

New Kid in Town

Understanding Data from the American Community Survey



Julie N. Zimmerman, Professor of Rural Sociology and Cameron McAlister, Graduate Assistant.

As the Census Bureau puts it...

while the Census that is conducted every 10 years tells us “how many” people there are,

the American Community Survey tells us

“what do they look like?”

If you are looking for county-level data on family characteristics, educational attainment, or detailed data on poverty, the **American Community Survey** is the place to go.

The **American Community Survey** (also called **ACS**) provides detailed estimates on many different population characteristics and for many different geographies including counties, cities, states, and the nation.

Even though the American Community Survey is a rich data source and can be the only source for many county-level data, there are **important differences** that we need to know about.

What kinds of data can I find in the American Community Survey?

The American Community Survey has a wide array of data. Here is just a sampling of some of the topics and data that are available:

Families and Living Arrangements

Children
Married
Single Parents
Grandparents
Relationship (within Household)

Health

Health Insurance
Disability

Education

Educational Attainment
Level of School

Income and Poverty

Detailed Poverty Characteristics
Income
Earnings
Cash and Other Assistance
SNAP/Food Stamps

Populations and People

Ability to Speak English
Language Spoken at Home
Older Population
Residential Mobility
Veterans

Housing

Own/Rent
Year Moved In
Year Structure Built
Vehicles Available
Computer Access
Internet Access

Employment

Transportation to Work
Travel Time to Work
Occupation
Hours/Weeks Worked

How are data from the American Community Survey different?

Data from the American Community Survey are different in several ways:

1. The data are called “estimates.”
2. Instead of data for just one point in time, estimates for most counties cover 5 years.
3. For some places, the American Community Survey provides both 1-year estimates and 5-year estimates.
4. We now have something called a margin of error.

Each of these are explained in this publication.

Why are the data called “estimates?”

The data are called estimates because they are just that – estimates. The technical terms are “multi-year” estimates and “period” estimates. The technical terms in part reflect that the data are collected over a period of time.



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Updated March 2020

Because the data are estimates, it is important that we **use the word “estimates”** when we report data from the American Community Survey.

Here are some examples of how to write about data from the American Community Survey:

“**Estimates** from the American Community Survey indicate that ____.”

“According to the American Community Survey, it is **estimated** that ____.”

When it comes to estimates, it is important to know that they are **not a population count**.

Data from the American Community Survey tell us the characteristics, but if you want to know the **official count**, you must use either the **decennial census** or the **annual population estimates**.

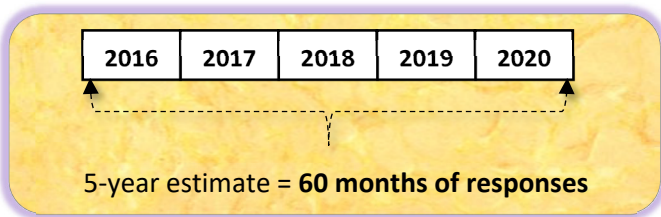
Why are there 1-year and 5-year estimates?

A key reason for creating the American Community Survey was to reduce cost. As a result, the ACS uses a smaller sample. Another change was that the ACS continuously collects responses over time. To get a sample that is big enough, all of the responses during that time need to be combined.

For the 1-year estimates, responses are collected each month during the entire 12 months of the calendar year.



For the 5-year estimates, responses are collected each month over a longer 60-month time period.



In both cases, all of the responses collected during that time are combined to produce the 1- or 5- year estimate.

While early publications often made this mistake, it is important to remember that the ACS estimates are **NOT AVERAGES**. The estimates cover all of the responses collected during each of the time frames.

Which estimates are available for my county?

All counties in the U.S. are provided **5-year estimates**. However, only counties with 65,000 persons or more get **BOTH** 1-year and 5-year estimates.

American Community Survey Estimates for Kentucky Counties

5-year estimates ONLY
(Populations of less than 65,000)

Adair, Allen, Anderson, Ballard, Barren, Bath, Bell, Bourbon, Boyd, Boyle, Bracken, Breathitt, Breckinridge, Butler, Caldwell, Calloway, Carlisle, Carroll, Carter, Casey, Clark, Clay, Clinton, Crittenden, Cumberland, Edmonson, Elliott, Estill, Fleming, Floyd, Franklin, Fulton, Gallatin, Garrard, Grant, Graves, Grayson, Green, Greenup, Hancock, Harlan, Harrison, Hart, Henderson, Henry, Hickman, Hopkins, Jackson, Jessamine, Johnson, Knott, Knox, LaRue, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, Lincoln, Livingston, Logan, Lyon, McCreary, McLean, Magoffin, Marion, Marshall, Martin, Mason, Meade, Menifee, Mercer, Metcalfe, Monroe, Montgomery, Morgan, Muhlenberg, Nelson, Nicholas, Ohio, Owen, Owsley, Pendleton, Perry, Powell, Pulaski, Robertson, Rockcastle, Rowan, Russell, Scott, Shelby, Simpson, Spencer, Taylor, Todd, Trigg, Trimble, Union, Washington, Wayne, Webster, Whitley, Wolfe, and Woodford.

1-year and 5-year estimates
(Populations of 65,000 + persons)

Boone, Bullitt, Campbell, Christian, Daviess, Fayette, Hardin, Jefferson, Kenton, McCracken, Madison, Oldham, Pike, and Warren.

My county has both 1- and 5-year estimates, which one do I choose?

It depends on your purpose. Generally speaking, the **1-year estimates** will have **larger margins of error**.

This means that the 1-year estimates are not as precise as the 5-year estimates for the same item.

If you are interested in general characteristics for a large population, the difference might not matter.

But for small groups, such as just female headed households or just people in a particular age group, the margin of error can be too large for the estimate to be useful. In this case, you would want to use the 5-year estimates.

What is a “Margin of Error?”

The margin of error tells us the range within which the estimate most likely falls.

If you have seen poll results reported in the news, when they say “plus or minus 5 points,” they are telling you the margin of error.

Why is the Margin of Error important?

All data that come from surveys have margins of error. The margin of error gives us an idea as to how reliable the data are.

One reason that margins of error are important is that they can be **very large** (especially for small places or small groups).

One way to think of it is:

Imagine planning a program where the number of potential participants is 50 people (+/- 10). This means that you could have anywhere between 40 and 60 participants in your program.

Now imagine planning that same program if the number of potential participants is 50 (+/- 40). This means that you could have anywhere from 10 to 90 people.

When the range is this large, you can see how things can become more difficult.

The same goes for understanding estimates from the American Community Survey. The larger the margin of error, the more “wobble room” there is in the estimate.

Do I have to include the Margin of Error?

Yes. It is important to **always report** the margin of error – in text, tables, or charts and graphs.

**If we don’t know the margin of error,
how can we figure out how much
“wobble room”
there is in the estimate?**

If you use a website that does not give you the margin of error, go to a website that does.

What is the easiest way to look at data for my county?

For many of the commonly used estimates, the Census Bureau provides special tables called “**Data Profiles**” and “**Subject Tables**.”

“Data Profiles” provide an overall look at selected estimates on social, economic, housing, and demographic characteristics.

“Subject Tables” are similar but they focus on a specific topic.

These tables are also handy because the Census Bureau already does the math and provides **both estimates** and **percents**.

If a table number begins with an “S,” then you know it is a subject table. If the table starts with “DP,” then you know it is a data profile table.

How do I compare my county with another county?

Since estimates from the American Community Survey vary depending on the size of a place, when it comes to comparing counties, it is important to always compare the same years. One way to remember this is to “compare apples to apples.”

If your county only has 5-year estimates, then you need to compare it with the other county’s 5-year estimates.

Whichever year(s) you pick for one county, be sure and use the same years for the other county.

How often do new data come out?

Each year, the Census Bureau releases new estimates from the American Community Survey.

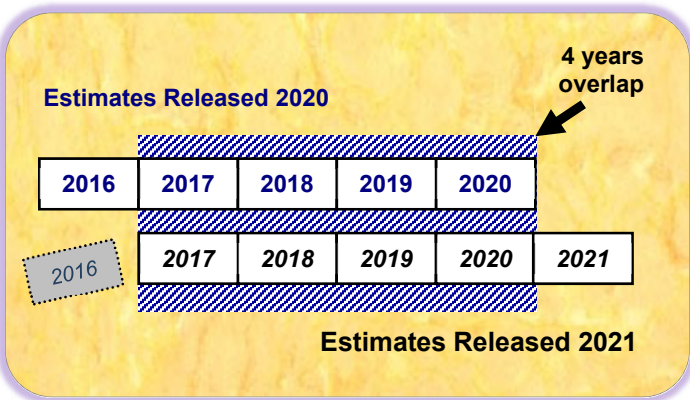
However, it is really important to know that even though new estimates are released each year, this means that **only one year** of the responses have changed. (The Census Bureau calls it “refreshing” the estimates.)

For the 1-year estimates, this means that the estimate is based on a whole new set of responses. However, for the 5-year estimates, things are different.

Remember, how the Census Bureau is constantly collecting new responses for the American Community Survey? This means that each year the new responses are added to the estimates and the oldest ones are dropped out.

For the 5-year estimates, even though a new year of responses has been added,

the other 4 years of responses did not change.



Can I use the American Community Survey to see how much things have changed?

You can use the American Community Survey to look at change over time. But, it is important to remember that:

Small changes may not mean that any real change actually happened

If the two estimates have overlapping years, it is likely that change between the estimates is only because some of the people in the sample changed, not because there was any real change.

To be sure, the Census Bureau recommends to **only compare estimates for years that don't overlap.**

It is also important to know that since the American Community Survey uses a smaller sample, for any change to be real, the difference needs to be

larger than the margin of error.

Where do I find data online from the American Community Survey?

The Census Bureau provides access to the American Community Survey through its new “**data.census.gov**” website. As the website grows, it will have many different data sources produced by the Census Bureau.

<https://data.census.gov>

I found my county's data BUT, some of it is missing. What's going on?

There are two common reasons why you could encounter missing data:

1. It might be that you are looking for estimates that don't exist. For example, if you are looking for 1-year estimates for Jackson or Livingston counties, you won't find anything.

Remember, **most counties only have 5-year estimates.**

2. Another reason could be that there were not enough responses to report an estimate. In this case, the Census Bureau does not provide a table. If this happens, for 1-year estimates, you can look for the 5-year estimate for the same item.

How do I find more information?

The Census Bureau's website has lots of resources and information about the American Community Survey.

<https://www.census.gov/programs-surveys/acs/>

Resources include guidance for data users and a library with infographics, videos, and outreach materials to learn more about responding to the ACS.

Brief publications like this one are also available through the **Kentucky: By The Numbers** program at

<https://kybtn.ca.uky.edu/>