

American FactFinder

Gateway to the Census

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Imagine a funnel with several gigabytes of data in the maw and a computer screen at the tip. That's American FactFinder. Its job is to guide the public to millions of pieces of data gathered over the past decade for the nation, every state, county, city and hundreds of thousands of smaller geographies.

"Legacy FactFinder," the original site that shut down on Jan. 20, 2012, was admirably simple. It also was quirky, occasionally inconsistent in its search results (for example on disabilities), dreadfully slow in mapping and plainly inadequate for the flood of data from the 2010 Census.

So in early 2011 the Census Bureau launched a new site (factfinder2.census.gov). The old address (factfinder.census.gov) redirects to the new address after a several-second delay; at some future point both addresses will work automatically. The initial rollout, coinciding with the release of redistricting data, was poorly received by many journalists. But today the site lives up to the bureau's claims: Once you master its search functions you can find an amazing amount of data quickly.



The screenshot shows the homepage of American FactFinder. At the top, there's a navigation bar with links for 'MAIN', 'COMMUNITY FACTS', 'GUIDED SEARCH', 'ADVANCED SEARCH', and 'DOWNLOAD OPTIONS'. Below the navigation, there's a search bar with a placeholder 'e.g., Atlanta, GA' and a 'GO' button. To the right of the search bar is a large image of a young woman smiling. On the left side, there's a section titled 'Community Facts' with a sub-section for 'Guided Search', 'Advanced Search', and 'Download Options'. The background features a map of the United States with state outlines.

This is version 4.0 of a handout originally prepared for the NICAR conference in Raleigh in February 2011. It was updated for the McCormick census conference at Arizona State University in July 2011, completely revised for the NICAR conference in St. Louis in February 2012 and rewritten for the Nieman immigration workshop at Harvard in October 2013.

FactFinder's home page invites you to begin with the simplest possible search – Community Facts. This presents a community profile, a just-the-facts presentation drawn from the American Community Survey. It's a good place to start but barely touches the surface.

I'm going to spend most of my time on Advanced Search – the heart of FactFinder. Here's the Advanced Search home page:

The screenshot shows the American FactFinder Advanced Search interface. At the top, there's a navigation bar with links for U.S. Department of Commerce, United States Census Bureau, MAIN, COMMUNITY FACTS, GUIDED SEARCH, ADVANCED SEARCH (which is highlighted in orange), and DOWNLOAD OPTIONS. Below the navigation is a search bar with the placeholder "Search - Use the options on the left (topics, geographies, ...) to narrow your search results". To the right of the search bar is a map of the central US with states like Kansas, Missouri, and Kentucky labeled. On the left side, there's a sidebar titled "Your Selections" which says "'Your Selections' is empty". Below this are several expandable categories: Topics (age, income, year, dataset, ...), Geographies (states, counties, places, ...), Race and Ethnic Groups (race, ancestry, tribe), Industry Codes (NAICS industry, ...), and EEO Occupation Codes (executives, analysts, ...). To the right of the sidebar, instructions say "To search for tables and other files in American FactFinder:" followed by three numbered steps: 1. Enter search terms and an optional geography and click GO. Step 1 includes a search form with fields for "topic or table name" and "state, county or place (optional)", and radio buttons for "topics", "race/ancestry", "industries", and "occupations". 2. Select from Topics, Race and Ethnic Groups, Industry Codes, EEO Occupation Codes. Step 2 lists bullet points: "these are added to 'Your Selections'" and "the Search Results are updated". 3. Next, select Geographies (states, counties, cities, towns, etc.). Step 3 lists bullet points: "these are added to 'Your Selections'" and "the Search Results are updated".

The Census Bureau publishes thousands of tables every year. This search form lets you narrow your search quickly to find the exact table you want:

- **Topics** includes people, housing, business and industry as well as less obvious divisions such as the year the data was collected and the dataset (American Community Survey, for example).
- **Geographies** drills down from the nation to states, counties, places (cities and towns), ZIP codes and census tracts.
- **Race and ethnic groups** lets you narrow a search to a specific racial group or even to a particular immigrant nationality.

I usually start my search by selecting a geography. I click on the Geographies box and a box immediately opens. I type the address of the Walter Lippman House, home of the Nieman Foundation.

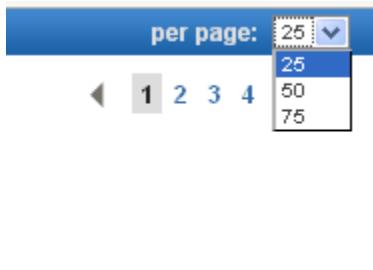
I press the GO button, and FactFinder delivers 28 geographies that contain this address. This includes obvious choices such as Massachusetts and Cambridge, several variations on the Boston metropolitan area, the local congressional district and a few real treats – the census tract, block group and block. The Census Bureau has collected data for every single one of them. Each of those 28 geographies is a hyperlink. Let's click on three of them – the tract, the city and the area's seat in the lower house of the state legislature. As we click the city, FactFinder tells us there are 22,587 tables available; when we click on the tract that covers this address, the number is reduced to 4,717. Finally, when we click on 25th Middlesex District, the lower legislative house seat, the number falls to 2,199.

FactFinder is performing a Boolean search. It is looking for all tables that meet a series of criteria: this AND this AND this. That's why adding more geographies reduces the number of tables.

Now let's close the "Select Geographies" tab and look at the results.

ID	Table, File or Document Title	Dataset	About
DP02	SELECTED SOCIAL CHARACTERISTICS IN THE UNITED STATES	2011 ACS 5-year estimates	
DP03	SELECTED ECONOMIC CHARACTERISTICS	2011 ACS 5-year estimates	
DP04	SELECTED HOUSING CHARACTERISTICS	2011 ACS 5-year estimates	

There's a lot on this page, so let's take it one piece at a time. First that tiny thing on the top right is a hidden convenience. Take a close look – really close. You can decide how many tables you want to display on a screen.



Next the cheery “i” icons in the “About” column: They represent empty tables. Why should you care? Because this could be a timesaver on deadline. FactFinder has thousands of preformatted tables which in turn represent hundreds of thousands of live tables. (Think, for example, of DP02, Selected Social Characteristics in the United States: one preformatted table, replicated for each and every block, block group, census tract, city, county and state in the whole country.) That’s where the “i” comes in handy; you can window-shop for tables, picking just the ones you really need, without having to wait for the data to load.

Next the Dataset column: We’re seeing just a few of the nearly 2,200 tables with data on the Nieman neighborhood. But those few tables come from one dataset –the 2011 5-year American Community Survey. There are dozens more.

You’ve already narrowed down the data geographically by selecting a tract, a city and a legislative district. You can sort tables by ID, file name or dataset, if you are among the very few people who are fluent in census-speak. But FactFinder also provides a search bar near the top of the Search Results panel to let you search the tables on the fly. So if you want information on the foreign-born population, just start typing, and FactFinder instantly offers suggestions:

Your Selections		Search Results: 1-25 of 1,271 tables and other products match 'Your Selections'															
Search using... Census Tract Census Tract 1255, St. Louis city, Missouri		Selected: View Download Compare <input type="checkbox"/> Clear All															
		Search for: <input type="text" value="foreign"/>															
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>ID</th> <th>Table Description</th> </tr> </thead> <tbody> <tr> <td>DP-1</td> <td>B05006: PLACE OF BIRTH FOR THE FOREIGN-BORN POPULATION</td> </tr> <tr> <td>DP-1</td> <td>B05006: PLACE OF BIRTH FOR THE FOREIGN-BORN POPULATION IN THE UNITED STATES</td> </tr> <tr> <td>DP02</td> <td>B05006PR: PLACE OF BIRTH FOR THE FOREIGN-BORN POPULATION IN PUERTO RICO</td> </tr> <tr> <td>DP03</td> <td>Foreign Born</td> </tr> <tr> <td>DP04</td> <td>SELECTED HOUSING CHARACTERISTICS</td> </tr> <tr> <td>DP05</td> <td>ACS DEMOGRAPHIC AND HOUSING ESTIMATES</td> </tr> </tbody> </table>		ID	Table Description	DP-1	B05006: PLACE OF BIRTH FOR THE FOREIGN-BORN POPULATION	DP-1	B05006: PLACE OF BIRTH FOR THE FOREIGN-BORN POPULATION IN THE UNITED STATES	DP02	B05006PR: PLACE OF BIRTH FOR THE FOREIGN-BORN POPULATION IN PUERTO RICO	DP03	Foreign Born	DP04	SELECTED HOUSING CHARACTERISTICS	DP05	ACS DEMOGRAPHIC AND HOUSING ESTIMATES
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DP04	SELECTED HOUSING CHARACTERISTICS																
DP05	ACS DEMOGRAPHIC AND HOUSING ESTIMATES																
Search using the options below: Topics <small>(age, income, year, dataset)</small>																	

Now I’ve reduced the number of tables to 150 – all in the Nieman neighborhood, all containing information on the foreign-born.

First I'm just going to look at a single table. I'll click on the hyperlink for S0501, Selected Characteristics of the Native and Foreign-Born Populations. A moment later the table appears, with data visible in separate columns for Census Tract 3536, Cambridge and the 25th Middlesex District.

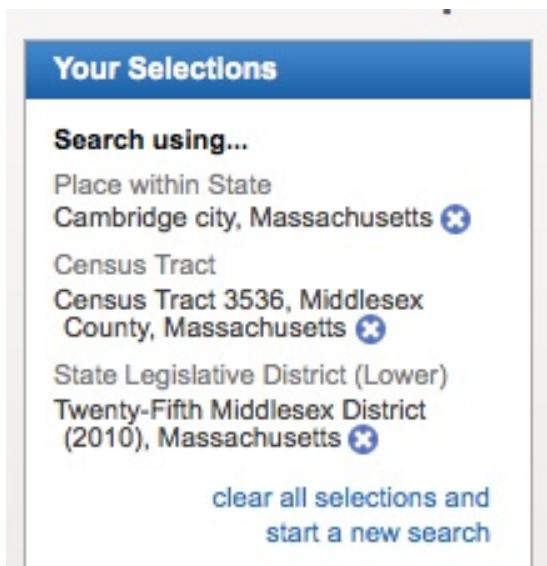
The screenshot shows the FactFinder interface for the 2007-2011 American Community Survey 5-Year Estimates. The top navigation bar includes 'DP02' and 'SELECTED SOCIAL CHARACTERISTICS IN THE UNITED STATES'. Below the navigation are 'Table View' and 'BACK TO ADVANCED SEARCH' buttons. Under 'Actions', there are links for 'Modify Table', 'Bookmark', 'Print', 'Download', and 'Create a Map'. Below these are 'View Geography Notes' and 'View Table Notes' buttons. A note states: 'Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.' The main content is a table with three rows: 'Census Tract 3536, Middlesex County, Massachusetts', 'Cambridge city, Massachusetts', and 'Twenty-Fifth Middlesex District (2010), Massachusetts'. The table has four columns for each row, labeled 'Subject', 'Estimate', 'Margin of Error', and 'Percent Margin of Error'.

Subject	Census Tract 3536, Middlesex County, Massachusetts			Cambridge city, Massachusetts			Twenty-Fifth Middlesex District (2010), Massachusetts		
	Estimate	Margin of Error	Percent Margin of Error	Estimate	Margin of Error	Percent Margin of Error	Estimate	Margin of Error	Percent Margin of Error
Census Tract 3536, Middlesex County, Massachusetts									
Cambridge city, Massachusetts									
Twenty-Fifth Middlesex District (2010), Massachusetts									

If I want to download the data, I simply click on the blue **Download** link near the top. FactFinder downloads in four formats: PDF, CSV (comma-separated variable), RTF (rich text format) and Excel. If you modify the table and transpose rows and columns, you'll want to avoid the Excel format – unless you're an ace with IF() functions; in those cases you should choose the CSV format instead.

More on Geographies: A lot of reporting is about comparing people and places. FactFinder makes that easy.

Now for some housekeeping. Go back to the search page and clear “Your Selections” in the upper lefthand corner, either by hitting the “Clear All Selections” link or by individually clicking on the little blue X next to each search term.



Next go up to the Geographies tab on the left to activate it, click on the “Name” tab and, in the search bar, type the name of a state. Click GO. You’ll see something like this:

The screenshot shows the FactFinder interface for selecting geographies. On the left, under 'Your Geography Filters', there is a search bar containing 'Massachusetts' with a clear all filters link below it. Under 'Geography Filter Options', there is a tree view of geographic types: Geographic Type (selected), State (1), County (101), School District (655), Congressional District (340), State Legislative District (2), City or Town (1,339), Economic Place (293), Township/Census County Division (1,173), Census Tract (2,467), Block Group (166), Block (1,934), and Metro/Micro Area (17). The main area is titled 'Select geographies to add to Your Selections' and shows a table of results. The table has columns for 'Geography Name' and 'Geography Type'. The results listed are: Massachusetts (State), All Counties within Massachusetts (County), Statewide, Massachusetts; Massachusetts (County), Barnstable County, Massachusetts (County), Berkshire County, Massachusetts (County), Bristol County, Massachusetts (County), Dukes County, Massachusetts (County), Essex County, Massachusetts (County), and Franklin County, Massachusetts (County). There are checkboxes next to each entry, and buttons for 'Add', 'Check All', 'Clear All', and a magnifying glass icon.

The first link is to the state. The second link is to “All counties within (the state).” You’ll find a similar pattern if you first select a county; the next entry will be “All places within xxx County.” If you select a city, one of the next entries will be all census tracts within that city. This is a great way of finding similar data for a region.

Next to Geographies, the Topics search box is the best way to narrow a search in FactFinder. You can quickly identify a subject and source material here.

The broadest topics are, of course, People and Housing. But you can greatly narrow your selection by choosing a particular year (2000 and then annually 2005 through 2010), program (decennial or American Community Survey) or dataset (such as the progressively more accurate 1-, 3- and 5-year ACS).

Mapping: This is the biggest single improvement over Legacy FactFinder. Let’s map median age by city in Middlesex County, MA. First we’ll go to Select Topics, expand the People category, expand Age & Sex, and choose Age. That will add it to “Your Selections.” We’ll then close the Select Topics box and type median age in the Search box.

Your Selections

Search using...

People:Age & Sex:
Age

County
Middlesex County, Massachusetts

Place within State
All Places fully within/partially within Middlesex County, Massachusetts

[clear all selections and start a new search](#)

Search using the options below:

Topics
(age, income, year, dataset, ...)

Geographies
(states, counties, places, ...)

Recommendations (4)



2010 Population Totals can be found in most 2010 tables. Use the chart to find popular population tables.

[Population Totals](#)

[Data Profiles](#)



The 2009-2011 American Community Survey 3-year estimates provide social, economic, demographic, and housing data for areas with populations of 20,000 or more.

[View Available Tables](#)

Search Results: 1-25 of 4,061 tables and other products match "Your Selections"

topic or table name

Refine your search results: state, county, place, topic, race/ancestry, industry

topics race/ancestry industry

FactFinder identifies 17 versions of Table B01002, Median Age by Sex. These are various editions of the American Community Survey. Our choice depends on the tradeoff of older data vs. more coverage. The newest data (2012 1-year ACS) covers only cities with population of 65,000 and up. The oldest data (2011 5-year ACS) covers all cities and towns but obviously won't reflect recent population trends. Let's go with the 5-year data to get every town.

Here is what we get:

Table View 

Actions:  [Modify Table](#) |  [Bookmark](#) |  [Print](#) |  [Download](#) |  [Create a Map](#)

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's responsibility to disseminate the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units.

« « 1 - 18 of 74 » »

	Middlesex County, Massachusetts		Arlington CDP, Massachusetts		Ayer CDP, Massachusetts		Belmont CDP, Massachusetts		Burlington CDP, Massachusetts		Cambridge, Massachusetts	
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Median age --												
Total:	38.4	+/-0.2	41.7	+/-0.9	45.6	+/-8.2	41.5	+/-0.9	40.8	+/-0.8	31.2	
Male	37.0	+/-0.2	39.7	+/-1.2	43.8	+/-10.4	40.2	+/-1.6	39.8	+/-1.5	30.5	
Female	39.7	+/-0.1	43.2	+/-0.8	46.0	+/-8.1	42.4	+/-1.5	41.6	+/-1.1	31.9	

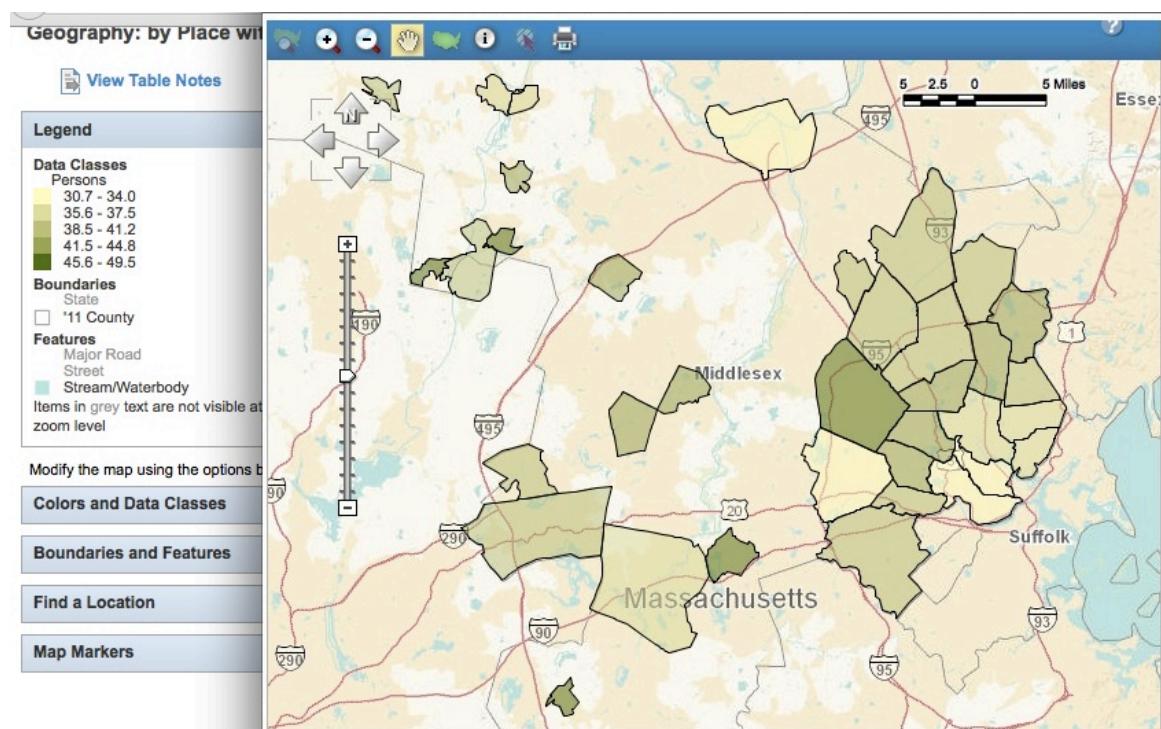
Notice that blue linked phrase **Create a Map** right next to the Download link near the top. Click on that, and FactFinder will ask us to click on a value in the data table to map. We choose the estimate for one of the cities (not the county – that would create one value for the entire county). Here's the result:

The screenshot shows the FactFinder website interface. At the top, there are links for 'Modify Table', 'Bookmark', 'Print', 'Download', and 'Create a Map'. A 'Create a Map' button is highlighted in blue. Below the table, a message says 'Click on a data value in the table to map.' A modal window titled 'Select a Data Value to Map' is open, containing the text: 'The selected data values to map are: Estimate; Median age -- - Total: by: Place within State'. It has 'SHOW MAP' and 'CANCEL' buttons.

Middlesex County, Massachusetts		Arlington CDP, Massachusetts		Ayer CDP, Massachusetts		Belmont CDP, Massachusetts		Burlington CDP, Massachusetts		Cambridge city, Massachusetts		Cochituate CDP, Massachusetts		Devens Massach	
Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
38.4	+/-0.2	41.7	+/-0.9	45.6	+/-8.2	41.5	+/-0.9	40.8	+/-0.8	31.2	+/-0.4	46.6	+/-2.9	39.7	
37.0	+/-0.2	39.7	+/-1.2	43.8	+/-10.4	40.2	+/-1.6	39.8	+/-1.5	30.5	+/-0.5	44.8	+/-4.1	39.7	
39.7	+/-0.1	43.2	+/-0.8	46.0	+/-8.1	42.4	+/-1.5	41.6	+/-1.1	31.9	+/-0.6	48.0	+/-1.6	42.1	

Bureau, 2007-2011 American Community Survey

Click on Show Map. (This will take a while.) And voila!



But wait, as the breathless infomercial hawkers say, there's more! Yes, you can export this so-so map as a PDF. And you can change the fill and boundary colors, or add labels.

The real power, however, is this: You can export this puppy as a shapefile. If you've spent any time working with a geographic information system, you know a shapefile is the standard platform used by all GIS software. So you can find census data, map it inside FactFinder, then export that map in a universally recognized GIS format and link it to other geographic data. And you get that data for free.