## UNDERSTANDING AND USING AMERICAN COMMUNITY SURVEY DATA: WHAT JOURNALISTS NEED TO KNOW

Finding fresh data for news stories used to be difficult. With the U.S. Census Bureau's American Community Survey (ACS), data are now available on a wide range of topics, whenever they are needed. The ACS provides journalists with data they can use to strengthen news coverage and feature stories with up-to-date social, economic, housing, and demographic information about America's communities.

The ACS has become a valuable resource for datadriven journalism—where the goal is to tell compelling stories that are grounded in data. This guide provides a brief overview of how journalists are using ACS data to make comparisons across geographic areas and population subgroups, support anecdotal evidence by providing a broader context, report on trends and reversals, and conduct research. It also describes some important considerations when working with ACS data—particularly estimates for small geographic areas and small population groups.

For more detailed information about the ACS—how to judge the accuracy of ACS estimates, understanding multiyear estimates, knowing which geographic areas are covered in the ACS, and how to access ACS data on the Census Bureau's Web site—see the Census Bureau's handbook on *Understanding and Using American Community Survey Data: What All Data Users Need to Know.*<sup>1</sup>

# 1. ACS BASICS

The American Community Survey (ACS) is a nationwide survey designed to provide communities with reliable and timely social, economic, housing, and demographic data every year. A separate annual survey, called the Puerto Rico Community Survey (PRCS), collects similar data about the population and housing units in Puerto Rico. The U.S. Census Bureau uses data collected in the ACS and the PRCS to provide estimates on a broad range of population, housing unit, and household characteristics for states, counties, cities, school districts, congressional districts, census tracts, block groups, and many other geographic areas.

The ACS has an annual sample size of about 3.5 million addresses, with survey information collected nearly every day of the year. Data are pooled across a calendar year to produce estimates for that year. As a result, ACS estimates reflect data that have been collected over a period of time rather than for a single point in time as in the decennial census, which is conducted every 10 years and provides population counts as of April 1 of the census year.

ACS 1-year estimates are data that have been collected over a 12-month period and are available for geographic areas with at least 65,000 people. Starting with the 2014 ACS, the Census Bureau is also producing "1-year Supplemental Estimates"—simplified versions of popular ACS tables—for geographic areas with at least 20,000 people.

#### What Is the ACS?

- The ACS is a nationwide survey designed to provide communities with reliable and timely data every year.
- Data are available for a wide range of geographic areas.
- The annual sample includes 3.5 million addresses.
- Data are pooled across years to produce estimates for small geographic areas.
- The ACS includes social, economic, housing, and demographic measures.
- The ACS was designed to provide estimates of the characteristics of the population, not population counts.

The Census Bureau combines 5 consecutive years of ACS data to produce multiyear estimates for geographic areas with fewer than 65,000 residents. These 5-year estimates represent data collected over a period of 60 months.

<sup>&</sup>lt;sup>1</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>.

## **Topics Covered in the ACS**

The primary purpose of the ACS is to help Congress determine funding and policies for a wide variety of federal programs. In fact, ACS data help determine how more than \$675 billion in federal funds are distributed to state and local areas each year.<sup>2</sup> Because of this, the topics covered by the ACS are diverse. They include social, economic, housing, and demographic measures, which yield a wealth of information journalists can use to write better stories (see Table 1.1).<sup>3</sup> Various tables in the ACS have different "universes," or base reference totals against which all other characteristics are compared. Some tables cover population characteristics, while others cover housing characteristics. Among the population tables, some cover the entire population (such as tables of the population by age), while some cover only a subset of the population (such as tables of employment status, which include data only for the population 16 years and older).

Many of these topics contain numerous subtopics. For example, "Journey to Work"—that is, commuting includes data on means of transportation (e.g., car, truck, or van; bus; bicycle; walking), travel time (both duration and time departed), and whether a carpool is used. Data on the foreign-born population include information about citizenship, place of birth, and year of entry.

TIP: The ACS was designed to provide estimates of the characteristics of the population, not to provide counts of the population in different geographic areas or population subgroups. The ACS can tell you the share of young adults in Multnomah County, Oregon, who bike to work, but is not intended to tell you how many young adults live in Multnomah County. For basic counts of the U.S. population by age, sex, race, and Hispanic origin, visit the Census Bureau's Population and Housing Unit Estimates Web page.\*

\* U.S. Census Bureau, Population and Housing Unit Estimates, <www.census.gov/popest/>.

#### Table 1.1. Population and Housing Data Included in American Community Survey Data Products

**Social Characteristics** Ancestry **Citizenship Status** Disability Status<sup>1</sup> **Educational Attainment** Fertility Grandparents as Caregivers Language Spoken at Home Marital History<sup>2</sup> **Marital Status** Migration/Residence 1 Year Ago Period of Military Service Place of Birth School Enrollment Undergraduate Field of Degree<sup>3</sup> Veteran Status<sup>2</sup> Year of Entry

Economic Characteristics Class of Worker Commuting (Journey to Work) Employment Status Food Stamps/Supplemental Nutrition Assistance Program (SNAP)<sup>4</sup> Health Insurance Coverage<sup>2</sup> Income and Earnings Industry and Occupation Place of Work Poverty Status Work Status Last Year

#### **Housing Characteristics**

Computer and Internet Use<sup>5</sup> House Heating Fuel Kitchen Facilities Occupancy/Vacancy Status Occupants Per Room Plumbing Facilities<sup>6</sup> Rent Rooms/Bedrooms Selected Monthly Owner Costs Telephone Service Available Tenure (Owner/Renter) Units in Structure Value of Home Vehicles Available Year Householder Moved Into Unit Year Structure Built

**Demographics Characteristics** Age and Sex Group Quarters Population Hispanic or Latino Origin Race

Relationship to Householder Total Population

<sup>1</sup> Questions on Disability Status were significantly revised in the 2008 survey to cause a break in series.

<sup>2</sup> Marital History, Veterans' Service-Connected Disability Status and Ratings, and Health Insurance Coverage were added in the 2008 survey. <sup>3</sup> Undergraduate Field of Degree was added in the 2009 survey.

<sup>4</sup> Food Stamp Benefit amount was removed in 2008.

<sup>6</sup> One of the components of Plumbing Facilities, flush toilet, and Business or Medical Office on Property questions were removed in 2016. Source: U.S. Census Bureau.

<sup>&</sup>lt;sup>2</sup> U.S. Census Bureau, "Uses of Census Bureau Data in Federal Funds Distribution," 2017, <www.census.gov/library/working -papers/2017/decennial/census-data-federal-funds.html>.

<sup>&</sup>lt;sup>3</sup> U.S. Census Bureau, American Community Survey (ACS), Subjects Included in the Survey, <www.census.gov/programs-surveys/acs /guidance/subjects.html>.

<sup>&</sup>lt;sup>5</sup> Computer and Internet Use was added to the 2013 survey.

A good way to learn about the topics covered in the ACS is to explore the information available through the Census Bureau's data.census.gov Web site.<sup>4</sup> The Data Profiles in data.census.gov, which include the most frequently requested social, economic, housing, and demographic data, are especially useful for novice users who want to explore the range of topics available.<sup>5</sup>

Journalists with expertise in using statistical packages may also be interested in the Public Use Microdata Sample (PUMS) files, which contain a sample of individual records of people and households that responded to the survey (stripped of all identifying information). The PUMS files permit analysis of specific population groups and custom variables that are not available through pretabulated ACS tables.<sup>6</sup>

### When Are ACS Data Released?

ACS data are very timely because they are generally released during the year immediately following the year in which they are collected. The Census Bureau's ACS Data Releases Web page provides information about upcoming ACS data releases, including scheduled dates, notes about new estimates or new guidance, and technical information about geography and product changes. Users can also browse the notes from previous years.<sup>7</sup>

The Census Bureau provides accredited journalists with advance access to ACS data. Media embargos are typically available 48 hours before the public release of ACS 1-year and 5-year published estimates.

For more information about ACS data releases or to request an interview, please contact the Census Bureau's Public Information Office by phone (301-763-3030) or e-mail <pio@census.gov>.

<sup>&</sup>lt;sup>4</sup> U.S. Census Bureau, <https://data.census.gov>.

 $<sup>^{\</sup>rm 5}$  U.S. Census Bureau, data.census.gov, Data Profiles, <https://data.census.gov/cedsci/table?q=dp>.

<sup>&</sup>lt;sup>6</sup> U.S. Census Bureau, American Community Survey (ACS), PUMS Data, <www.census.gov/programs-surveys/acs/data/pums .html>.

<sup>&</sup>lt;sup>7</sup>U.S. Census Bureau, American Community Survey (ACS), Data Releases, <www.census.gov/programs-surveys/acs/news/data -releases.html>.