

## 5. USER NOTES

### Population Thresholds

The U.S. Census Bureau publishes American Community Survey (ACS) 1-year and 5-year estimates,

with population thresholds set for the ACS 1-year estimates to provide reliable data. Table 5.1 provides a brief comparison of the two types of estimates:

Table 5.1. **Understanding ACS 1-Year and 5-Year Estimates**

1-Year Estimates	5-Year Estimates
Published for selected geographic areas with populations of 65,000 or greater	Published for all geographic areas down to the block group level
Represent the average characteristics over a calendar year	Represent the average characteristics over a 5-year period of time
Have fewer published geographic areas than the 5-year estimates	Have more published areas than the 1-year estimates

Source: U.S. Census Bureau.

For more guidance on using ACS 1-year and 5-year estimates, see the Chapter on “Understanding Multiyear Estimates” in *Understanding and Using American Community Survey Data: What All Data Users Need to Know*.<sup>18</sup>

### Explanation of Missing Estimates and Data Release Filtering Rules

Data users often question why certain ACS estimates are not available. Missing estimates can be caused by data suppression through various methods or restrictions that are applied to ACS data to limit the disclosure of information about individual respondents and the number of published estimates with unacceptable statistical reliability.

Filtering rules, based on statistical reliability of the ACS 1-year estimates, are used to ensure that Detailed Tables are not released where the majority of estimates in the Detailed Tables have an unacceptable level of reliability.

Learn more about missing estimates and filtering rules on the Census Bureau’s Data Suppression Web page.<sup>19</sup>

<sup>18</sup> U.S. Census Bureau, *Understanding and Using American Community Survey Data: What All Data Users Need to Know*, <[www.census.gov/programs-surveys/acs/guidance/handbooks/general.html](http://www.census.gov/programs-surveys/acs/guidance/handbooks/general.html)>.

<sup>19</sup> U.S. Census Bureau, American Community Survey (ACS), Data Suppression, <[www.census.gov/programs-surveys/acs/technical-documentation/data-suppression.html](http://www.census.gov/programs-surveys/acs/technical-documentation/data-suppression.html)>.

### Rounding Rules and Margins of Error

Tables B00001, B00002, B98001, and B98002 are sample counts, not estimates, and do not have margins of error associated with them. Tables in series B99 imputation tables and B98 (except B98001 and B98002) quality measure tables do not provide margin of error calculations. The margin of error calculations are set to “-1” for these tables.

There are a few special rules on how certain margins of error are determined for ACS estimates. The accuracy of the estimate (decimal place) within the Detailed Tables determines to how many digits the margin of error is rounded.

### Jam Values

Some data values represent unique situations where either the information to be conveyed is an explanation for the absence of data, represented by a symbol in the data display, such as “(X),” or the information to be conveyed is an open-ended distribution, such as “115 or greater,” represented by 115+. These are the so-called “jam values.”

The following special data values can appear in an ACS Summary File table as an explanation for the absence of data:

- **Missing Value = ""**  
A missing string indicates that the estimate is unavailable. This value appears in the estimate and margin of error files as two commas adjacent to each other without any characters between them. A missing value indicates an estimate is missing because of geographic restrictions, unacceptable statistical reliability, or the Census Bureau's Disclosure Review Board requirements. If the last cell in a data file is filtered, then there will be a comma followed immediately by a carriage return or end-of-file (EOF) indication.
- **Dot = "."**  
A dot indicates that the estimate has no sample observations or too few sample observations.

In the margin of error files, this value could also indicate that the margin of error is unavailable for a median estimate that has been replaced with a jam value.

- **Zero = "0"**  
A "0" entry in the margin of error column indicates that the estimate is controlled. This is similar to the "\*\*\*\*\*" symbol used in data.census.gov.
- **Negative 1 = "-1"**  
This indicates that an estimate does not contain a margin of error. Tables B00001 and B00002 and tables starting with B98 and B99 do not have margins of error associated with them.
- **Jam Values for Medians**  
Table 5.2 lists the jam values for medians. For example, a dollar amount is not calculated for Table B10010 if the estimate is 2,500 or less.

Table 5.2. **Jam Values for Medians**

Jam Value	Actual Meaning	Use for Medians
0	1 or less	Age, Duration of Marriage
9	9.0 or more	Rooms
10	10.0 or less	Gross Rent as Percentage of Income, Owner Costs as Percentage of Income
50	50.0 or more	Gross Rent as Percentage of Income, Owner Costs as Percentage of Income
99	100 or less	Rent, Gross Rent, Selected Monthly Owner Costs, Monthly Housing Costs
101	101 or more	Duration of Marriage
116	115 or more	Age
199	200 or less	Tax
1001	1,000 or more	Selected Monthly Owner Costs
1939	1939 or earlier	Year Built
1969	1969 or earlier	Year Moved In
2001	2,000 or more	Rent, Gross Rent
2010	2010 or later	Year Built, Year Moved In
2499	2,500 or less	Income, Earnings
4001	4,000 or more	Selected Monthly Owner Costs, Monthly Housing Costs
9999	10,000 or less	Value
10001	10,000 or more	Tax
200001	200,000 or more	Income
250001	250,000 or more	Income, Earnings
1000001	1,000,000 or more	Value

Source: U.S. Census Bureau.

## Display of ACS Estimates

The estimates in the Summary File are stored using standard notation instead of in scientific notation. The estimates are stored as whole numbers. The largest estimate in the ACS Summary File contains 14 digits.

## Multiple Sequences for a Table

There are eight tables with more than the maximum 245 cells that cannot fit into a single sequence, so each of these tables is divided into multiple sequence files. Table 5.3 shows the tables that contain multiple sequences.

Check Appendix A of the 1-year Appendixes or 5-year Appendixes Excel files to verify the sequences for

these tables.<sup>20</sup> The last six tables on the list are only produced at the national level (summary level 010), and the files for these sequences will be blank for all other summary levels.

### For More Information

Please send any technical questions or comments you have on the ACS Summary File via e-mail to: <acso.users.support@census.gov>. If you have questions or comments about the ACS, you can submit a question online at <<https://ask.census.gov/>>.

<sup>20</sup> U.S. Census Bureau, American Community Survey (ACS) Summary File Documentation, <[www.census.gov/programs-surveys/acs/technical-documentation/summary-file-documentation.html](http://www.census.gov/programs-surveys/acs/technical-documentation/summary-file-documentation.html)>.

Table 5.3. **Tables That Are Contained in More Than One Sequence File**

Table ID	Table Title
B24010	Sex by Occupation for the Civilian Employed Population 16 Years and Over
B24020	Sex by Occupation for the Full-Time, Year-Round Civilian Employed Population 16 years and Over
B24121	Detailed Occupation by Median Earnings in the Past 12 Months for the Full-Time, Year-Round Civilian Employed Population 16 Years and Over
B24122	Detailed Occupation by Median Earnings in the Past 12 Months for the Full-Time, Year-Round Civilian Employed Male Population 16 Years and Over
B24123	Detailed Occupation by Median Earnings in The Past 12 Months for the Full-Time, Year-Round Civilian Employed Female Population 16 Years and Over
B24124	Detailed Occupation for the Full-Time, Year-Round Civilian Employed Population 16 Years and Over
B24125	Detailed Occupation for the Full-Time, Year-Round Civilian Employed Male Population 16 Years and Over
B24126	Detailed Occupation for the Full-Time, Year-Round Civilian Employed Female Population 16 Years and Over

Source: U.S. Census Bureau.