

## **Citizen Voting Age Population (CVAP) Special Tabulation From the 2016-2020 5-Year American Community Survey (ACS)**

### **Background**

This is a special tabulation of the citizen voting age population and other data from the 2016-2020 5-year American Community Survey (ACS). This is the twelfth release of this special tabulation of ACS data. The first release used the 2005-2009 5-year ACS data, and the data are re-released every year using each subsequent year's 5-year ACS data. These special tabulations provide citizenship voting age data to assist the redistricting process. Data from this and all previous releases are available through the [Voting Rights link](https://www.census.gov/rdo) on the Census Bureau's Redistricting Data Office web site, [www.census.gov/rdo](https://www.census.gov/rdo).

The American Community Survey is an ongoing survey that provides data every year, giving communities the current information they need to plan investments and services. Information from the survey generates data that help determine how more than \$675 billion in federal and state funds are distributed each year. To help communities, state governments, and federal programs, we ask about a variety of topics, including age, race, ethnicity, and citizenship. For more information on the American Community Survey, go to [www.census.gov/acs](https://www.census.gov/acs).

### **Format**

The data are available in two formats: in SAS data sets or in CSV (comma-separated values) files. SAS is a statistical analysis software package, and CSV files can be read into many software programs such as Excel or Access. Note that in the CSV files, the variable names are on the first row in the file.

### **Tables**

There are ten tables in this data release, one table for each of the following geographic summary levels:

- Nation (summary level 010)
- State (summary level 040)
- Congressional District (summary level 500, based on boundaries for the 116<sup>th</sup> Congress)
- State Legislative District, Upper Chamber (summary level 610, based on the boundaries for the 2018 elections)
- State Legislative District, Lower Chamber (summary level 620, based on the boundaries for the 2018 elections)
- County (summary level 050, based on boundaries as of January 1, 2020)
- Place (summary level 160, based on boundaries as of January 1, 2020)
- Minor Civil Division (MCD) (summary level 060, for the 12 strong MCD states: CT, ME, MA, NH, RI, VT, MI, WI, NJ, NY, MN, and PA, based on boundaries as of January 1, 2020)
- Tract (summary level 140, based on boundaries as of January 1, 2020)
- Block Group (summary level 150, based on boundaries as of January 1, 2020)

NOTE: The 116<sup>th</sup> congressional districts and 2018 state legislative districts are the most current set of boundaries collected by the U.S. Census Bureau prior to the 2020 Census. The next set of congressional and state legislative district boundaries that will be collected, in 2022, are those for the 118<sup>th</sup> congress and the 2022 state legislative districts.

## Table Contents

Each file contains the following variables:

- **GEONAME:** The name of the geographic area, like “United States”, “New Hampshire”, or “Houghton County, Michigan”
- **LNTITLE:** The description of the line, such as “Not Hispanic or Latino” or “Asian and White”. Note that the race groups under “Not Hispanic or Latino” only include people who are not Hispanic or Latino, so “Asian and White” includes non-Hispanic Asians and Whites.
- **GEOID:** This is the identification number of the geographic area. The GEOID is unique for each geographic area, and is created for each type of area as shown in the table below:.

File	GEOID format
Nation	0100000US
State	0400000USss, where ss = two-digit state FIPS code
CD	5001600USssdd, where ss = two-digit state FIPS code and dd = the two-digit district number
SLDU	610U600USssddd, where ss = two-digit state FIPS code and ddd = the three-digit district number
SLDL	620L600USssddd, where ss = two-digit state FIPS code and ddd = the three-digit district number
County	0500000USssccc, where ss = two-digit state FIPS code and ccc = three-digit county FIPS code
Place	1600000USssppppp, where ss = two-digit state FIPS code and ppppp = five-digit place FIPS code
MCD	0600000USsscccmmmmm, where ss = two-digit state FIPS code, ccc = three-digit county FIPS code, and mmmmm = five-digit MCD FIPS code. Note that while it is rare, an MCD can be in two counties in a state. To get the whole MCD, you must add together the parts of the MCD that are in each county.
Tract	1400000USsscccttttt, where ss = two-digit state FIPS code, ccc = three-digit county FIPS code, and ttttt = six-digit tract code
BlockGr	1500000USssccctttttb, where ss = two-digit state FIPS code, ccc = three-digit county FIPS code, ttttt = six-digit tract group code, and b = one-digit block group code

- **LNNUMBER:** This is the number for the line in the table:

LNTITLE	LNNUMBER
Total	1
Not Hispanic or Latino	2
American Indian or Alaska Native Alone	3
Asian Alone	4
Black or African American Alone	5
Native Hawaiian or Other Pacific Islander Alone	6

LNTITLE	LNNUMBER
White Alone	7
American Indian or Alaska Native and White	8
Asian and White	9
Black or African American and White	10
American Indian or Alaska Native and Black or African American	11
Remainder of Two or More Race Responses	12
Hispanic or Latino	13

- TOT\_EST: The rounded estimate of the total number of people for that geographic area and group. (Not available for tracts or block groups.)
- TOT\_MOE: The margin of error for the total number of people for that geographic area and group. (Not available for tracts or block groups.)
- ADU\_EST: The rounded estimate of the total number of people 18 years of age or older for that geographic area and group. (Not available for tracts or block groups.)
- ADU\_MOE: The margin of error for the total number of people 18 years of age or older for that geographic area and group. (Not available for tracts or block groups.)
- CIT\_EST: The rounded estimate of the total number of United States citizens for that geographic area and group
- CIT\_MOE: The margin of error for the total number of United States citizens for that geographic area and group.
- CVAP\_EST: The rounded estimate of the total number of United States citizens 18 years of age or older for that geographic area and group.
- CVAP\_MOE: The margin of error for the total number of United States citizens 18 years of age or older for that geographic area and group.

## Notes

- The total number of citizens (CIT\_EST) and its margin of error (CIT\_MOE) were not included in the 2005-2009 5-Year CVAP tabulation but have been included with each subsequent release.
- The estimates from the ACS are based on a sample survey and hence are subject to sampling error. An approximate 90 percent confidence interval for each estimated count is given by (CVAP\_LO and CVAP\_HI), where  $CVAP\_LO = \text{MAX}(0, CVAP\_EST - CVAP\_MOE)$  and  $CVAP\_HI = CVAP\_EST + CVAP\_MOE$ , and CVAP\_MOE is the margin of error provided in the CVAP table. Note that to avoid negative counts, which are logically impossible, the

lower limit, CVAP\_LO is set to zero when the CVAP\_MOE is greater than CVAP\_EST, as can happen in areas where the ACS sample is small. (In fact, we know the lower limit is bounded below by the number of cases in the ACS sample, but this detail is ignored to keep tables concise.) The interval based on the margin of error is an approximate 90 percent confidence interval, and its coverage of the true value can deviate from the nominal level of 90 percent, particularly when the ACS sample size is small. Nevertheless, it gives an indication of the sampling error associated with the estimate.

- Because this is a special tabulation of data and not part of the standard data products shown on the Census Bureau's data.census.gov web site, these estimates are rounded. Estimates between 1 and 7 are rounded to 4 and estimates 8 and higher are rounded to the nearest 5. Therefore, the detail may not exactly add to the total. For example, the sum of each of the race groups for non-Hispanics may not be the same as the estimate given for non-Hispanics.
- These estimates will not match counts from the 2010 Census or 2020 Census. The ACS data were collected for and represent the five-year period from 2016 to 2020. The 2010 Census data represent April 1, 2010, and the 2020 Census data represent April 1, 2020.
- There are cases where the margin of error is missing (a "." in SAS or "0" in the CSV files). Those are situations where the estimate is controlled to the Population Estimates and therefore there is no sampling error.

## Questions

If you have any questions about these files, please contact the Census Bureau's Redistricting & Voting Rights Data Office at (301) 763-4039 or by email at [rdo@census.gov](mailto:rdo@census.gov).