

U.S. Census Bureau: Three Demographic Programs

**(1) 2010 Decennial Census
(100% Count Population & Housing)**

Data: Released down to the block level (richest geographic detail)

Questions asked:

1. Age/Birthdate
2. Sex
3. Race
4. Hispanic origin
5. Relationship of each individual in household to first person listed on form
6. Home owned (with /without mortgage), rented, or occupied without rent

(2) Population Estimates Program (PEP)

(Derived from administrative records and net migration formulas in the intercensal years)

Data:

U.S., states, counties: Housing totals, population totals, characteristics (age, sex, race, ethnicity)

Incorporated places: Population totals only

(3) American Community Survey (ACS)

(Survey covering ~ 2.9 million housing units/year nationwide)

The ACS is designed to measure the *characteristics* of the population, not *counts* of the population. The official estimates of the population still come from the previous census and from the Census Bureau's Population Estimates Program (or PEP).

The ACS estimates describe characteristics of a population over a *period*, while the Decennial Census and the Population Estimates Program are *point-in-time* (April 1 and July 1, respectively) estimates.

The ACS generally does a better job estimating percents, rates, means, and medians than it does totals.

ACS data products: population thresholds (all surveyed addresses are unique within any 5-year period)

- 1-year estimates: 65,000 or more
- 3-year estimates: 20,000 or more
- 5-year estimates: All geographic areas below 20,000, including all census tracts and all block groups. ZCTAS will first be released in 2012, with the 5-year ACS 2007-2011 estimates.

Population controls are from the Population Estimates Program

- One-year ACS estimates are controlled to the PEP estimates as of July 1 of the tabulated year
- Multiyear ACS population and housing estimates are controlled to the average of the individual year's population and housing estimates (from the PEP)

Constructing ACS estimates

- Data are pooled across 12 months, 36 months, or 60 months (1-year, 3-year, 5-year)
- Appropriate weights are assigned for housing and population estimates (from the PEP)

Comparing ACS estimates with Census data

- Comparisons can be made for most population and housing subjects
- Global differences (residence rules, universes, and reference periods) exist between the ACS and the Decennial Census, and some items cannot be compared at all
- For more information, see http://www.census.gov/acs/www/guidance_for_data_users/comparing_2009/

Comparing two or more ACS estimates across different geographic areas

- Use the same length time period (1-year ACS estimate to other 1-year ACS estimate, and so on)
- Use the same time period when making comparisons (2007-2009 to 2007-2009, for instance)

Comparing two or more ACS estimates for one geographic area across time

- Use the same length time period
- Try to compare non-overlapping periods; statistical testing is more straightforward (See Compass Guide)
- Use caution if geographic boundaries have changed over time

Dollar-valued (or dollar-denominated) estimates in multiyear estimates

- Income
- Rent
- Home values
- Energy costs

Estimates are adjusted for inflation to the most recent year, using inflation factors based on the Consumer Price Index (or CPI). A similar adjustment is also done for individual months within a one-year estimate. Inflation adjustment is designed to put the collected data into dollars of equal value.

Geographic boundaries in multiyear estimates

- Based on geographic boundaries as of January 1 of the last year in the multi-year period.
- Census Bureau's annual Boundary Annexation Survey (or BAS) collects information about the following legally defined geographic areas:
 - Counties or county-equivalents
 - Incorporated places
 - Federally-recognized American Indian areas
- Boundaries of other statistical areas (such as census tracts, block groups, urbanized areas, PUMAs) are updated every decade in conjunction with the decennial census

ACS 5-year estimates

- For most areas, no population thresholds; there are some disclosure-related release restrictions, most of which apply only to block groups
- Will not be filtered based on the reliability of the estimates; many published estimates will be unreliable -- decision to release these data driven by the need to provide building blocks for users and to be certain even the smallest areas receive data
- Data user must look at the margins of error (MOEs)!
- Will be released every year, dropping the oldest year and adding the most recent
- Excluded data products: Comparison profiles, state ranking profiles, selected population profiles
- Planned for production using 2006-2010 estimates: Summary File 4 and AIAN Summary File
- Census block group estimates:
 - Not displayed as tables in American FactFinder (AFF) for the casual data user
 - Released only in summary file format, accessible from the AFF download center