

Interim Projections of the U.S. Population by Age, Sex, Race, and Hispanic Origin: Summary Methodology and Assumptions

Development of Interim Population Projections

These interim projections were created using a cohort-component method, which uses assumptions about the components of population change (fertility, mortality, and international migration) to project population by age and sex. The basic assumptions developed for the population projections released in January 2000 (using a 1998 population estimates base) were applied to a Census 2000 population base to produce the interim projections. Modifications were introduced to the assumptions on rates of components of population change (births, deaths, immigration) so that the projected values for 2001 were consistent with the estimated component values available late in 2001, as well as consistent with the Census 2000 results. For 2002 to 2050, these modifications were applied to the fertility and mortality rates and the international migration data used in the interim projections. For a more detailed discussion of the cohort-component method and the assumptions about the components of population change, see U.S. Bureau of the Census, "Methodology and Assumptions for the Population Projections of the United States: 1999 to 2100," Population Division Working Paper, No. 38, January 2000.

Fertility, Mortality, and International Migration

The modifications resulted in slight reductions in the original fertility assumptions, no change in the original mortality assumptions, and small increases in the original immigration assumptions. These changes were applied to the Census 2000 population of 281.4 million, which was 6.8

million, or 2.5 percent, larger than the previous projection of 274.6 million for April 1, 2000. By 2050, the interim projections show a population of 419.9 million, which is 4 percent more than the previously projected population of 403.7 million.

The fertility assumptions for the interim projections are a weighted average, combining 0.921 of the middle fertility series with 0.079 of the low fertility series developed for the original projections. The total fertility rate (the average number of lifetime births per 1,000 women implied by age-specific fertility rates) in the underlying middle series rose from 2,048 in 1999, to 2,207 in 2025, and to 2,219 in 2050. In the new interim series, the total fertility rate is 2,180 in 2025 and 2,186 in 2050, a little more than a 1-percent reduction from the original values.

The mortality values used in the interim projections are identical to those used in the middle series of the projections published in January 2000. They assume that average life expectancy at birth will increase gradually from 1999 values of 74.1 years for the male population and 79.8 years for the female population to 2050 values of 81.2 years for the male population and 86.7 years for the female population.

With respect to international migration, the interim projections use a weighted average of 0.938 of the middle series assumption and 0.062 of the high series assumption developed for the previous set of projections. The basic international migration assumptions for the original projections include assumptions about levels of in-migration (both legal immigration and unauthorized in-migration) of the foreign born to the United States and about rates of emigration

from the United States. Net immigration in the previous projections was 912,000 in 2025 and 984,000 in 2050. In the new interim series, net immigration is 996,000 in 2025 and 1,097,000 in 2050.

Race and Hispanic Origin

The primary objective in developing the methodology for the interim projections by race and Hispanic origin was to disaggregate projections of the total population by age and sex into a small set of mutually exclusive and exhaustive categories consistent with the Census 2000 modified race results. (For an explanation of how Census 2000 data on race were modified to reassign people who reported Some Other Race, see <http://eire.census.gov/popest/topics/methodology/asro.php>.) The groups for which projections were developed include: (1) non-Hispanic White alone, (2) Hispanic White alone, (3) Black alone, (4) Asian alone, and (5) all other groups. The fifth category includes the categories of American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, and all people reporting more than one of the major race categories defined by the Office of Management and Budget (OMB). The basic assumptions by race used in the previous projections were adapted to reflect the Census 2000 race definitions and results. To comply with the 1997 OMB multiple-race identification concept, the race and Hispanic origin of the projected births were determined using a special tabulation of Census 2000 data on the race of mothers, fathers, and children under age 18 in family households, taking into consideration the changing demographic characteristics of both the male and female populations. The resulting population projections by age and sex for

the five race and Hispanic-origin categories were then adjusted proportionally to be consistent with the projections for the total population by age and sex.