

## ACS SF Worked Example

Here is an example of how to access the three different types of Summary File estimates for one table for all geographies from the ACS summary file.

**Question:** I am interested in downloading table B01001 for all published ACS geographies, how would I do this?

1. Go to the ACS 2008 Summary File Technical Documentation for chapters 5 and 6 of the technical document these chapters provide information about the sequence numbers that each table is located in, there are files that summarize this information at:

[http://www2.census.gov/acs2008\\_1yr/summaryfile/merge\\_5\\_6.xls](http://www2.census.gov/acs2008_1yr/summaryfile/merge_5_6.xls)

[http://www2.census.gov/acs2008\\_1yr/summaryfile/merge\\_5\\_6.sas7bdat](http://www2.census.gov/acs2008_1yr/summaryfile/merge_5_6.sas7bdat)

2. Using the Summary File SAS Example Macros located at

[http://www2.census.gov/acs2008\\_1yr/summaryfile/OSASExamplePrograms/summary\\_file\\_example\\_macros.sas](http://www2.census.gov/acs2008_1yr/summaryfile/OSASExamplePrograms/summary_file_example_macros.sas)

Run the macro for `%TableShell(B01001)`;

This macro will provide metadata information on a given table, in this case B01001

3. The following SAS dataset will be created with information about table B01001

fileid	tblid	seq	order	position	cells	total	Title	subject_area
ACSSF	B01001	0013			749 CELLS		SEX BY AGE	Age-Sex
ACSSF	B01001	0013					Universe: Total population	
ACSSF	B01001	0013	1				Total:	
ACSSF	B01001	0013	2				Male:	
ACSSF	B01001	0013	3				Under 5 years	
ACSSF	B01001	0013	47				75 to 79 years	
ACSSF	B01001	0013	48				80 to 84 years	
ACSSF	B01001	0013	49				85 years and over	

We can see that table B01001 is located in Sequence 0013; this applies to all published geographies.

4. We can read into SAS all of the 0013 sequences using the SAS Example Macros, this time using the macro

Run the Macro for `%callst`;

This macro will run a do loop creating State two-digit abbreviations. Which will allow a simple way to read the summary files into SAS for all geographies.

Each time a valid two digit state abbreviation is created the macro `%ALLSeqs` is ran with the two digit state abbreviation.

`%ALLSeqs` Macro performs the following tasks

- a) Read the Geographic header file - `%AnyGeo` Macro.
- b) There is a do loop to allow you to choose which sequences you would like to read in for example if you wanted sequence 0010 set the loop to be `do x=13 %to 13;` - The 0 values will be filled in.
- c) Within the do loop the following macros will be executed
  - I. `%TablesBySeq;` - This will give information about the whole 10 sequence, not just table B01001.
  - II. `%ReadDataFile` - Macro is called 3 times once for each type of estimate. This macro will generate and run SAS code for each sequence specified in the do loop in step 2 and for each geography specified in the `%CallSt` macro.
  - III. Lastly there is a merge statement that will merge together each of the three types of estimates and the geography header file by sequence number per geography.

5. You now will have all 0013 sequences read into SAS in the following dataset names (if the code is not modified), in the work directory

Sf0013<st two-digit abbrev>.sas7bdat