

Using the American Community Survey: U.S. Census Data at the Community Level

Originally established in 1790, the U.S. Census has become an important tool in answering vital questions about social and economic trends. Because the Census surveys the U.S. population only once every 10 years, the American Community Survey (ACS) was created to provide more timely data. Fully implemented for the first time in 2006, the ACS uses the same questions as the decennial Census but surveys approximately 3 million households every year.

The ACS is generally the best and most easily accessed source for a wide range of community data, and is widely used by local policymakers. In addition, ACS data help determine funding decisions for many state and federal programs, including TANF, adult education, and eligibility for Low-Income Housing Tax Credits. Statistics produced from the ACS data are most easily accessed online at <http://factfinder.census.gov/>. Additional guidelines for using the data are at http://www.census.gov/acs/www/UseData/Compass/compass_series.html.

What kinds of data are available?


ACS questions are classified into four broad categories, listed in Table 1. Beginning in 2010 the decennial Census will include only demographic questions, making the ACS the only source of information regarding social, economic, and housing data.

Table 1. American Community Survey Topics

ACS Subjects	Characteristics
Demographic	Sex, Age, Race/Ethnicity
Social	Educational Attainment, Marital Status, Citizenship, Ancestry
Economic	Income, Employment and Occupation
Housing	Home Ownership, Vacancy, House value and costs

The ACS and the decennial Census provide extensive sets of analyses reported at a variety of geographic levels, illustrated in Table 2. Data at the zip code level is not normally provided, but can be constructed by aggregating Block Group data.

Table 2. Geographic Units Available in the American Community Survey and the U.S. Census



State / County: The largest geographic areas. These data are the most accurate and frequently utilized.
Place: Corresponds to what we call a city (e.g. Redwood City, CA) or neighborhood (North Fair Oaks, CA).
Tract: Used for local planning, a geographic unit that includes between 1,500 and 8,000 people.
Block Group: The smallest available geographic unit, usually consisting of a few city blocks. Likely not sufficiently large to provide useable estimates.

Are data the same for geographic areas of all sizes?

Because the ACS surveys fewer households than the decennial Census, it can only report accurate annual estimates for areas that contain more than 65,000 people. To create reliable estimates for areas containing between 20,000 and 65,000 people the ACS aggregates and then averages three years of data, and for areas with less than 20,000 people, the ACS uses five years of aggregated data. Receiving aggregated ACS estimates is an improvement over receiving data only once every 10 years, but smaller communities will continue to be limited by a lack of timely information regarding their populations. Three-year estimates became available for the first time in December 2008 and five years estimates will become available in 2010.

Table 3. Availability of Geographic Units in the American Community Survey

Population Size	Requires:	Year when available:					Notes
		2006	2007	2008	2009	2010	
65,000+	1-year estimates						In San Mateo County, CA for example, this includes the cities of Daly City, Redwood City, and San Mateo.
20,000-64,999	3-year estimates						2008 data is an average of 2005, 2006, and 2007 data.
<20,000	5-year estimates						Includes Block Group and Tract data. The first year available will be an average of 2005 through 2009 data.

What are some common issues with interpreting ACS data?

Users should always be careful in interpreting ACS data. Following are a few important considerations:

- Although the best source for a variety of community data, both the decennial Census and the ACS are subject to error. Due to individual mobility, respondent distrust, and cultural differences in how households are defined, some populations have been shown to be undercounted (urban residents, minorities, young children, and homeless individuals) while other populations may be overcounted (families with multiple residences or college students living away from their families). In addition, ACS estimates are based on a random sample of households, potentially making it less accurate than the decennial Census, which attempts to incorporate every household. Some judgment must be used when data is disaggregated into small groups (i.e. using multiple demographic, social, and economic breakdowns in one chart) or into small geographies (e.g. Block Groups).
- Care should be taken when comparing ACS data across years or to other data sources such as the decennial Census. For example, smaller geographic areas should not compare three-year estimates from one year to the next because they rely on overlapping data. Comparison guidelines can be found at <http://www.census.gov/acs/www/UseData/compACS.htm>.
- Race and Hispanic origin are two separate questions in both the decennial Census and the ACS. As a result, some tables place people of Hispanic origin into other race categories while other tables place Hispanics in their own separate category.
- Many 2008 three-year estimates will be inaccurate because they rely on ACS data from 2005, prior to full ACS implementation. Data from 2005 does not include “Group Quarters” such as jails, hospitals, colleges, and military barracks. This will no longer be a problem for three-year estimates in 2009, but will affect the first implementation of five-year estimates in 2010.
- In limited cases users may create their own data tables, but this can be done only on special Public Use Microdata Areas (PUMAs). Details are at <http://www.census.gov/acs/www/Products/PUMS/index.htm>.