

2001 Methodology

2001 METHODOLOGY for ESTIMATES of STATE and COUNTY TOTAL POPULATION

Brief Summary of Methodology:

The state and county population estimates are calculated by starting with the most recent decennial census figure (April 1, 2000) and updating that figure with information on births, deaths, domestic migration, and international migration that have occurred between the census date and the date of the population estimate. The state population estimates are developed by summing the county population estimates to the state level. The District of Columbia is treated as a county equivalent, but is reported as both a state and a county.

The following is the basic equation used in calculating population estimates:

- Estimates base population
- + births
- - deaths
- + net domestic migration
- + net international migration
- + group quarters population
- -----
- = July 1, 2001 Population

Detailed Narrative:

The Census Bureau develops county estimates with a demographic procedure called a "component change" method. This approach assumes that the components of population change can be represented by administrative data series in a statistical model. Census Bureau demographers estimate each component of population change separately as well as the population over and under age 65. For the population residing in households the components of change are births, deaths, net domestic migration and net international migration. For the non-household population, net change is calculated as the change in the population in group quarters.

Estimate of the Population Under Age 65

Base Population under age 65

Base Total Population under age 65 -- The base population for the estimate of the population under age 65 is the enumerated population of the previous decennial census. Each year, the population estimate is the revised county estimate for the prior estimate year.

Base Group Quarters Population under age 65 -- This component is primarily a combination of military personnel living in barracks, college students living in dormitories and persons residing in institutions. Inmates of correctional facilities, persons in health care facilities and persons in Job Corps Centers are also included in this category. We have excluded persons aged 65 and over residing in nursing homes and other facilities from this category since they are implicitly included in the estimate of the 65+ population. The base group quarters population for the current estimate year is the group quarters population as enumerated in the decennial census.

Household Base Population under age 65 -- By subtracting the group quarters population under age 65 from the total resident population under age 65, we obtain the household base population under age 65.

Components of Change for the Household Population under age 65

Births -- Resident births are estimated using a combination of data from the National Center for Health Statistics and the state participants in the Federal State Cooperative Program for Population Estimates.

Deaths -- Resident deaths to the household population under 65, are estimated using a combination of data from the National Center for Health Statistics and the state participants in the Federal State Cooperative Program for Population Estimates.

Net International Migration of the population under age 65 -- The estimate is based on the national estimate of net international migration developed by the Census Bureau which includes emigration from the United States and the immigration of refugees, legal immigrants, net unauthorized immigrants, net movement from Puerto Rico, and federal and civilian citizen movement from abroad. We allocate the national estimate of net international migration by using a combination of Census 2000 data on the distribution of foreign born population who arrived in the United States between 1995 and 2000 and data on the county of intended residence of legal immigrants as reported by the Immigration and Naturalization Service.

Net Domestic Migration Rate for the population under age 65 -- Federal income tax returns are used to measure the internal, or domestic, migration of the population under 65 years of age, by matching the returns for successive years for that age group. We determine the status of the filer by noting the address, used as a proxy for place of residence, on tax returns filed in the prior year and in the estimate year. We categorize the filers in each county into: (1) in-migrants (INS), (2) out-migrants (OUTS), and (3) non-migrants (NONMOVERS). We derive a net migration rate for each county, based on the difference between the in-migration and out-migration of tax filers and his or her dependents.

Net Domestic Migration of the population under age 65 -- Estimated net domestic migration is developed by applying the net domestic migration rate to the household population under age 65.

Estimated persons turning age 65 -- The household population under age 65 is also decremented by those persons aged 64 and over who will turn 65 (expressed as a factor) during the estimates cycle.

Estimated Group Quarters Population under age 65 -- We assume that military personnel living off base and those living on base in family quarters are included in the components of change of the household population, described above. Although throughout the decade we are able to collect various data to update the estimates of the group quarters population, for this first estimate year beyond Census 2000, we relied primarily upon the Census 2000 data and assumed for the most part that the group quarters population remained unchanged.

Estimate of the Population Aged 65 and Over

Base Population Aged 65 and Over

- Base Total Population aged 65 years and over -- is the enumerated population from Census 2000.
- Base Group Quarters Population aged 65 and over -- This component is an estimate of the population aged 65 and over residing in nursing homes, prisons and other group quarters facilities.
- Population turning 65 in current year -- This component is an estimate of the population who reached their 65th birthday during the estimate year. They are in a sense the number of people "born" into the 65 and older age group.
- Household Base Population aged 65 and over -- This component is calculated by subtracting the group quarters population aged 65 and over from the total population aged 65 and over and adding the population turning age 65 in the current year.

Components of change for the household population aged 65 and over

- Deaths -- Resident deaths to the household population over age 65, are estimated using a combination of data from the National Center for Health Statistics and the state participants in the Federal State Cooperative Program for Population Estimates.

Net International Migration of the population aged 65 and over -- The estimate is based on the national estimate of foreign migration developed by the Census Bureau which includes emigration from the United States and the immigration of refugees, legal immigrants, net unauthorized immigrants, net movement from Puerto Rico, and federal and civilian citizen movement from abroad. We allocate the national estimate of net international migration by using a combination of Census 2000 data on the distribution of foreign born population who arrived in the United States between 1995 and 2000 and data on the county of intended residence of legal immigrants as reported by the Immigration and Naturalization Service.

- Net Migration Rate for the population aged 65 and over -- The migration rate for the population aged 65 and older is obtained by taking the difference in Medicare enrollment in the current year and the previous year and dividing the difference by the previous year's enrollment. The difference is adjusted to account for deaths and persons age 64 entering the 65 and over age group during the year.
- Net Domestic Migration of the population aged 65 and over -- The net domestic migration is developed by applying a net migration rate to the household population aged 65 and over.
- Estimated Group Quarters Population aged 65 and over -- Persons aged 65 and over residing in nursing homes, correctional facilities and other group quarters. Although we receive updated estimates of the persons aged 65 and over residing in nursing homes, correctional facilities and other group quarters, for this first estimate year after the Census 2000, we are relying primarily upon the Census 2000 data.

As a final step in the estimates process, the populations under age 65 and aged 65 and over are adjusted to be consistent with the national estimates of the resident population under age 65 and aged 65 and over. Separate "rake factors" are developed for the populations under age 65 and aged 65 and over defined as the ratio of the national estimate of the total population under and over age 65 divided by the sum of the estimated total population under and over age 65 for all counties in the nation. These rake factors are applied to the county populations to arrive at the final county population estimates.

Final State Components of Change

The components of change shown in our data tables result from aggregating the under and over 65 age segments of each demographic component (except births). The net domestic migration component shown includes changes in group quarters for both the under and over 65 population. Finally, the residual shown is the effect of the national proration procedure. It is the difference between the implementation of the national estimates model and the subnational model.