

DIY Census Data Exercises

Homepage (Census.gov) tools are shortcuts to data: QuickFacts

1. Use QuickFacts to find recent information on the city of Fresno from several Census Bureau sources - - the 2010 Census, the American Community Survey (ACS), and the Survey of Business Owners (SBO).

- (a) What was the percent population change between 2000 and 2010?
- (b) In 2010, what percent of the total population was Hispanic or Latino?
- (c) For the period 2006-2010, what percent of Fresno residents 25 years and over had a bachelor's degree or higher? (What is the source of these data?)
- (d) In 2007, what percent of all businesses were owned by women? (What is the source of these data?)

Census.gov > (left column) QuickFacts > Select a state to begin = California
(Note that California and USA appear side by side for quick comparisons.)
Select a city = (type an "F" to move down the list quickly) Fresno > GO
(Note that Fresno and California now appear side by side.)

Answer (a): The percent population change in Fresno from 2000 to 2010 was 15.7%.
Click on left-side "i" icon for information about data source, then back arrow to QuickFacts page

Answer (b): In 2010, the percent of Hispanic or Latino persons in Fresno was 46.9%.

Answers (c): For the 5-year period 2006-2010, 20.5% of Fresno residents had a bachelor's degree or higher. (Click on "i" icon.) Source is the American Community Survey 5-year estimates.

Answers (d): In 2007, 29.9% of all firms in Fresno were owned by women. Source is the Survey of Business Owners.

"Browse datasets" on the QuickFacts page to open a world of data

2. How do you find more information on your selected geography (city of Fresno)?

Answer: Click on "browse data sets for Fresno (city), highlighted in yellow above the data columns.

EXPLORE LATER ON YOUR OWN: Scroll down the page to see the available data sources: American Community Survey, Demographic profile from the 2010 Census, Census 2000, Population Estimates, etc.

Click "Home" (upper right banner) to see two other links from the Census Bureau's homepage. **Interactive Map** tool and **Population Finder** tool appear below **QuickFacts** in the left column. Follow instructions for each.

American FactFinder (AFF): factfinder2.census.gov

Homepage > Data tab (top of page) > American FactFinder (or URL above)

Main tab = AFF Main page

1. Feedback (*use this!*), FAQs (*from data users*), Glossary (*excellent*), Help (*tutorials*) (top right)
2. Main, Search, What We Provide, Using FactFinder (*blue navigation banner*)
3. “Your Selections” box and (4) filter bars (*left column*)
4. Quick Start text box (*middle frame*)
5. Address Search, Reference Maps, and Load Query (*right column*)

Search tab

- Repeats 1 thru 3 from Main tab
- Search Results pane with Narrow your search text box

BEFORE YOU START, REMEMBER . . .

- Use the homepage (census.gov) tools (left column) for simple searches
- AFF2 is flexible, with usually more than one path to every solution
- Generally, you can start your search with any filter (try alternates if unsuccessful)
- AFF2 is NOT rocket science, but it does have a lot of moving parts
- Finding data is sometimes trial-and-error, even for experienced users
- AFF2 is forgiving - - all goofs can be fixed, usually quite easily

Use Address Search as a shortcut to neighborhood data for a specific address

3. **You want to find data for the area around a specific address.** (Remember that data for individuals, as well as individual households and businesses are protected.)

(a) Find the 2010 census tract number for the Silicon Valley Community Foundation -- 2440 West El Camino Real, Mountain View, CA 94040.

(b) Then find the median age (total population) for this census tract from the 2010 Demographic Profile Summary File.

Census.gov > Data tab (in header) > American FactFinder (AFF)

(Main tab, right column) Address Search = street address

(enter in street address box) 2440 west el camino real (city box) mountain view (state drop-down) California = GO

Answer (a): Census Tract 5094.04, Santa Clara County, California.

Click on the hyperlink for Census Tract 5094.04, Santa Clara County, CA.

After making certain the census tract appears in the Your Selections box, close the Geographies overlay (window).

Click on the hyperlink for the table DP-1 (Profile of General Population and Housing Characteristics: 2010) from the dataset 2010 Demographic File SF

Answer (b): The median age for the total population in Census Tract 5094.04, Santa Clara County, California was 33.0 years in 2010.

Click on the gray bar, “Back to Search” and clear all selections from the Your Selections box.

**Simple (one topic) data for All Counties in a State
“Narrow your search” text box to refine search
Use Compare to see two table shells side by side
Modify Table > Transpose Rows / Columns > Filter Results**

4. Find a 2010 Census table which lists the Filipino Alone population in California by county. Sort the counties in descending order (largest to smallest) by Filipino Alone population.

(a) Which county had the largest Filipino Alone population on the 2010 Census? Which county had the smallest?

(b) How do you display only the counties with Filipino Alone populations of 50,000 people or more? How many counties display? What are they?

Topics filter bar > expand Program = Decennial Census

(still on Topics filter bar) expand Year = 2010

Close Topics overlay after confirming that your selections are in the Your Selections box

Geographies filter bar > (List tab is default) Select a geographic type = County

Select a state = California

Select one or more . . . = All Counties within California > Add to Your Selections

Close Geographies window after confirming that your selection is in the Your Selections box.

Narrow your search (text box): Filipino > GO

If you need to see two table shells side by side (in this case, PCT5 and PCT6, put a check in the checkbox to the left of each

Click Compare (wait – you may have to click Compare a second time)

What’s the difference? Check the table title. PCT6 allows for more than one Asian category

Deselect PCT6 by clicking on the check in the checkbox

That leaves a check next to PCT5, Asian Alone with One Asian Category for Selected Groups

Click View

Actions: Modify Table > Transpose Rows / Columns

Mouse over down arrow in the Filipino column, then click on the down arrow (you want Filipino in the left “Sort by” column, and “Descending (Z-A)” in the right column) > OK

Answer (a): Largest Filipino Alone population was Los Angeles County, at 322,110, and the smallest was Alpine County, at 1 person.

Click on the filter icon (stem glass-looking icon) in the Filipino column > (drop-down menu) = greater than or equal to > 50,000 > OK

Answer (b): 7 counties had Filipino Alone populations of 50,000 or greater: Los Angeles, San Diego, Santa Clara, Alameda, Orange, San Mateo, and Riverside.

Back to Search and clear all selections from the Your Selections box.

**Use an ACS table code (see handout) in Quick Start and a wildcard (*) to filter selections
Download to an Excel spreadsheet; "View All as PDF"
Delete one selection and substitute another (Narrative (text) Profiles for Data Profiles)
Product Type selections in Topics filter bar**

5. ACS Data Profiles (4) and Narrative Profile (1)

(a) How do you pull up the most current Social (DP02), Economic (DP03), and Housing (DP04) data profiles for the city of San Francisco? (Note that the table codes all begin with DP0.) Make a pdf of them.

(b) Find the most current Narrative Profile (NP) for the city of San Francisco.

Answer (a): (ACS Data Profiles instructions) = AFF Main tab > Quick Start text boxes (topic or table name) dp0* and (state, county or place) san francisco city, california > GO
Checkboxes for DP02, DP03, and the DP04 (2010 ACS 1-year estimates as dataset for each)
View (in the Search Results pane, three is the maximum number you can view at one time)
The Social Characteristics will be the first table. You may view the other two by clicking the Result right arrow at the top of the page

Download > Excel (.xls) > OK > Download > Open (only one table displays) > Close – top X

View All as PDF > Open -- resulting document will be all three tables with appropriate page breaks

Close PDF > Back to search (do not clear all selections)

Answer (b): (path to most current Narrative Profile for the city of San Francisco)

Click the delete filter button (the "x") for dp0*

Narrow your search (text box): np*

Click hyperlink for NP01 Population and Housing Narrative Profile: 2010, 2010 ACS 1-year estimates dataset

Alternate method: (delete np*) Topics filter bar > Product Type = Narrative Profile

Click hyperlink for NP01, Population and Housing Narrative Profile, 2010 ACS 1-year estimate)

Back to Search and clear all selections from the Your Selections box

The four ACS Data Profiles contain more than 450 characteristics on any covered geography, down to the census tract level.

In addition, a Narrative Profile is currently available for geographies covered by the 1-year and 3-year ACS estimates, that is, with populations of 20,000 or more. The Narrative Profile is a template that pulls data from the Data Profiles and features charts and text with grammatically- and statistically-correct English. These are great for grant applications!

**Creating a Thematic Map for all census tracts in a county
Totals and sub-totals: taking note of indents and outdents in table row headings
Saving and loading a query**

6. **Make a table of people living below the poverty level by census tract in Alameda County, California (the most recent data). Then make a thematic map of the percent of children under 18 years living below the poverty level for the same geographies.**

Geographies filter bar > (List tab) Select a geographic type = Census Tract
Select a state = California
Select a county = Alameda
Select one or more geographic areas = All Census Tracts within Alameda County, California
Add to Your Selections
Close Geographies window

Narrow your search: poverty > GO
Click hyperlink for table S1701, Poverty Status in the Past 12 Months

**Thematic Map Caveats: (1) Two or more “like” geographies; (2) One theme only per map
If your data source is a survey, the margins of error do not display alongside the estimates**

Create a Map > (row=Under 18 years; column=Census Tract 4001, Percent below poverty level Estimate) click the intersecting data cell -- value is 7.0%. (Note: Value will be underlined if it is possible to map.) > Show Map

Click the “*r*” button in the blue banner on top of the map itself. Then click the large census tract in the western part of Alameda County that appears to have the highest percentage of children under 18 years old living below the poverty level. This will display a value (47.3 Percent), along with the census tract number (4017) and other census geography.

Experiment with other map tools and filter bars to the left of the map.

Note that you can toggle back to the Table View by clicking on its tab.

If you want to save the geographies you’ve listed, **save the query** from the table view:
Bookmark > Save Query > Save (to desktop for this exercise) > Save > Close.

To load the query: Main tab of AFF > Load Query (lower right corner) > Browse > *.aff
(wildcard for file with extension .aff (.aff = american factfinder) > (highlight file name) Open > Okay. All geographies are in Your Selections box.

Note: The best way to store geographies so you don’t have to reselect them for another table is to create a simple table with your geographies and Save the query by clicking on **Bookmark. When you Load the query later and click **Back to Search**, the selected geographies will be in the Your Selections box.**

Back to Search and clear all selections from the Your Selections box.

Economic Program Exercise

7. *We are looking at female-owned construction firms in California . . .*

(a) What is the most recent number of female-owned construction firms -- NAICS Sector 23 -- in the state of California?

(b) Of these, what's the number of firms with paid employees? . . . without paid employees?

(c) How many of these female-owned construction firms had revenues of \$1,000,000 or more in 2007, and what s the total revenue of those firms?

Census.gov > Data tab (in header) > American FactFinder (AFF)

Topics filter bar > Business and Industry > Business Owner = Owner's Sex

Staying on Topics filter bar > Year = 2007

Close Topics filter

Geographies filter bar > Name tab

(in Geography Results pane) click on hyperlink for California

Close Geographies filter

Industry Codes filter bar > (under Industry Codes Filter Options)

Expand Industry Sector > 23: Construction

(in Industry Codes Results pane) click on hyperlink for (23) Construction

Close Industry Codes window

There are four data products (tables) available. **Click hyperlink for SB0700CSA05**

Filter results:

Modify Table

In the "Meaning of Gender code" column:

- Click on the filter icon (resembles a stem glass) > check 002 Female-owned > OK

In the "Meaning of Sales, receipts, or revenue size of firm code" column:

- Click on the filter icon > check 001 All firms and 532 Firms with sales/receipts of \$1,000,000 or more > OK

Answer (a): 21,138 female-owned construction firms in California in 2007

Answer (b): 4,395 firms with paid employees; 16,743 firms without paid employees

Answer (c): 1,884 firms; total revenue of \$8,737,468,000 (remember those last 3 zeroes!)

Note the data source is 2007 Survey of Business Owners.

RESOURCE

"Using the New American FactFinder: Finding Economic Data on AFF"

census.gov > (Footer - Business & Industry) Economic Census = Download AFF help guide.
This is a 43-page illustrated manual, with step-by-step instructions to finding your data.

Workshop Information and Data Questions

Los Angeles Regional Office

818-267-1725 or

888-806-6389 (toll-free)

Thank You!

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