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access resources



Accessing ACS Data Products: Using the ACS Summary File

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Using the American Community Survey Summary File

What is the ACS Summary File?

The ACS Summary File

- A set of files containing the same data as **Detailed Tables**.
 - Flexibility allowing data users to extract only the desired data or entire datasets.
- Used by advanced users **who want entire datasets**.



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Using The American Community Survey Summary File

The ACS Detailed Tables

- Most detailed ACS data and cross tabulations of variables.
- Begin with the letters "**B**" for base tables and "**C**" for collapsed tables.
 - Collapsed tables - same topics as base tables, but with fewer categories.
- All geographic areas including the **block group** level.
- Available through the ACS Summary File, Census Bureau Application Programming Interface, and data.census.gov

| Table ID | Table Title |
|----------|---|
| B01001 | SEX BY AGE |
| B01001A | SEX BY AGE (WHITE ALONE) |
| B01001B | SEX BY AGE (BLACK OR AFRICAN AMERICAN ALONE) |
| B01001C | SEX BY AGE (AMERICAN INDIAN AND ALASKA NATIVE ALONE) |
| B01001D | SEX BY AGE (ASIAN ALONE) |
| B01001E | SEX BY AGE (NATIVE HAWAIIAN AND OTHER PACIFIC ISLANDER ALONE) |
| B01001F | SEX BY AGE (SOME OTHER RACE ALONE) |
| B01001G | SEX BY AGE (TWO OR MORE RACES) |
| B01001H | SEX BY AGE (WHITE ALONE, NOT HISPANIC OR LATINO) |
| B01001I | SEX BY AGE (HISPANIC OR LATINO) |
| B01002 | MEDIAN AGE BY SEX |
| B01002A | MEDIAN AGE BY SEX (WHITE ALONE) |
| B01002B | MEDIAN AGE BY SEX (BLACK OR AFRICAN AMERICAN ALONE) |
| B01002C | MEDIAN AGE BY SEX (AMERICAN INDIAN AND ALASKA NATIVE ALONE) |
| B01002D | MEDIAN AGE BY SEX (ASIAN ALONE) |
| B01002E | MEDIAN AGE BY SEX (NATIVE HAWAIIAN AND OTHER PACIFIC ISLANDER ALONE) |
| B01002F | MEDIAN AGE BY SEX (SOME OTHER RACE ALONE) |
| B01002G | MEDIAN AGE BY SEX (TWO OR MORE RACES) |
| B01002H | MEDIAN AGE BY SEX (WHITE ALONE, NOT HISPANIC OR LATINO) |
| B01002I | MEDIAN AGE BY SEX (HISPANIC OR LATINO) |
| B01003 | TOTAL POPULATION |
| B02001 | RACE |
| B02003 | DETAILED RACE |
| B02008 | WHITE ALONE OR IN COMBINATION WITH ONE OR MORE OTHER RACES |
| B02009 | BLACK OR AFRICAN AMERICAN ALONE OR IN COMBINATION WITH ONE OR MORE OTHER RACES |
| B02010 | AMERICAN INDIAN AND ALASKA NATIVE ALONE OR IN COMBINATION WITH ONE OR MORE OTHER RACES |
| B02011 | ASIAN ALONE OR IN COMBINATION WITH ONE OR MORE OTHER RACES |
| B02012 | NATIVE HAWAIIAN AND OTHER PACIFIC ISLANDER ALONE OR IN COMBINATION WITH ONE OR MORE OTHER RACES |
| B02013 | SOME OTHER RACE ALONE OR IN COMBINATION WITH ONE OR MORE OTHER RACES |
| B02014 | AMERICAN INDIAN AND ALASKA NATIVE ALONE FOR SELECTED TRIBAL GROUPINGS |
| B02015 | ASIAN ALONE BY SELECTED GROUPS |

Using the American Community Survey Summary File

Overview of the Summary File Formats

Two Summary File formats are currently available

- Table-based (current): 2018 – Present ACS Data
- Sequence-based (old): 2005 – 2021 ACS Data

Table-based: Pipe-Delimited text file

Sequence-based: Comma-Delimited text file

- First check data.census.gov for data interest to easily download

```
ACSSF,2021e1,a1,000,0001,0000001,5039877,2445896,149482,154786,168349,97886,70364,38216,32896,90846,
42,1947,1605,419,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,106975,55362,6563,6141,5842,1518,2203,4720,3697,3875
ACSSF,2021e1,a1,000,0001,0000002,2947627,1407288,86314,91660,98761,54845,44755,24587,20987,62905,300
,,,,,,,,,69352,36777,3914,3590,3790,1374,1898,3814,2164,2588,6966,3613,2391,198,354,123,32575,3883,13
ACSSF,2021e1,a1,000,0001,0000003,2092250,1038608,63168,63126,69588,43041,25609,13629,11909,27941,577
6,1533,1287,2948,1569,1805,680,156,0,19038,2439,2176,1935,1512,1006,1664,1018,1754,1748,1801,1309,49
ACSSF,2021e1,a1,000,0001,0000004,4634896,2249537,138234,142915,154552,90082,61042,34262,30721,86597,
82,1605,419,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,98981,50222,6170,5826,5134,1428,727,4486,3567,3861,9174,4
ACSSF,2021e1,a1,000,0001,0000005,3855417,1864689,114255,120946,126233,74709,51651,28627,24941,73859,
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,74667,36784,4635,3976,3683,1330,641,3374,2536,3094,6033,3569,2973,41
ACSSF,2021e1,a1,000,0001,0000006,1440409,689339,43334,44542,42824,23746,21287,14342,12475,33690,5343
2586,1089,1332,212,108,,GEO_ID|B01001_E001|B01001_M001|B01001_E002|B01001_M002|B01001_E003|B01001_M003|B01001_E004|B01001_M004|
ACSSF,2021e1,a1,000,0001,0000007,74667,36784,4635,3976,3683,1330,641,3374,2536,3094,6033,3569,2973,41
007|B01001_M007|B01001_E008|B01001_M008|B01001_E009|B01001_M009|B01001_E010|B01001_M010|B01001_E011|B01
194,1090,483,2304,1342,,|B01001_E014|B01001_M014|B01001_E015|B01001_M015|B01001_E016|B01001_M016|B01001_E017|B01001_M017|B01001
ACSSF,2021e1,a1,000,0001,0000008,1001_M020|B01001_E021|B01001_M021|B01001_E022|B01001_M022|B01001_E023|B01001_M023|B01001_E024|B01001_M0
1_E027|B01001_M027|B01001_E028|B01001_M028|B01001_E029|B01001_M029|B01001_E030|B01001_M030|B01001_E031|
ACSSF,2021e1,a1,000,0001,0000009,033|B01001_E034|B01001_M034|B01001_E035|B01001_M035|B01001_E036|B01001_M036|B01001_E037|B01001_M037|B01
|B01001_M040|B01001_E041|B01001_M041|B01001_E042|B01001_M042|B01001_E043|B01001_M043|B01001_E044|B01001
ACSSF,2021e1,a1,000,0001,0000010,1001_E047|B01001_M047|B01001_E048|B01001_M048|B01001_E049|B01001_M049
010000010|331893745|-555555555|164350703|26594|9552445|19155|10284656|48771|11155383|50933|6668042|2008
6|11211933|22521|11595901|23199|11321797|43227|10702211|39321|9867371|20934|10418635|17955|10438687|412
19|7204611|32597|4420293|23006|2695951|21508|2170982|18714|167543042|26594|9108800|18568|9726157|47464|
|2109965|29169|6181806|36709|10888520|21578|11382784|17685|11049601|54925|10659952|52873|9914954|18572|
2|4080082|23979|5571798|28478|8221808|34105|5452475|26914|3582418|26703|3791691|28666
010000110|265980172|280629|130865702|146312|7731228|27987|8221994|46959|8883395|52445|5272856|21020|372
9252|20531|9707505|22044|9239218|38610|8595000|36340|7847768|25252|8178025|22032|8025203|39185|3287765|
31108|3288276|23925|2036258|19718|1724181|17819|135144470|149161|7383034|28173|7778873|45560|8521097|45
356|5299508|34674|9276649|24179|9551667|24827|9030782|43966|8676021|45470|7982134|23698|8317370|21528|8
268604|25698|6348008|31851|4263877|26004|2846650|24550|3129805|25543
01000430|65913573|280629|33485001|146650|1821217|26178|2062662|24568|2271988|23707|1395186|21111|77798
23926|1888396|23088|2082579|27755|2107211|24055|2019603|20236|2240610|21623|2413484|21800|1046041|16346
1132017|15375|659693|11782|446801|8614|32428572|149718|1725766|25629|1947284|23237|2145012|26560|128283
54|1611871|24181|1831117|24389|2018819|26321|1983931|24248|1932820|21293|2155387|20200|2350180|23434|10
3800|17800|1188598|13038|735768|11823|661886|13369
```



Using the American Community Survey Summary File

Overview of the Sequence-Based Summary File



The Sequence-based ACS Summary File Format

- Includes three files: estimates, margins of error, and geography files
- Large number of cells stored in a series of files (“Sequences”) containing only the estimates.
- Sequences don't include metadata like table titles, row descriptions, and names of geographic areas.
- Metadata must be merged with data files to reproduce complete tables.

Challenges:

- Confusing for data users
- Technical documentation needed to find files that contain the data table of interest
- Combining 3 files to create complete tables
- Large haul for ACS Staff – split data into 40,000 files

The screenshot shows the top portion of a webpage titled "ACS Summary File Sequence-Based Format (2005-2021)". It features social media sharing icons for Facebook, Twitter, and LinkedIn. The main text explains that the ACS Summary File Sequence-Based Format consists of comma-delimited text files for ACS data releases from 2005-2021, divided into estimates, margin of error, and geography files. A small thumbnail image of a document is visible. Below the text, there is a link to "Download Using the American Community Survey Summary File: What Data Users Need to Know [PDF - 6.5 MB]". A "Related Information" section on the right lists "ACS Summary File Table-Based Format" and "MAPPING FILE TIGER/Line with Selected Demographic and Economic Data". At the bottom, there is a navigation bar with years 2021, 2020, 2019, 2018, 2017, and a "More" dropdown menu.

Using the American Community Survey Summary File

Overview of the Table-Based Summary File



The Table-Based ACS Summary File Format

- Streamlines production by delivering only one file.
- Files split by table ID (no longer split by state and sequence number).
- Each file (by Table ID) contains estimates and MOEs for all geographies.
- Reduces complexity to roughly 2,000 files rather than 140k files.

Benefits:

- Estimates and MOEs for tables are combined into one file
- Geography identifiers and labels combined into one file
- Simplified documentation for Census Bureau staff - saving time and resources
- Can use Excel, SAS, or Python to work with the SF

The screenshot shows the 'ACS Summary File' webpage. On the left is a navigation menu with links: 'Within Data', 'Congressional and State Legislative Districts', 'Custom Tables', 'Data Tables', 'Data Tools', 'Data via API', 'Data via FTP', 'Equal Employment Opportunity (EEO)', 'Experimental Data', 'Race/Ethnicity and American Indian & Alaska Native', 'Summary File', and 'Variance Replicate Estimate Tables'. The main content area features the title 'ACS Summary File', social media share buttons for Facebook, Twitter, and LinkedIn, and a 'Share' button. Below this is a paragraph explaining the ACS Summary File as a unique data product. To the right is a 'Related Information' section with a link to 'ACS Summary File Sequence-Based Format'. The 'Table-Based Format' section explains that for the 2018 data release, the Census Bureau tested a new format that groups estimates and MOE by table ID. A bolded note states: 'The Table-Based Format is the recommended format for the 2021 data release, and it will be the only format starting with the 2022 data release.' Below this is a call to action for feedback. The 'Changes for the 2021 Data Release' section notes that the 2021 release is the final of the original Sequence-Based Format. At the bottom is a navigation bar with links for 'Getting Started', '2021', '2020', '2019', '2018', and '2017 To 2005'. A logo for 'Join the ACS Data Users Group' is also visible.

Using the American Community Survey Summary File

Accessing Summary File from the ACS Webpage

Within Our Surveys & Programs

- About the ACS
- Respond to the ACS
- News & Updates
- Data**
- Microdata
- Guidance for Data Users
- Geography & ACS
- Technical Documentation
- Methodology
- Information For...

American Community Survey (ACS)

The American Community Survey (ACS) helps local officials, community leaders, and businesses understand the changes taking place in their communities. It is the premier source for detailed population and housing information about our nation.

Featured

Respond to the ACS

Learn the different ways to respond to the American Community Survey – online, by phone, by email. Read our FAQs or call us for more help with the survey.

American Community Survey Data

Within American Community Survey (ACS)

- Custom Tables
- Data Tables
- Data Tools
- Data via API
- Data via FTP
- Equal Employment Opportunity (EEO)
- Experimental Data
- Race/Ethnicity and American Indian & Alaska Native
- Summary File**
- Variance Replicate Estimate Tables

American Community Survey Data

Share

The American Community Survey (ACS) releases new data every year through a variety of data tables that you can access with different data tools. Learn more about the different types of tables and profiles powered by ACS data. We also have information about other special datasets, such as the ACS Experimental Data, ACS Summary File, and ACS Public Use Microdata Sample (PUMS) files.

Get Started Accessing ACS Data

Check out data.census.gov, the Census Bureau's main data dissemination tool. Here, you can access tables and maps with ACS data. You can also view data.census.gov Resources for step-by-step guidance, video tutorials, FAQs, and more.

[GO TO DATA.CENSUS.GOV](https://data.census.gov)

data.census.gov Resources

Related Information

- DATA
- Data
- data.census.gov Resources

Within Data

- Congressional and State Legislative Districts
- Custom Tables
- Data Tables
- Data Tools
- Data via API
- Data via FTP
- Equal Employment Opportunity (EEO)
- Experimental Data
- Race/Ethnicity and American Indian & Alaska Native
- Summary File**
- Variance Replicate Estimate Tables

ACS Summary File

Share

The American Community Survey (ACS) Summary File is a unique data product that includes all estimates and margins of error (MOE) from the Detailed Tables for all geographies published for the ACS. The ACS Summary File allows data users to download statistics for a large number of tables and geographic areas. Currently, there are two methods for downloading the summary file: the new Table-Based Format and original Sequence-Based Format.

Table-Based Format

For the 2018 data release, the Census Bureau tested a new, Table-Based Format for the ACS Summary File. This format groups the estimates and MOE by table ID, removing the need to merge these files. That is, a file is posted for each table containing both the estimates and MOE for all available geographies. Data users only need to merge in geography labels to create complete tables.

The Table-Based Format is the recommended format for the 2021 data release, and it will be the only format starting with the 2022 data release. Check out the Getting Started and data year tabs below for information and resources. The resources include instructions for merging the geography labels with each table via Excel or programs like SAS and Python.

To share feedback on the Table-Based Format, please send your comments to acso.users.support@census.gov and title your message "ACS Summary File Feedback." We appreciate hearing about what you like or what we can improve.

Changes for the 2021 Data Release

The 2021 data release is the final release of the original Sequence-Based Format; it is available for years 2005 through 2021. More information, including data, instructions and example programs are located on the [ACS Summary File Sequence-Based Format](#) page. Starting with the 2022 data release, the Table-Based Format will be the only format available.

[Getting Started](#) | [2021](#) | [2020](#) | [2019](#) | [2018](#) | [2017 To 2005](#)

Related Information

- [ACS Summary File Sequence-Based Format](#)

Using the American Community Survey Summary File

Demo: Access the Table-Based Summary File Tables



Accessing the Summary File Tables and Geography File from the FTP:

Getting Started

The Table-Based ACS Summary File contains three file types:

Table Labels - Description of each line item in a table
 Example File Name: ACS2019_Table_Shells.csv
 Example: B01001_003 = "SEX BY AGE - Total Males Under 18"

Geography Labels - All geography labels for a 1-year or 5-year release
 Example File Name: 20191YRGeos.csv, 20195YRGeos.csv
 Example: 0400000US06 = "California"

Data Files - Data (including estimates, margins of error, and confidence intervals) are organized by table ID for 1-year or 5-year release
 Folder: 1YRData, 5YRData
 Example: The file acsdt1y2019-b01001.dat, variable B01001_003 for 0400000US06 = 1,215,418

There are a variety of resources available for understanding the table-based format. Linked below are webinars related to the table-based format, the FTP site to access data and documentation, instructions on how to use the summary file, and links to the ACS Summary File documentation for further guidance on the table-based format as well as examples of how to use the data in Python.

Summary File Data

2021-Present: select the Data folder to find table-based data. 2018-2020: select the Prototype folder to find table-based data.

[ACS Summary File Data](#)

| Year | Modified | Item |
|------------------|------------------|------|
| Parent Directory | - | - |
| 2005/ | 2015-04-29 14:18 | - |
| 2006/ | 2015-04-29 14:22 | - |
| 2007/ | 2015-04-29 14:26 | - |
| 2008/ | 2015-04-29 15:14 | - |
| 2009/ | 2015-05-01 16:42 | - |
| 2010/ | 2015-05-13 09:50 | - |
| 2011/ | 2015-05-20 16:07 | - |
| 2012/ | - | - |
| 2013/ | - | - |
| 2014/ | - | - |
| 2015/ | - | - |
| 2016/ | - | - |
| 2017/ | - | - |
| 2018/ | - | - |
| 2019/ | - | - |
| 2020/ | - | - |
| 2021/ | - | - |

| United States [®] Census Bureau | | Name | Last modified |
|--|--|--------------------|------------------|
| Parent Directory | | | |
| | | sequence-based-SF/ | 2022-09-15 14:33 |
| | | table-based-SF/ | 2022-09-15 14:33 |

| United States [®] Census Bureau | | Name | Last modified |
|--|--|----------------|------------------|
| Parent Directory | | | |
| | | data/ | 2022-12-01 10:00 |
| | | documentation/ | 2022-12-01 10:00 |

| United States [®] Census Bureau | | Name | Last modified |
|--|--|----------|------------------|
| Parent Directory | | | |
| | | 1YRData/ | 2022-08-29 15:24 |
| | | 5YRData/ | 2022-11-29 13:20 |

| United States [®] Census Bureau | | Name | Last modified | Size | Description |
|--|--|-------------------------|------------------|------|-------------|
| Parent Directory | | | | | |
| | | 1YRData.zip | 2022-08-22 14:36 | 515M | |
| | | acsdt1y2021-b01001.dat | 2022-08-22 14:33 | 3.7M | |
| | | acsdt1y2021-b01001a.dat | 2022-08-22 14:33 | 2.3M | |
| | | acsdt1y2021-b01001b.dat | 2022-08-22 14:33 | 1.2M | |
| | | acsdt1y2021-b01001c.dat | 2022-08-22 14:33 | 259K | |



census.gov/programs-surveys/acs/data/summary-file.html

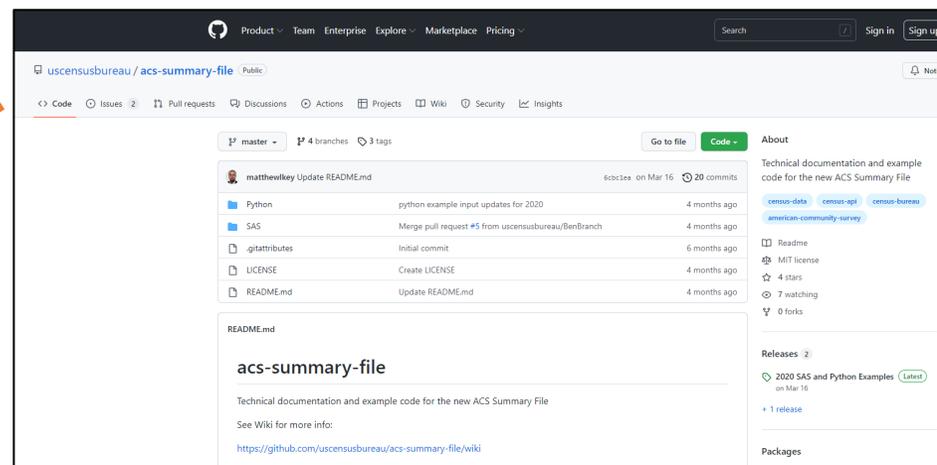
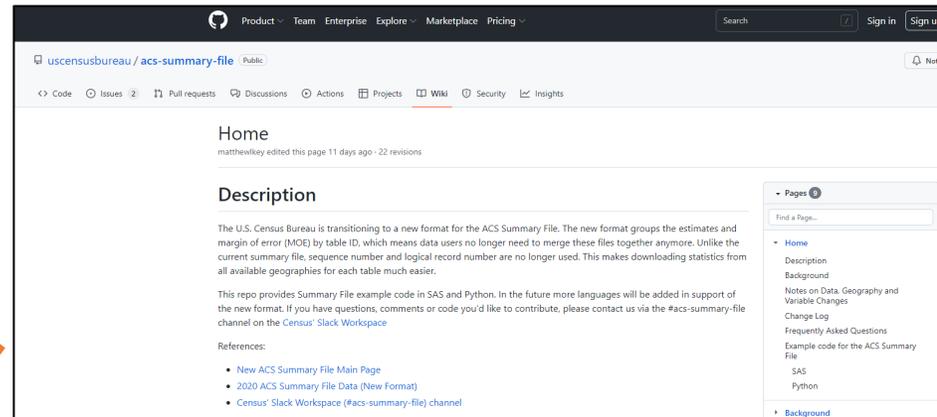
Using the American Community Survey Summary File

Overview of the Table-Based Summary File



Resources/Guides for the ACS Table-Based Summary File Format:

- [ACS Summary File GitHub wiki page](#)
- [ACS Summary File GitHub repository](#)



Data Analysis Examples Provided in GitHub:

- SAS
- Python

Using the American Community Survey Summary File

Resources for Using the Summary File: Table-Based



Resources/Guides for the Table-Based Summary File

- Handbook- **Coming Soon!**
- Webinars
- Example SAS and Python Programs
- Excel Instructions on How to Import Geography into the Table-Based Summary File Table

Summary File Data

2021-Present: select the Data folder to find table-based format. 2018-2020: select the Prototype folder to find table-based format.

[ACS Summary File Data](#)

Webinars About the Summary File Format Change

[September 2022- Using the American Community Survey Summary File](#)

[June 2022- Understanding the New ACS Summary File Format](#)

[October 2020- Proposed Format Change to Simplify the ACS Summary File](#)

Release Notes and Supporting Materials

Visit the ACS Summary File GitHub wiki page for notes on data, geography, variable changes, example code, and other important general information about the table-based format.

[GitHub Wiki Page](#)

Example Programs

Visit the ACS Summary File GitHub repository for examples using SAS and Python. Additionally, there are instructions for using the ACS Summary File with Excel.

[SAS-How to Retrieve ACS 1-Year Table Data for All Geographies in a State](#)

[SAS-How to Retrieve All ACS 5-Year Table Data for All Tracts in the United States](#)

[Python-Get ACS 1-Year Table Data for All Geographies in a State](#)

[Python-Get All ACS 5-Year Table Data for All Tracts in the United States](#)

[Excel Instructions on How to Import Geography into Table-Based Summary File Tables](#)

Using the American Community Survey Summary File

Resources for Using the Summary File: Sequence-Based



Resources/Guides for the Sequence-based Summary File

- Handbook- Using the American Community Survey Summary File hat Data Users Need to Know
- Instructions on How to Read the ACS Summary File into Excel
- Instructions on Joining the ACS Summary File to the TIGER/Line Shapefiles
- SAS programs for each sequence per state
- Example of Creating a Table Using SAS

ACS Summary File Sequence-Based Format (2005-2021)

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The American Community Survey (ACS) Summary File Sequence-Based Format is a set of comma-delimited text files that contain all of the Detailed Tables for the ACS data releases. Summary File data in the sequence-based format are only available for data years 2005-2021. The sequence-based format is divided into three file types: estimates, margin of error, and geography files for each release.

In the sequence-based format, Detailed Tables are stored in a series of files with only the data from the tables and without such information as the table title, description of the rows, or geographic identifiers. That information is located in other files that the user must merge with the data files to reproduce complete tables.

The handbook, Using the ACS Summary File: What Data Users Need to Know, provides an overview and more about working with the sequence-based format. Data, instructions, guides, and example SAS programs are provided below for each year.

Download Using the American Community Survey Summary File: What Data Users Need to Know [PDF - 6.5 MB]

Related Information

- ACS Summary File Table-Based Format
- MAPPING FILE
- TIGER/Line with Selected Demographic and Economic Data

2021 2020 2019 2018 2017 More ▾

2021

| | |
|---|---|
| 2021 ACS 1-year Estimates | 2017-2021 ACS 5-year Estimates |
| 1-Year Summary File (Sequence-Based) | 5-Year Summary File (Sequence-Based) |

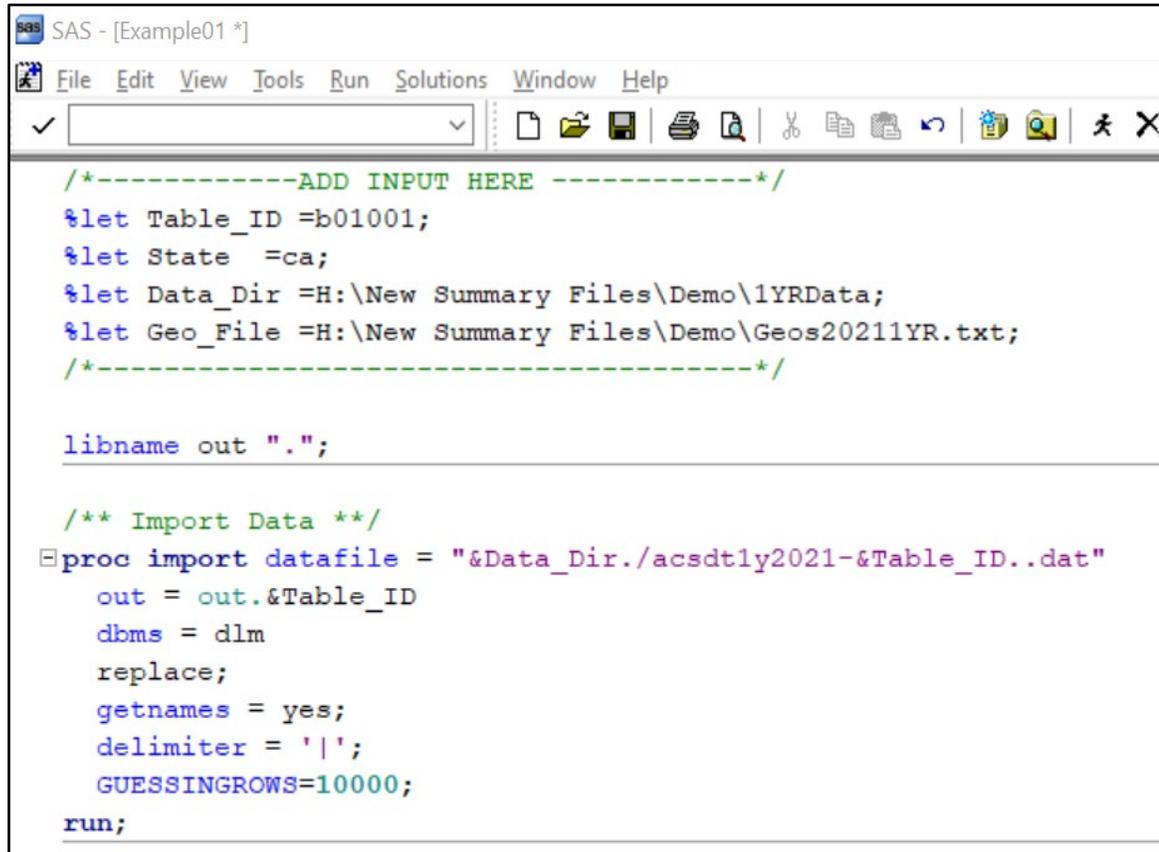
Using the American Community Survey Summary File Table-Based Summary File Demonstration | Geography Names

- SAS Code Example (Bonan Ren)
- Excel “VLOOKUP” Example (Vicki Mack)

Using the American Community Survey Summary File

SAS Example

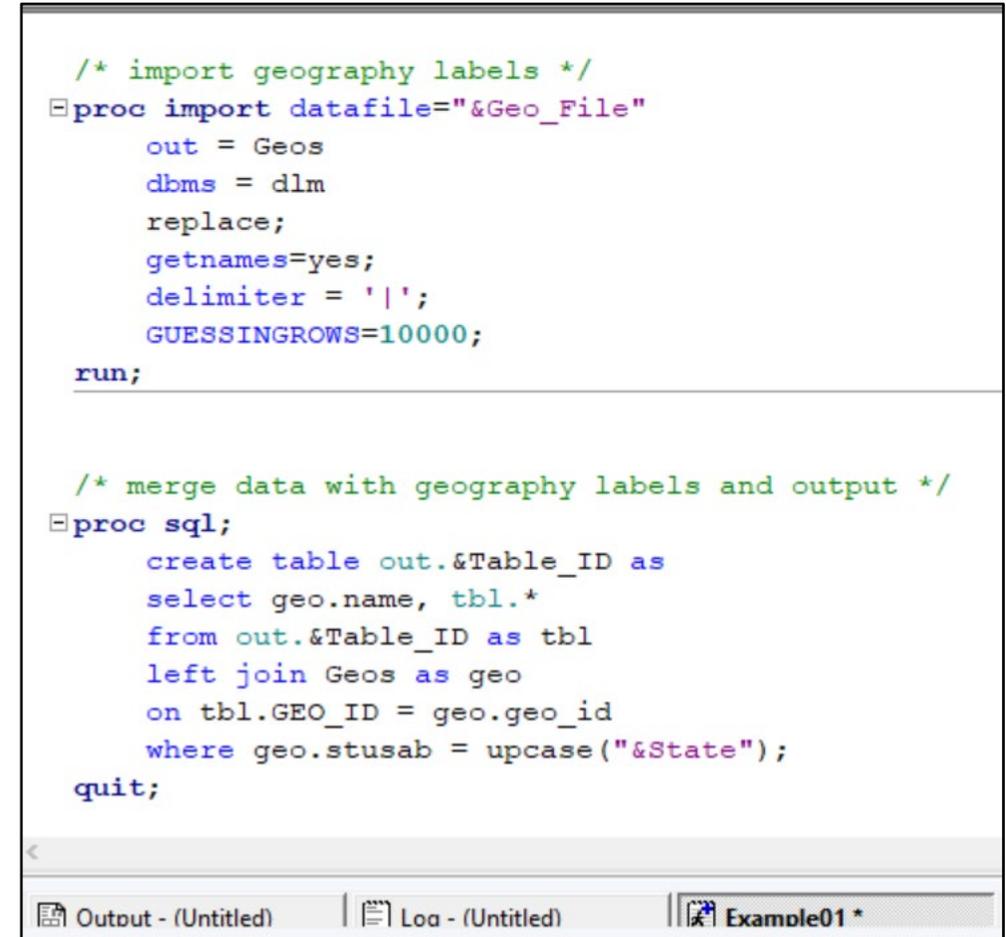
Output data from all geographies and sub-geographies of a given state from the selected data table



```
SAS - [Example01 *]
File Edit View Tools Run Solutions Window Help
/*-----ADD INPUT HERE -----*/
%let Table_ID =b01001;
%let State =ca;
%let Data_Dir =H:\New Summary Files\Demo\1YRData;
%let Geo_File =H:\New Summary Files\Demo\Geos20211YR.txt;
/*-----*/

libname out ".";

/** Import Data **/
proc import datafile = "&Data_Dir./acsd1y2021-&Table_ID..dat"
  out = out.&Table_ID
  dbms = dlm
  replace;
  getnames = yes;
  delimiter = '|';
  GUESSINGROWS=10000;
run;
```



```
/* import geography labels */
proc import datafile="&Geo_File"
  out = Geos
  dbms = dlm
  replace;
  getnames=yes;
  delimiter = '|';
  GUESSINGROWS=10000;
run;

/* merge data with geography labels and output */
proc sql;
  create table out.&Table_ID as
  select geo.name, tbl.*
  from out.&Table_ID as tbl
  left join Geos as geo
  on tbl.GEO_ID = geo.geo_id
  where geo.stusab = upcase("&State");
quit;
```

Using the American Community Survey Summary File

All Data from the State of California in Table B01001

| | NAME | GEO_ID | B01001_E001 | B01001_M001 | B01001_E002 | B01001_M002 | B01001_E003 | B01001_M003 | B01001_E004 | B01001_M004 |
|----|---|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 1 | California | 0400000US06 | 39237836 | -555555555 | 19618934 | 6432 | 1129355 | 3475 | 1210580 | 14702 |
| 2 | California -- Urban | 0400001US06 | 37039607 | 40644 | 18459965 | 24696 | 1060499 | 5939 | 1148785 | 14470 |
| 3 | California -- Rural | 0400043US06 | 2198229 | 40644 | 1158969 | 23831 | 68856 | 5217 | 61795 | 4717 |
| 4 | California -- In metropolitan or micropolitan statistical area | 04000A0US06 | 38956998 | -555555555 | 19474623 | 6175 | 1122822 | 3435 | 1204457 | 14791 |
| 5 | California -- In metropolitan statistical area | 04000C0US06 | 38374563 | -555555555 | 19179376 | 5102 | 1110028 | 3000 | 1188541 | 14611 |
| 6 | California -- In metropolitan statistical area -- in principal city | 04000C1US06 | 17768429 | 3337 | 8873501 | 24723 | 501178 | 11127 | 531411 | 11901 |
| 7 | California -- In metropolitan statistical area -- not in principal city | 04000C2US06 | 20606134 | 3337 | 10305875 | 23993 | 608850 | 11461 | 657130 | 12638 |
| 8 | California -- In micropolitan statistical area | 04000E0US06 | 582435 | -555555555 | 295247 | 3170 | 12794 | 1392 | 15916 | 2011 |
| 9 | California -- In micropolitan statistical area -- in principal city | 04000E1US06 | 157703 | 8859 | 80663 | 5977 | 2809 | 1234 | 3447 | 1304 |
| 10 | California -- In micropolitan statistical area -- not in principal city | 04000E2US06 | 424732 | 8859 | 214584 | 7107 | 9985 | 1412 | 12469 | 1881 |
| 11 | California -- Not in metropolitan or micropolitan statistical area | 04000G0US06 | 280838 | -555555555 | 144311 | 1596 | 6533 | 990 | 6123 | 1259 |
| 12 | California -- Not in metropolitan statistical area | 04000H0US06 | 863273 | -555555555 | 439558 | 3400 | 19327 | 1505 | 22039 | 2011 |
| 13 | Alameda County, California | 0500000US06001 | 1648556 | -555555555 | 816792 | 301 | 44662 | 199 | 46548 | 2478 |
| 14 | Butte County, California | 0500000US06007 | 208309 | -555555555 | 103229 | 826 | 5124 | 303 | 5783 | 1049 |
| 15 | Contra Costa County, California | 0500000US06013 | 1161413 | -555555555 | 570719 | 716 | 31081 | 2 | 32812 | 2867 |
| 16 | El Dorado County, California | 0500000US06017 | 193221 | -555555555 | 96068 | 849 | 4295 | 522 | 4050 | 1006 |

Using the American Community Survey Summary File

Additional support

U.S. Census Bureau Slack Channel

- Developer's forum to help improve access to public datasets from the U.S. Census Bureau
- [Join U.S. Census Bureau Slack Channel](#)

ACS User Support

- acso.users.support@census.gov

GitHub

- All programming languages are welcome!
- If you are interested in submitting code to the ACS GitHub, please submit an email to acso.users.support@census.gov.