area type is needed, users can link to **Advanced Search**. (Use the Name tab on Advanced Search.)

b) Narrow the search to a single state, county or other area or retrieve data for the entire United States, all counties in a state or another area or group of areas by using additional pull-down menus.

c) When a geographic area selection has been made, click **Add to Your Selections**. The number of tables in the results will decrease.

d) When a selection has been made, click **Next** to move on.

6. The next step in **Guided Search** asks users to identify the racial, ancestry or ethnic group of interest, if any. If racial, ancestry or ethnic group data is not needed, this step can be bypassed by clicking on the **Skip This Step** button.

a) If seeking data for basic racial, ethnic, ancestry or tribal groups, click on **Select From Basic Groups**. This option allows users to retrieve data on basic racial and ethnic groups and tribes.

b) If seeking detailed data on specific tribes, ancestries, countries of birth, click on **Select From Detailed Groups**.

7. If Racial, Ethnic or Ancestry data was not selected, the next (**Search Results**) page offers users a list of tables that meet their criteria. The 10 most commonly retrieved will be listed in a results box. To view a table, click on the table of interest. If the tables do not provide the information needed, it is possible to view all of the remaining tables by clicking on the

Advanced Search link below the results list.

If the **Select From Basic Groups** or **Select From Detailed Groups** options were chosen, identify the racial, ethnic or ancestry group of interest and click **Add to Your Selections**. Once all of the racial, ethnic or ancestry groups of interest have been identified click **Next**.

While the Guided Search system can be used to narrow searches for data, the initial results given may not match expectations or needs. If it does not find the needed results, use **Advanced Search**.

Accessing Data through Advanced Search

The **Advanced Search** system allows users to select from all of the datasets available through American FactFinder and access data for all geographic types. There are several steps to finding data through Advanced Search:

- Identify a **Dataset** of interest (if known).
- Identify the **Topic** of interest.
- Identify the **Geographic Area** of interest.

These steps can be performed in any order. The options on the **Advanced Search** page allow users to select options to limit the number of tables retrieved. The tables can then be examined to determine whether the data retrieved will serve the users' needs. A search option is also available.

Searching for Data through Advanced Search

1. Link to **American Factfinder** and select **Advanced Search**. An explanation of the Advanced Search system will be shown with a button saying **Show Me All**. Click the button.

2. The first page that appears allows users to search for a topic or table name in several categories, including: topic, race/ancestry, industry or occupation. Users can also enter the name of a state, county or place if they wish.

3. To use the search system, choose a general topic by clicking in the radio button next to the topics listed below the search boxes and enter a few letters of a word on that topic. A list of terms matching what is entered will be shown. Users can select from those terms or continue entering a term.

4. Once a topic has been entered or selected, enter the name of the State, County or place for which data is needed. If data is needed for another type of geography (Census Tracts, Block Groups, Townships, etc.), use the search options on the left side of the page. **NOTE**: Data for **Census Blocks** is available through the Census Bureau **Download Center** or the **National Historic GIS** website.

Selecting from Search Options

American FactFinder's **Advanced Search** page contains a series of selection options on the left side of the page that can be used to narrow selections. These links can be used to select **Topics**, **Geographies**, **Race & Ethnic Groups**, **Industry Codes** or **EEO Occupation Codes** for which data is needed.

Selecting a Dataset

1. To narrow a search to a specific dataset, click on the word **Topics** on the left side of the Advanced Search page to view a menu of selection options, one of which is **Dataset**. Click on the word **Dataset** to select the dataset of interest. A list of datasets available is presented. Next to the name of each dataset is a number in parentheses. This shows the number of tables

available for each dataset. To select a dataset, click on the name of the dataset that contains the data of interest. A list of tables available for that dataset will be shown.

The datasets available in American Factfinder are listed below in alphabetical order (users will have to browse to find the dataset of interest).

2010 & 2000 Decennial Census - includes data for population, age, race, ancestry, income, education, employment, language, occupation, poverty, housing and other topics for *all* people. Data can be retrieved for a variety of geographic area types.

2010 & 2000 Redistricting Data – the first set of data released after each Decennial Census. It includes population totals and summaries by race, Hispanic or Latino, and voting age for all geographic areas. The 2010 Census Redistricting data also included data on housing and housing occupancy.

American Community Survey (ACS) – ACS data is available for 1 and 5-year estimates and older 3-year estimates from **2005 to the Present** (3-year estimates have been discontinued). The ACS surveys a *sample* of the population, which is used to develop a population estimate. The table on page 1 provides information about the data released with each estimate. To retrieve data for both rural and urban areas, use the 5-year estimates.

American Housing Survey – a biennial survey that provides information on a variety of housing subjects, including the size and composition of the nation's housing inventory, vacancies, fuel usage, condition, occupant characteristics, home improvements, mortgages and other housing costs, persons eligible for and beneficiaries of assisted housing and home values. Additional questions may be added to collect other information.

Annual Survey of Entrepreneurs – an annual survey (introduced in 2014) that provides information on economic and demographic characteristics of businesses and business owners by gender, ethnicity, race, and veteran status.

Annual Survey of Manufactures – an annual survey (except during Economic Census years) that collects data on manufacturing employment, payroll, supplemental labor costs, materials costs, operating expenses, value of shipments, value added by manufacturing, capital expenditures, fuels and electric energy used, and inventories of manufacturing establishments.

Annual Survey of State Government Finances - provides a survey of state Revenue by source, expenditures by object and function of expenditure, indebtedness including long or short-term debt, and assets by purpose and type. Data is available for 2012 and 2013.

Annual Survey of State Government Tax Collections - provides data on taxes collected by state in 5 tax categories and 25 tax subcategories, including the tax collections by type of tax and taxes collected by state governments. Available from 2012 to 2014.

Business Patterns – data on economic activity for counties, zip codes and metropolitan areas. Business Pattern data includes the number of businesses, employees, and payroll by industry. Data is available for the years 2011 to 2014.

Census of Governments - reports data on the scope and nature of the nation's state and local government sector, including data on public finance and employment, type of local

government organizations, powers, and activities and measures the fiscal relationship between federal, state, and local governments.

Commodity Flow Survey - provides data on the movement of goods in the United States, including commodities shipped, their value, weight, and mode of transportation, and the origin and destination locations of commodity shipments from manufacturing, mining, wholesale, and selected retail and services establishments.

Disability Employment, 2010-2010 – a special tabulation of Census data that was produced from 3-year American Community Survey data covering the time period from 2008-2010 for several US government agencies. Conducted every 5 years with the Economic Census.

Economic Census - a survey of business establishments conducted every 5 years. Data is grouped by NAICS (North American Industry Classification System) code and provided for local areas, counties, states, regions and the entire country.

EEO Tabulation - a custom tabulation of American Community Survey data for the time period from 2006-2010 that can be used by employers to benchmark the racial, ethnic, and sexual composition of their work force to the external labor market in a geographic area and occupation.

Nonemployer Statistics - data about businesses without paid employees (businesses operated by people who are self-employed) for the years 2004 to 2012.

Population Estimates - population by age, sex, race, and Hispanic origin for the nation, states and counties. Data is available from 2011 to 2014.

Redistricting Data – basic population data for the voting age population that is used to divide up representation in Congress, state legislatures and other areas with representative government.

Survey of Business Owners - provides data on characteristics of the businesses and their owners, including gender, ethnicity, race, and veteran status of business owners, Industry (by NAICS code), firm receipts and number of employees. It is reported for a variety of geographies, including the United States, states, metropolitan areas, counties, and places.

Survey of Public Employment & Payroll – provides estimates of state and local government employment and payrolls for 2012 and 2013.

Survey of Public Pensions - provides revenues, expenditures, financial assets, and membership data for the public pension systems. It includes data for individual pension systems as well as national, state, and local pension systems for the years 2012 and 2013.

Survey of School System Finances – provides data on revenues, expenditures, debt, and assets of elementary and secondary public school systems for school systems in all states and the District of Columbia for 2012 and can be viewed online or and downloaded.

2. Once a selection has been made, click the **Close** button in the upper right corner of the selection box.

Selecting Data by Topic

1. It is possible to narrow the search by choosing the general topic of interest and then selecting the type of data.. The **Search Options** on the left side of the page can be used to narrow the selection. The **Topics** area of the **Search Options** area allows users to narrow the search to include data on:

> **People** – allows users to specify the type of population data to be retrieved (basic population or specific topics, such as age, sex, race, education, employment, or income.

> **Housing** – allows users to retrieve data related to housing.

> **Business and Industry** – allows users to select the type of economic data to be retrieved.

> **Governments** – allows users to obtain data from the Census of Governments.

> **Year** – allows users to narrow to data reported for a specific year.

> **Product (Table) Type** – allows users to narrow to a specific type of table, such as a data profile, quick table or geographic comparison table, among others.

> **Program** – can be used to narrow data by the type of survey, including: American Community Survey, Survey of Manufactures, Business Expenses and Patterns, Commodity Flow, Decennial or Economic Census, Non-Employer (Self Owned Business) statistics, Population Estimates and Business Owners.

2. Choose the topic(s) of interest by clicking on **Topics**. Select the topic that best describes the data needed by clicking on the plus sign next to that topic. A list of subtopics will be shown.

   a) Choices can be narrowed further by selecting themes within each sub-topic; for example, some of the themes in the sub-topic **People** include Basic Count/Estimate; Age & Sex; Age Group; Disability; Education; Employment; Income & Earnings; Insurance Coverage; Language; Marital & Fertility Status; Origins; Population Change; Poverty; Relationship and Veterans.

   b) Once the sub-topic and theme have been selected, a list of subjects in that sub-topic will be shown. Each term is followed by a number in parentheses, showing the number of tables in that subject area.

   c) When a table has been selected, the word **View** at the top of the search results becomes active. Click **View**. The data table will be displayed. It is also possible to view a data table by clicking on the title of the table.

Selecting the Geographic Area of Interest

1. Census data can be retrieved for a wide variety of geographic entities, including the United States, States, Counties, County Subdivisions (townships), Metropolitan Statistical Areas, Places, Incorporated Places, Census Tracts, Block Groups, and American Indian or Alaska Native areas and Hawaiian home lands. To choose the geographic area of interest:

   a) Click on **Geographies** in the **Search Options** on the left side of the page. The system offers a search box and several tabs.

b) The **Name** tab in the **Select Geographies** menu offers the widest array of geographies (everything from the Nation to Block Groups and other areas). Click on the **Name** tab and choose the geography best suited for the study topic.

c) Choose the type of geography of interest. The system will then offer **Filter Options** that allow users to further narrow the geographic options.

d) Once the selection has been made, the word **Add** at the top of the **Geography Results** display becomes active. Click **Add**. The selection will appear in the **Your Selections** box at the top of the left side of the page. If there are multiple pages for a given geography, **Add** must be clicked before moving to the next page to select additional geographic areas (the system will prompt the user to add the selections before moving to the next page).

e) After selecting all of the geographic areas of interest, close the selection box by clicking the **Close** button in the upper right corner of the selection box.

Viewing a Data Table

1. Once the **Dataset**, **Topic** and **Geography** have been selected, choose the table(s) that best describe the data need. When a table has been selected, the word **View** at the top of the search results becomes active. Click **View**. The data table will be displayed.

2. Several options are offered while viewing a table:

- **Modify Table** - allows users to change the appearance of the table, collapse and expand data columns, rearrange columns and rows, sort data or filter the rows. It is also possible to transpose the rows and columns to show all data in a very long table that stretches over many pages. When the data is transposed, the data will be presented on a single page.

- **Add/Remove Geographies** – allows users to add geographic areas to or remove geographic areas from the table display.

- **Bookmark / Save** – a table can be bookmarked so that a user can return to it at a later date.

- **Download** – data can be downloaded for use in statistical or Geographic Information System software.

- **Create a Map** – the user can create a simple map from their data.

Downloading Data

After viewing a table to ensure that it shows the needed information, data can be downloaded by clicking on the word **Download** at the top of the results.

1. Use the **Database-compatible formats (.csv)** option to download the data for use with GIS.

2. Check the box labeled **Include descriptive data element names**, so that information about the data in each column of the table will be known.

3. Click **OK**. Repeat the entire process to download data for multiple tables if needed.

4. Once the data has been downloaded, save it. Then open the data in Excel. Edit the column headings and **GEO.id2** field (number with no decimal places) so that the data can be used with GIS software. See the article from the Spring, 2012 issue of *ArcUser* on using Excel Files in ArcGIS for more information on using Excel data in ArcGIS. Once all changes have been made, save the data as a text file. (If you are working with data for one of the states that have a FIPS code that starts with 0, converting Geo.id2 to a number will alter the FIPS code, forcing the system to drop the initial zero.)

Using the Census Bureau Download Center

While data for Census Tracts and Block Groups is available through Advanced Search, Block level data (the smallest geographic area for which the Census Bureau reports data) is only available through the Census Bureau Download Center. Block level data is only available for the SF1 files of the 2010 and 2000 Decennial Censuses. To download data:

1. Connect to **American Factfinder** and click on **Download Center**.

2. Select a Dataset. Only the Decennial Census has Block level data.

3. Choose the data set of interest.

> SF1 - Summary File 1, contains data on population, race, Hispanic origin, ancestry, age, households, and families. **Block level data is available**.

> SF2 - Summary File 2 contains data on population characteristics, such as sex, age, household size, tenure and type, relationship to householder such as nonrelative or child, family and family type. **Block level data is NOT available**.

Decennial Census data is also used to develop specialized summaries, such as data used for Redistricting, Congressional Districts and other small area summaries. Block level data is only available for SF1 data. When the data set of interest has been selected, click **Add to Your Selections**. Then click **Next**.

4. Choose the state and county of interest by using the pull-down menus on the Geographies page. Block level data can only be retrieved for one county at a time. After a selection has been made click **Add to Your Selections**. Then click **Next**.

5. The next page asks the user to identify the table of interest. Identify the data set of interest by clicking in one or more check boxes and then click **Next**. The system will provide a summary of the data to be downloaded. Users are also offered the option to include descriptive element names and urban/rural summaries if included in the file. **ALWAYS** include descriptive element names, because they are more meaningful than the alphanumeric codes for field names used by the Census Bureau. To change the selection, click **Cancel**. Otherwise, if everything is correct, click **OK**. The data download process will start.

Data will be provided as a zip file with a text readme file, a file with notes about the data, and metadata and data in separate csv files.
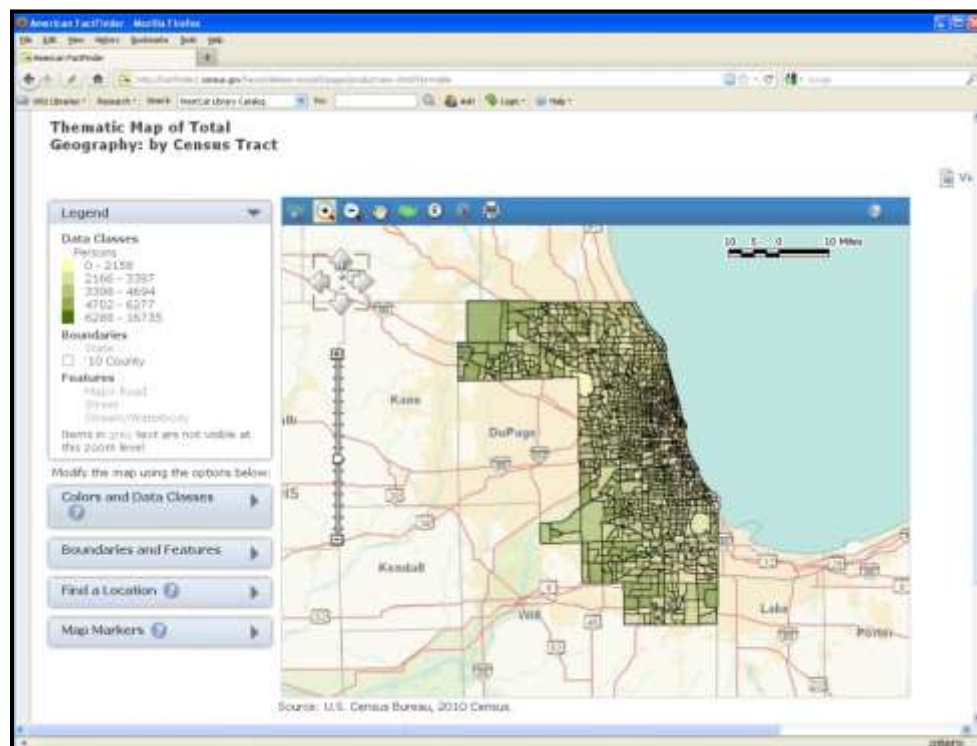
Mapping Data with American Factfinder

1. Get into **American Factfinder** (http://factfinder.census.gov). In **Advanced Search**, choose the type of **Geography** that will be mapped. The geographic selection must consist of

more than one feature: for example, Census tracts within Cook County, counties in Illinois or States within the United States.

2. Select the data **Topics** needed for the study. Once the appropriate selections have been made, click **View**.

3. When a data table appears, click on the words **Create a Map**. The system states: "**Click on a data value in the table to map**." Note that the numbers in the table are now hyperlinked. Click in a cell with the data of interest to the study. The system will display the topics to be mapped. Check to see that the selection is appropriate and click the **Show Map** button. A map of the data will be displayed. The mapping system may not work for smaller Census subdivisions in densely populated areas (for example Census Blocks in Cook County).

Mapping Data with the Census Data Mapper

In addition to the mapping option available in American Factfinder, the Census Bureau provides several interactive mapping applications (https://www.census.gov/geography/interactive-maps.html) that can be used to explore data. The **Census Data Mapper** can be used to map data on population, ethnicity, race, age, sex and households.

1. Link to the interactive mapping systems and choose **Census Data Mapper**. The initial map shows the Percent Male by County for the entire United States.

2. Change the data theme using the pull-down menu on the left side of the map. Choose one of the data topics.

3. Choose a data table for that theme by using the pull-down menu on the left side of the map under the words **Choose a data table**.

4. Choose the color palette and number of classes for the map by using the pull-down menus on the left side of the page.

5. Once the initial map is made, it is possible to change the geographic level or zoom in and out on the map using the scroll wheel on a mouse. The map can also be re-centered by clicking on the map with the mouse and sliding the map around in the window until the area of interest is centered.

6. To view data about a specific area, hover over the area with the cursor. A statistic on the topic will appear.