

Research Brief

The Commonwealth's Official Source for Population and Economic Statistics

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2007-2009 American Community Survey Data Released: Multi-Year Estimates Provide Updated Data for Dozens of Counties and Cities

PENN STATE HARRISBURG – The Census Bureau recently released new demographic and social data for areas with populations of 20,000 or more. The 2007-2009 American Community Survey 3-Year Estimates contain data relating to income, poverty, educational attainment, commuting statistics, disability, employment and much more. The American Community Survey (ACS) is a continuous survey that replaces the decennial census long form, and provides more timely and updated information about the nation's changing and diverse population every year.

In Pennsylvania, three-year estimates for the period 2007-2009 were released for all of the state's congressional districts, 61 of Pennsylvania's 67 counties, the largest 20 cities, 202 school districts, as well as many larger municipalities, several metropolitan statistical areas, and other geographies.

Striking a Balance

ACS single-year, 3-year, and 5-year estimates are all period estimates that represent the average characteristics of the population over a specific period of time. Single-year estimates include information collected over a 12-month period, 3-year estimates represents data collected over a 36-month period, and 5-year estimates include data collected over a 60-month period.

The differences in time periods between single-year and multi-year ACS estimates affect decisions about which set of estimates should be used for a particular analysis. While single-year estimates present the most current estimate available and 5-year estimates provide the greatest precision by means of a larger sample size, ACS 3-year estimates offer a trade-off between the two because they are more reliable than 1-year and more current than 5-year estimates.

The Census Bureau encourages comparing estimates based only on the same survey period. For example, if a data user wanted to make a comparison between Altoona, Pennsylvania, which receives both 3-year and 5-year multi-year data from the ACS, with estimates for Philadelphia, he or she would have to choose between 3-year and 5-year multi-year estimates. Altoona is below the population threshold (65,000 or more) for receiving 1-year estimates; therefore single-year estimates are not available. If a more recent estimate is required, the data user would be better served comparing 2007-2009 estimates for Altoona with 2007-2009 estimates for Philadelphia, as 3-year estimates are available for both geographies and provide the most current



data. However, if the precision of the estimate is paramount, the larger sample size provided by the 5-year estimate would make it more appropriate for the analysis. Remember: regardless of what estimate is selected use only the same survey period when comparing two geographies (1-year estimates should only be compared with other 1-year estimates; 3-year estimates with other 3-year estimates, ect.).

Assessing Change

In addition to finding a balance between currency and reliability, data users must take caution when accessing change over time. Comparing successive multi-year estimates is not recommended for year to year changes as the change in a specific characteristic may be attributed to the fact that two-thirds of the data in a 3-year estimate overlap with the data in the next year's 3-year estimate. Therefore, data users are encouraged to wait for non-overlapping estimates (ACS 2005-2007 and ACS 2008-2010).

Selected Data from 2007-2009 ACS

- In 2007-2009, the median income for a Pennsylvania resident with a bachelor's degree was \$46,821. The median income increased to \$62,252 for those who achieved a graduate or professional degree. Overall, 26.3 percent of Pennsylvanians attained a bachelor's degree or higher in 2007-2009.
- During the period 2007-2009 an average of 18.1 percent of women who gave birth during the previous year in Pennsylvania were unmarried and below the federal poverty level.
- The percentage of Pennsylvania seniors who worked in the past twelve months was 17.3 percent in 2007-2009. Nationwide 18.4 percent of the population 65 and older worked in the past twelve months during the same period.

More about the ACS

The 2007-2009 ACS estimates are based on an annual, nationwide household sample of about 250,000 addresses per month, or 2.5 percent of the population a year (7.5 percent over 36 months). Geographic areas for which data are available are based on total populations of 20,000 or more. They are different from, and should not be directly compared to the ACS 5-year estimates, which were previously released, and relate to the period 2005-2009 only. As is the case with all surveys, statistics from sample surveys are subject to sampling and nonsampling error

The Pennsylvania State Data Center is the commonwealth's expert in demographics and Census datasets. To request custom American Community Survey data tables or maps, contact the Pennsylvania State Data Center at 717.772.2710.

Source: U.S. Census Bureau, 2007-2009 American Community Survey

The Pennsylvania State Data Center is the commonwealth's official source for population and economic statistics. It is based at Penn State Harrisburg's Institute of State and Regional Affairs. The Pennsylvania State Data Center is part of the U.S. Census Bureau's National State Data Center Program.

Editors: For additional data, contact the Pennsylvania State Data Center's State Capital Office at 717.772.2710 or for faculty comment on this topic, contact Penn State Harrisburg's Public Information Office at 717.948.6029.