Finding and Accessing American Community Survey Block Group Data – from the February 2013 CSDC Network News

With the American Community Survey (ACS) replacing the decennial census long form, options for accessing estimates at the block group level have narrowed. Block group level data are only available in the 5-year ACS and even then, not all tables are provided. For example, the 5-year 2007-2011 ACS only makes block group level data available for 353 of its 942 tables. Data at the block group level for the 2000 Census and for the 2010 Census can be accessed through American FactFinder, but American FactFinder does not provide estimates and tables from the 5-year ACS at the block group level. At present, there are four ways to access block group data from the 5-year ACS:

- The Excel Summary File Retrieval Tool;
- The Excel Summary File Import Tool;
- The Census Bureau's DataFerrett tool; and
- Missouri Census Data Center Data Extracter (Dexter).

The Excel tools require downloading the 5-year ACS Summary File. By contrast, DataFerrett and the Missouri Census Data Center Dexter tool are run online without needing to download multiple large files.

About the 5-year ACS Summary File
The 5-year ACS Summary File is a set of comma-delimited text files that contain all available tables for the ACS. The Summary File is made up of individual text files, called "sequences", each containing various ACS tables. The Census Bureau provides downloadable technical documentation that contains detailed information about the Summary File and the options for accessing the tables it contains. The technical document for the most recent 5-year ACS Summary File (2007-2011) can be found here:
http://www2.census.gov/acs2011_5yr/summaryfile/ACS_2007_2011_SF_Tech_Doc.pdf

The Census Bureau organizes the Summary File into three directories to facilitate downloading according to user needs. The directory for the 2007-2011 5-year ACS Summary File is here:
http://www2.census.gov/acs2011_5yr/summaryfile

For state-level data, there are two folders available:

- By State All Tables
- By State By Sequence Table Subset.

The By State All Tables directory has two zipped files for each state, one containing tables at the tract and block group level named

[State]_Tracts_Block_Groups_Only.zip and another for the remaining geographies. Each zipped file contains a separate geography file and multiple estimate and margin of error "sequence" files. Downloading the zipped files from this directory is ideal if the user wants all the available tables for a state level geography (i.e., block groups).

If instead, the user wants data from only a few tables for a particular state level geography, the By State By Sequence Table Subset directory is the one to use. The directory is organized by state. The Tracts_and_Block_Groups_Only folder has individual zipped sequence files, along with a geography file. In order to determine which file contains the desired tables, the Census Bureau provides a Sequence Number and Detailed Table Number Lookup file (available as an Excel spreadsheet or text file). For the 2007-2011 5-year ACS Summary File, that file can be found here:
http://www2.census.gov/acs2011_5yr/summaryfile/

As noted above, users should consult the technical documentation for the 5-year ACS Summary File as it contains detailed information about the location of specific tables in the Summary File, along with a listing as to whether block group data are available for that table (see Appendix E).

Excel-ing at Data Retrieval
The Census Bureau provides two Microsoft Excel-based tools that can be used to extract tables from the 5-year ACS Summary File at the block group level. Note that both of these tools will initially provide data for every block group in the state. The user can only select specific block groups after the data have been downloaded.

The Summary File Excel Retrieval Tool is a macro-driven spreadsheet that provides a method to easily retrieve a table for all geographic areas in a state and load it into a spreadsheet for easier manipulation. It does not require any programming experience and the user does not need to download the raw data file. It is the best method to use if only a few tables are needed. Note that Excel 2007 or newer is required to use this tool. The Census Bureau provides a "users guide" with step-by-step instructions. Both the tool and the "users guide" can be downloaded at:
http://www.census.gov/acs/www/data_documentation/summary_file/
Note that this tool accesses data from the Internet so having a fast connection is helpful.

The Summary File Excel Import Tool is similar to the Excel templates provided for displaying data from the 2000 Census Summary File 3 release. It

provides a basic layout of each sequence in Excel in the same format that the estimate and margin of error files are formatted. One advantage it has over the Excel Retrieval Tool is that it will work on any version of Excel. Using this tool requires downloading the zipped Summary File templates file (which can be found in the Summary File's "UserTools" directory on the Census Bureau's website) along with the zipped "[State]_Tracts_Block_Groups_Only" file and the Excel state geography file (found in the Geography directory). A step-by-step tutorial is contained in the 5-year ACS Summary File technical documentation, found here for the 2007-2011 5-year ACS: http://www2.census.gov/acs2011_5yr/summaryfile/ACS_2007_2011_SF_Tech_Doc.pdf

Ferrett-ing Out Your Data

The third way to access 5-year ACS block group data is through the Census Bureau's DataFerrett at http://www.dataferrett.census.gov/. DataFerrett is a free online tool that can analyze and extract data from a variety of datasets, including the ACS Summary File. It provides users with the ability to construct custom variables from the variables found in the input data file(s), to select specific data variables rather than a whole table, to download data through a variety of options, and to create complex and cross-tabular reports from the data. The website provides detailed tutorials, a user's guide, training on advanced topics, and use examples. When logged on to the DataFerrett website, the user will see two tabs at the top of the page corresponding to the two-step process for using DataFerrett:

- Step 1: Select Dataset and Variable: The first step in employing DataFerrett is to select the dataset from the ACS Summarized Data folder, which currently contains 5-year ACS datasets for 2005-2009, 2006-2010, and 2007-2011. Once that is done, select the table or tables containing the desired variables. Finally, DataFerrett will prompt the user to select the level of geography – in this case the desired block groups.

- Step 2: Dataset/Download/Make A Table: This step allows the user to recode variables (change standard levels or data groupings such as age or income groups), delete variables, view or modify variables, or employ advanced SQL options. In addition, DataFerrett gives the user the choice to add MOEs to each data item. Once the desired data manipulation is accomplished, the user has the option to make a table through dragging and dropping variables, create a map, create pivot tables, or further manipulate data by cross-tabbing and using formulas. The user can save the tables and sessions as well as

download datasets created in DataFerrett. A detailed user's guide for accessing 5-year ACS data on DataFerrett is available here: http://dataferrett.census.gov/acs/ACS_5yrsf_UserGuide.pdf

One thing to keep in mind when using DataFerrett is that if you select a table that does not have block group level data (and remember that only 353 of the more than 900 tables for the 2007-2011 ACS provide data to the block group level), DataFerrett will not prompt you that block group level data are not available for that table. Therefore, users are advised to consult the technical documentation for the 5-year ACS file to confirm that data at the block group level are available for the tables of interest.

Missouri Census Data Center Dexter

The Missouri Census Data Center's (MCDC) Data Archive uses their Uexplore/Dexter Web Software to give users access to most of the data files from the U.S. Census Bureau. These files are generated for all states, not just Missouri. The website is http://mcdc2.missouri.edu/ - the link to the Archive is the second item on the left menu bar.

One advantage of using Dexter is that you can choose the specific block groups for which you want to extract data. Note that before using the Dexter Data Extracter, it is helpful to review the "Quick Start Guide" at http://mcdc2.missouri.edu/tutorials/dexter_quickstart/

As you navigate to the "American Community Survey" and then to the 2011 vintage files, you will get to the directory listing. The best way to find a data file of interest for the 2011 ACS is to view the "datasets.html," which is available at: http://mcdc.missouri.edu/pub/data/acs2011/Datasets.html

You can see file #4 has data for block groups (BG) in the United States. Click on the file name, Dexter link, to see the Dexter filter and variable selection page.

The MCDC Data Archive is a very useful site but it takes a little practice to efficiently find the data you want.

The Block Group Data are Out There

In summary, data for block groups are out there – we just have to dig for it. The staff of the California State Data Center can help affiliates to use these tools.