

The Changing Demographic Profile of the United States

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Summary

The United States, the third most populous country globally, accounts for about 4.5% of the world's population. The U.S. population—currently estimated at 307.5 million persons—has more than doubled since its 1950 level of 152.3 million. More than just being double in size, the population has become qualitatively different from what it was in 1950. As noted by the Population Reference Bureau, "The U.S. is getting bigger, older, and more diverse." The objective of this report is to highlight some of the demographic changes that have already occurred since 1950 and to illustrate how these and future trends will reshape the nation in the decades to come (through 2050).

The United States Is Getting Bigger. U.S. population growth is due to the interplay of increased births, decreased deaths, and increased net immigration. U.S. fertility rates are above the generational "replacement" level. The population is also growing because of declining mortality rates for common causes of death. There is and will continue to be net international immigration wherein more migrants move to the United States than Americans who leave.

The United States Is Getting Older. Aside from the total size, one of the most important demographic characteristics of a population for public policy is its age and sex structure. This report illustrates how the United States has been in the midst of a profound demographic change: the rapid aging of its population, as reflected by an increasing proportion of persons aged 65 and older, and an increasing median age in the population.

The United States Is Becoming More Racially and Ethnically Diverse, reflecting the major influence that immigration has had on both the size and the age structure of the U.S. population. This section considers the changing profile of the five major racial groups in the United States. In addition, trends in the changing ethnic composition of the Hispanic or Latino Origin population are discussed.

Although this report will not specifically discuss policy options to address the changing demographic profile, it is important to recognize that the inexorable demographic momentum will have important implications for the economic and social forces that will shape future societal well-being. There is ample reason to believe that the United States will be able to cope with the current and projected demographic changes if policymakers accelerate efforts to address and adapt to the changing population profile as it relates to a number of essential domains, such as work, retirement, and pensions; private wealth and income security; the federal budget and intergenerational equity; health, healthcare, and health spending; and the health and well-being of the aging population. These topics, among others, are discussed briefly in the final section of this report. This report will be updated as needed.

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The United States, the third-largest population globally, accounts for about 4.5% of the world's population. The U.S. population—currently estimated at 307.5 million persons¹—has more than doubled from its 1950 level of 152.3 million.² More than just being double in size, the U.S. population has become qualitatively different from what it was in 1950. As noted by the Population Reference Bureau, "The U.S. is getting bigger, older, and more diverse."³ The objective of this report is to highlight some of the demographic changes that have already occurred since 1950 and to illustrate how these and future trends will reshape the nation in the decades to come.⁴

While this report will not discuss policy options, it is important to recognize that the inexorable demographic momentum will produce an increasingly older population in the United States. There is ample reason to believe that the United States will be able to cope with the current and projected changes if policymakers address and adapt to the changing demographic profile as it relates to a number of essential domains such as work, retirement, and pensions, private wealth and income security, transfer systems, and the health and well-being of the aging population.⁵ These topics are discussed briefly in the final section of this report.

Population Size and Growth—The United States Is Getting Bigger

The U.S. population has experienced remarkable growth since 1950. From a base of about 152 million Americans in 1950, an additional 155 million persons were added to the population between 1950 and 2009, with the number of additional women slightly outnumbering additional men (see **Figure 1**). This increase (of about 105%) in the size of the U.S. population was remarkable compared with other industrialized countries. Germany and Italy, for instance, grew by only 21% and 30% respectively during the same period.⁶ And, a number of countries, most notably in Eastern Europe, have recently experienced absolute reductions in the size of their populations.⁷

¹ U.S. Census Bureau, POPclock, at http://www.census.gov/main/www/popclock.html, accessed September 22, 2009. This corresponds to the net gain of one person every 10 seconds (calculated as one birth every 7 seconds; one death every 13 seconds; and one international (net) migrant every 35 seconds).

² U.S. Census Bureau, International Data Base (IDB), at http://www.census.gov/ipc/www/idb/country.php accessed September 22, 2009.

³ P. Scommegna, U.S. growing bigger, older, and more diverse. Population Reference Bureau, April 2004, at http://www.prb.org/.

⁴ Through year 2050 is considered in this report.

⁵ National Research Council, 2001, *Preparing for an Aging World: The Case for Cross-National Research*, Panel on a Research Agenda and New Data for an Aging World, Committee on Population and Committee on National Statistics, Division of Behavioral and Social Sciences and Education, Washington, DC: National Academy Press (hereinafter cited as National Research Council, *Preparing for an Aging World*).

⁶ CRS calculations based on data in United Nations, *World Population Prospects: the 2008 Revision*, Highlights, United Nations: New York, 2009: , available at http://www.un.org/esa/population/publications/wpp2008/wpp2008_highlights.pdf.

⁷ Population Reference Bureau, 2008, Key Findings from PRB's 2008 World Population Data Sheet available at http://www.prb.org/pdf08/63.3highlights.pdf.



Figure I. U.S. Population, by Sex, 1950-2050, in Millions

Sources: CRS calculations based on (1) for 1950-2000 estimates, F. Hobbs & N. Stoops, *Demographic Trends in the 20th Century*, Census Bureau: CENSR-4, issued November 2002, and (2) for 2010-2050, U.S. Census Bureau Table 2. Projections of the Population by Selected Age Groups and Sex for the United States: 2010 to 2050 (NP2008-T2),issued August 2008 at http://www.census.gov/population/www/projections/files/nation/summary/ np2008-t2.xls.

Despite the growth of the U.S. population over this period, the United States' share of the world's population has been declining as less developed, higher fertility countries have grown more rapidly. Pakistan, Bangladesh and Nigeria, for instance, now rank #6, #7 and #8 in total population size, surpassing more developed countries—such as Germany, France, the United Kingdom, and Italy—that are no longer among the world's 10 most populous countries.⁸

The Census Bureau projects that the U.S. population will continue to grow, to almost 440 million persons by year 2050,⁹ albeit at a slower pace than the growth recorded over the past half-century. Note, however, that population projections, which rely upon assumptions about the future courses of mortality, fertility, and immigration are uncertain. More pessimistic growth projections are offered by the United Nations and the Social Security Administration, which estimate that the U.S. population will be 404 million or 411 million respectively in the same year.¹⁰

⁸ U.S. Census Bureau International Data Base at http://www.census.gov/ipc/www/idb/ranks.php.

⁹ U.S. Census Bureau Table 2. Projections of the Population by Selected Age Groups and Sex for the United States: 2010 to 2050 (NP2008-T2), issued August 2008 at http://www.census.gov/population/www/projections/files/nation/ summary/np2008-t2.xls.

¹⁰ It is beyond the scope of this report to reconcile these differences. All projections are medium-variant, or what the agencies consider to be the most likely scenario. See (1) United Nations, World Population Prospects: The 2008 Revision; and (2) The 2009 Annual Report of the Board of Trustees of the Federal Old-Age and Survivor's Insurance and Disability Insurance Funds. Washington DC: May 12, 2009, http://www.ssa.gov/OACT/TR/2009/trTOC.html.



Figure 2. Population Growth, Birth, Death, and Net Immigration Rates: United States, 1950-2050

Source: Congressional Research Service (CRS) compilation based on historical and projected figures from the U.S. Census Bureau and the National Center for Health Statistics (NCHS). See the **Appendix** for more information on sources and data used to derive this figure.

Notes: (1) Crude birth rate (CBR): the number of live births per 1,000 total population. Estimates for 1950-58 were adjusted by NCHS to correct for under-registration of births. (2) Crude death rate (CDR): the number of deaths per 1,000 total population. (3) Net immigration rate: number of immigrants less number of emigrants per 1,000 total population.

Average annual growth rates¹¹for each 10-year intercensal period between 1950 and 2000 were positive, but have generally been declining over time (see **Figure 2**). Expressed as a percentage of the population at the beginning of the period, the average population growth rate in the 1950s, for example, was 1.7% per annum while it was only 0.9% per year during the 1980s. The Census Bureau assumes that the growth rate will remain positive through year 2050, but will fluctuate over the time period. The current level of 0.8% per annum will increase through 2030 to closer to 0.9% per annum. After 2030 the growth rate is expected to return to 0.8% per annum.

Trends in the size and growth of the U.S. population reflect the interactions of three underlying determinants:

¹¹ Population growth rate: the number of persons added to (or subtracted from) a population in a year due to natural increase (births minus deaths) and net immigration per 1,000 persons in the population. Alternatively, the measure can be expressed as the percentage change of the population at the beginning of the time period subtracted from the population at the end of the time period and then divided by the population at the end of the time period.

- The role of human reproduction and the *fertility* behavior of American couples;
- Trends in disease risk and subsequent mortality, and,
- The net effect of international *immigration* to and from the United States.

Figure 2 and the **Appendix** (at end of this report), in addition to highlighting the estimated and projected trends in population growth for the period 1950-2050, also highlight trends and projections for these three underlying components of population change. Characteristics of U.S. fertility, mortality, and immigration are discussed in the following sections.

Fertility¹²

Average fertility in the United States reached a post-World War II maximum during the peak of the "baby boom" in the late 1950s. The highest observed number of annual births (4.3 million) and birth rates (25.3 births per 1,000 population) since 1950 were recorded in 1957. Steep declines were observed in the 1960s and early 1970s, a broad trend that was also observed in Europe, Canada, Japan, Australia, and New Zealand. U.S. birth rates since the early 1970s have remained remarkably constant,¹³ mostly fluctuating in the mid-teens, and reached an all-time low of 13.9 live births per 1,000 population in 2002. In contrast, in 2006, the most recent year for which final data are available, there were 14.2 live births per 1,000 in the population and almost 4.3 million births were recorded. This represents the largest *number* of births recorded in nearly 4 decades, though the birth *rate* remains lower than levels seen during the baby boom.¹⁴

Characteristics of American Fertility

Highlights of American fertility behavior in 2006 include the following:¹⁵

- There were approximately 4.3 million live births, an increase of 6% from the 2002 low.
- The crude birth rate (CBR) increased to 14.2 live births per 1,000 total population, which is a slight increase since 2005, but a modest increase from 2002. In 2002, the CBR was recorded as 13.9/1,000 population, the lowest rate ever recorded for the United States.
- The general fertility rate (GFR), which relates births to the number of women in their childbearing ages, was 68.5 live births per 1,000 women aged 15-44 years, a 6% increase since 2002.

¹² The Crude Birth Rate (CBR) is the primary measure of fertility used in this section because of its value in indicating directly the contribution of fertility to the population growth rate. However, because the age and sex composition of a population has a strong influence on the level of the CBR, additional measures to understand the underlying fertility trends are also used.

¹³ Gregory Spencer, Preface, *The Direction of Fertility in the United States*. Conference proceedings for a conference hosted by the Council of Professional Associations on Federal Statistics, Alexandria, VA, October 2-3, 2001.

¹⁴ National Vital Statistics Reports (NVSR), *Births: Final Data for 2006*, DHHS/CDC/ NCHS, vol. 57, no. 7, January 7, 2009 (hereinafter cited as NVSR, *Births: Final Data for 2006*). Note that *preliminary* data for 2007 have been released and are available in NVSR, *Births: Preliminary Data for 2007*, vol. 57, no. 12, March 18, 2009. Preliminary data for 2007 suggest a continued increase in fertility, with both an increase in the fertility rate and in the number of births.

¹⁵ NVSR, Births: Final Data for 2006.

- Fertility rates, as measured by the GFR, increased for nearly all race and Hispanic origin groups.
- Fertility is slightly over "replacement level" in 2006; this is the first time that the U.S. has been over replacement level since 1971, and the highest fertility rate recorded since that time.¹⁶ In 2006, there were, on average, 2.101 births per U.S. woman. This increase reflects increasing fertility rates for nearly all age groups and all race and Hispanic origin groups. Specifically, there was a 1% increase for non-Hispanic white, 3% increase for Hispanic, and 5% increase for non-Hispanic black women. Increasing fertility rates and fertility rates above replacement level stand in contrast to many European and Asian countries that have fertility rates below the replacement rate and in some cases considerably lower than those observed in the United States. Specifically, the 10 countries with the lowest recorded fertility rates (Macao SAR, Hong Kong, Bosnia Herzegovina, Republic of Korea, Malta, Japan, Poland, Singapore, Slovakia, and Belarus) have reached historically unprecedented fertility rates with rates below 1.3 children per woman.¹⁷
- Teenage childbearing increased in 2006, this is the first increase—following a 14-year decline—since 1991. Birth rates increased for mothers between the ages of 15 and 19.
- Childbearing by unmarried women rose steeply in 2006. More than 1.6 million babies were born to unmarried women—the highest number of births to unmarried women ever recorded in the U.S. This is an 8% increase since 2005 and a 20% increase since 2002, when the recent rapid increase in unmarried births began. The proportion of all births to unmarried women increased to 38.5% from 34.0% in 2002. Beginning in 1980, nonmarital births have become an important factor driving increasing fertility rates. However, since 1980, the age distribution of nonmarital births has changed—shifting away from teenager mothers. In 1980, 4 in 10 nonmarital births were to teenage mothers. There continues to be wide variation in nonmarital birth rates by race and Hispanic origin, with the highest rates for black and Hispanic women.
- The mean age of all first-time mothers in the United States was 25.0 years which is slightly lower than observed in prior years. This decline is driven by increases in teen pregnancy rates and an increase in birth rates for women ages 20-24. Despite the slight decline in the mean age of first time mothers, there is still a continuing tendency for women to postpone childbearing. Birth rates for women ages 35 to 39 have increased an average of 3% per year since 1978. Additionally, 2006 saw the highest birth rate for women ages 40 to 44 since 1968. Furthermore, the birth rate for this group has more than doubled since 1981 and as increased by 70% since 1990. Mean age at first birth varies considerably by race and Hispanic origin. Women of Asian and Pacific Islander descent had the

¹⁶ The replacement level of fertility measures the level of fertility and mortality in a population at which women will replace themselves in a generation. It corresponds to a total fertility rate, or completed family size, of about 2.10 births per woman.

¹⁷ United Nations, World Population Prospects: The 2008 Revision.

highest age at first birth (28.5 years), whereas American Indian women had the lowest (21.9 years).

• U.S. fertility rates increased in 2006 for almost all age groups. Rates for women above age 30 are similar to those observed during the baby boom (**Table 1**).

Age of Mother	Rate per 1,000 Women in Age Category in 2006	Trend Between 2005 and 2006				
10-14 years	0.6	Declined. Half the rate of what was reported in 1996. The only age group for whom the birth rate declined.				
15-17 years	22.0	Increased. Rose 3% from previous year, Prior to 2006, the teen birth rate had declined since 1991 resulting in a total decline of 45% from the 1991 birth rate.				
18-19 years	73.0	Increased. Rose 4% from the prior year. This contrasts with a 14 year decline (from 1991 to 2005) of 26%.				
20-24 years	105.9	Increased. The birth rate for this group reached its all time low in 2004 and has increased since that time. It increased 4% since 2005.				
25-29 years	116.7	Increased by 1%. Highest rate recorded since 1991.				
30-34 years	97.7	Increased. Highest rate recorded in since 1964.				
35-39 years	47.3.	Increased. Highest rate recorded since the mid-1960s.				
40-44 years	9.4	Increased. Highest rate recorded since 1968; rate for age group is up 70% since 1990.				
45-49 years	0.6	Unchanged.				

Table I	.Trend in	Birth Rates	Between	2005 and	2006,	by Ag	e of Mother
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Source: NVSR, Births: Final Data for 2006, vol. 57, no. 7, January 7, 2009.

Beyond the current year estimates presented above, the Census Bureau uses demographic projection techniques to predict future trends in American fertility. They project that the total fertility rate will remain at or above replacement level (2.1 births per woman age 15-44) through 2050. This is in contrast to much of Europe and to Canada, where fertility rates are below replacement level and not expected to increase.¹⁸ Experts suggest that these falling fertility rates are a result of societal changes, such as the increasing costs of raising a child, rising levels of women's labor force participation, and delayed childbearing.¹⁹ While the U.S. has experienced these same societal changes, U.S. fertility remains higher because of societal adaptations such as increased access to child care and increased male involvement in household labor and childrearing. Additionally, differences in U.S. fertility rates may be in part driven by differential fertility rates by racial and ethnic groups. For example, the average fertility rates for women of Hispanic origin was approximately 3.0 in 2006, while the fertility rate for non-Hispanic whites was 1.9 or slightly below replacement level.²⁰ Despite these projections, future trends in fertility

¹⁸ S. P. Morgan and M.G. Taylor, 2006, Low Fertility at the Turn of the Twenty-First Century. *Annual Review of Sociology* vol. 32, 2006, pp. 375-399.

¹⁹ Ibid. See also: R.R. Rindfuss, "The Young Adult Years: Diversity, Structural Change, and Fertility," *Demography*, vol. 28, pp. 493-512, 1991. S.M. Bianchi, "Maternal Employment and Time with Children: Dramatic Change or Surprising Continuity?" *Demography*, vol. 37, pp. 401-14, 2000.

²⁰ NVSR, *Births: Final Data for 2006.* This is the average for all women of Hispanic origin. Fertility rates differ among Hispanic groups, with women of Cuban origin on average having lower fertility rates than those of Mexican origin. In addition, fertility rates vary by generation in the U.S. with immigrant women having higher fertility rates than native born women.

are notoriously difficult to predict and specialists continually question the underlying assumptions of the models.

Mortality

As is evident from **Figure 2** and **Figure 3**, crude death rates (CDR) in the United States have been remarkably constant since 1950, fluctuating within the range of 8.1 to 9.7 deaths per 1,000 persons.²¹ The record low of 8.1 was attained in 2006, the most recent year for which final data are available.²²

In general, crude death rates are referred to as *crude* because they are influenced by two underlying characteristics of a population, making it difficult to interpret trends in the CDR without disentangling trends in these two underlying components:

- The population's age structure. An older population generally has higher crude death rates because a higher proportion of persons are in the older age groups where death rates are higher.
- Mortality risk, or the likelihood of death at a particular age. The risk of mortality reflects the health and disease profile of the underlying population, public health and sanitation, the availability of and access to health care, the education of the population, and other factors.

Age-adjusted death rates are better indicators (than crude rates) to measure *mortality risk* across time or across populations.²³ If age-adjusted rates are considered for the United States over time,²⁴ a striking pattern of the mortality risk emerges (see **Figure 3**): age-adjusted death rates have exhibited a dramatic *decline* since 1950 (rather than being remarkably *constant*, as suggested by the crude death rates). Use of the age-adjusted rates has allowed a much more refined evaluation of trends in American mortality over time. Specifically, they show that, despite the fact that the U.S. population has been aging over the past half-century, the risk of mortality has actually been falling.

²¹ The crude death rate (CDR) is the primary measure of mortality used in this section to show the contribution of mortality to the population growth rate.

²² See National Vital Statistics Reports (NVSR), *Deaths: Final Data for 2006*, DHHS/CDC/NCHS, vol. 57, no. 14, April 2009 (hereinafter cited as NVSR, *Deaths: Final Data for 2009*). Note that preliminary data on deaths in 2008 suggests that the CDR has remained stable at 8.2 deaths per 1,000 population. See *Births, Marriage, Divorces, and Deaths: Provisional Data for 2008*, DHHS/CDC/NCHS, vol. 57, no. 19, July 29, 2009.

²³ Note that age-adjusted rates have little meaning in themselves; they are constructs that show what the level of mortality would be if no changes occurred in the age composition of the population from year to year.

²⁴ The age-adjusted rates are based on the year 2000 standard population. By definition, crude and age-adjusted death rates converge in this year.



Figure 3. Crude and Age-adjusted Death Rates: United States, 1950-2006

Source: CRS computations using data from the vital statistics system, NCHS.

Notes: CDRs are on an annual basis per 1,000 population; age-adjusted rates per 1,000 U.S. standard population (year 2000).

Characteristics of American Mortality

Highlights of trends in American mortality in 2006 include the following:²⁵

- More than 2.4 million resident deaths were registered in the United States in 2003, about 4,900 more than in 2002.
- The crude death rate was about 7.8 deaths per 1,000 total population, a record low, a decrease of 2.8% from the 2005 rate.
- Life expectancy at birth²⁶ was 77.7 years, this continues a long-term trend of increasing life expectancy. Record high life expectancy was attained by the total population, as well as by both the black and white populations. Both males and females in both of the two major race groups attained record high levels. U.S. life

²⁵ See National Vital Statistics Reports, *Deaths: Final Data for 2006*, DHHS/CDC/NCHS, vol. 57, no. 14, April 2009.

²⁶ Life expectancy at birth represents the average number of years that a group of infants would live if they were to experience the current observed age-specific death rates throughout their lives. See CRS Report RL32792, *Life Expectancy in the United States*, by Laura B. Shrestha.

expectancy continues to fall short of that attained by a number of other countries, including Japan (82.7 years), Hong Kong (82.2), Iceland and Switzerland (81.8).²⁷

- The 10 leading causes of death were (1) heart disease, (2) malignant neoplasms (cancer), (3) cerebrovascular diseases (stroke), (4) chronic lower respiratory diseases, (5) accidents (unintentional injuries), (6) diabetes mellitus, (7) Alzheimer's disease, (8) influenza and pneumonia, (9) nephritis (kidney disease), and (10) septicemia. Age-adjusted death rates continued to decrease for the three leading causes. Significant increases occurred for kidney diseases. The top 10 causes of death and their rank order did not change between 2005 and 2006.
- The infant mortality rate was 6.7 infant deaths per 1,000 live births, a 2.7% decline since 2005. U.S. infant mortality rates are higher than many other developed countries. In 2004, the last year for which comparable international data was available, the U.S. ranked 29th in the world, tied with Poland and Slovenia and behind developed countries such as Japan, England, Canada.²⁸
- Differences in mortality between men and women increased slightly from 2005 to 2006. In 2006, the age-adjusted death rate for men was 40.6% greater than it was for women. Life expectancy at birth for females was 80.2 years, while it was 75.1 years for men (both increased from the previous year). The sex gap in life expectancy is 5.1 years, a very slight increase from 2005. Despite the one-year increase, this gap has narrowed since its late 1970s peak of 7.8 years.
- Differences in mortality between the black and white populations persist. The age-adjusted death rate for the black population was 1.3 times greater than for the white population. This means that the risk of dying is 30% higher for the black population than for the white population This ratio has remained constant since 1997. In 2006, the infant mortality rate was 2.4 times greater, and maternal mortality rate was 3.4 times greater for the black population than for the white population. Average life expectancy is also five years higher for the white population than for the black population.
- There are also differences between the white and Hispanic populations with the Hispanic populations experiencing lower age-specific death rates than the white population. However, this may be due to underreporting of Hispanic origin on death certificates. The Asian Pacific Islander population and the American Indian and Alaska Native population both have age-adjusted death rates that are lower than the white population, 40% and 20% lower rates respectively. However, the low death rates of the American Indian and Alaska Native population is likely attributed to the underreporting of deaths.

As with the data for fertility, demographers use demographic projection techniques to predict the future trends in American mortality. The Census Bureau projects that (crude) death rates will remain low through 2050 in the narrow range of 8.6 to 9.7 deaths per 1,000 persons in the population. The rate will gradually increase, reflecting the Census Bureau's assumption that the

²⁷ CRS compilation from data in United Nations, *World Population Prospects: the 2008 Revision*. Note that in 2008 version of the U.N. lists the U.S. life expectancy for 2005 to 2010 as 79.2.

²⁸ Marianne F MacDorman and T.J. Mathews, *Recent Trends in Infant Mortality in the United States*, National Center for Health Statistics, NCHS Databrief 9, Hyattsville, MD, October 2008.

aging of the population will not be fully offset by continued reductions in the risk of dying. As with other demographic variables; however, future mortality and survival are difficult to predict and specialists disagree on not only the level but also the direction of future trends. Research suggests that current models may be too pessimistic in their assumptions about mortality and survival probabilities, i.e., Americans may live longer than currently projected.²⁹ While some assert that life expectancy is approaching its natural limit, there has been a steady increase in life expectancy observed with an increase of 3 months per year for every year between 1840 and 2000.³⁰ Projections of future life expectancy vary. For example, one optimistic assumption predicts that international life expectancy will increase to 91.6 years for women by 2050.³¹ Others argue that this projection is too optimistic because it does not take into account that declines in mortality in early life (which increase life expectancy the most) are slowing. Additionally, smoking mortality is slowing life expectancy gains.³² However, there have been gains in life expectancy at the oldest ages and evidence that social and medical interventions are still effective at extending life thereby demonstrating that life expectancy may still be increasing and mortality rates may still be declining.³³

Net Immigration

Immigration has been an important component of population growth in the United States. The net immigration rate (**Figure 2**) has been and is projected to be positive (with in-migration exceeding out-migration) for the full century (1950 to 2050). It fluctuated in the low range of 1.5 to 2.4 net migrants per 1,000 resident population between 1950 and 1979. An increasing trend has been noted since 1980, and the annual rates in the 1990s were generally in the range of 3.0 to 3.9. The U.S. Census Bureau projects that net migration will continue to be an important component of population growth in the United States through 2050 with net immigration continuing at higher rates than currently observed.

Both gross immigration and gross emigration are important to consider when examining how immigration effects population growth and change. In general, the balance of gross immigration (of persons moving permanently *to* the United States) has exceeded gross emigration (of persons leaving) over the past century. A notable exception was observed during the Great Depression, when the number of out-migrants exceeded new immigrants (see **Table 2**). Reflecting fluctuations in economic conditions (in the United States and abroad) and U.S. immigration policies, the volume of *immigrant*³⁴ flow to the United States has fluctuated over time. Starting in 1915,

²⁹ R. Lee, Report for the Roundtable Discussion of the Mortality Assumption for the Social Security Trustees, note dated September 11, 2002.

³⁰ National Institute on Aging and U.S. Department of State, Why Population Aging Matters: A Global Perspective. March 5, 2007 at http://www.nia.nih.gov/ResearchInformation/ExtramuralPrograms/BehavioralAndSocialResearch/ GlobalAging.htm. This rate is for female life expectancy which is higher than male life expectancy; however, male life expectancy demonstrates similar patterns as female life expectancy.

³¹ J. Oeppen and J. Vaupel, Broken limits to life expectancy, *Science*, vol. 296, May 10, 2002, pp. 1029-1030.

³² Bongaart, J. How Long Will We Live? *Population and Development Review*, Vol. 32, Dec. 2006, p.p. 605-628. F. Pampel, Cigarette Use and the Narrowing Sex Differential in Mortality. *Population and Development Review*, vol. 28, no.1, March 2002, pp. 77-104.

³³ Ibid.

³⁴ These figures refer to legal immigrants, or citizens of other countries who have been granted visas that allow them to live and work permanently in the United States. It includes (1) relatives of U.S. residents; (2) foreigners who were admitted for economic or employment reasons; (3) refugees and asylees; and (4) persons in the "diversity" category, which was created to introduce more variety into the stream of immigrants. It does *not* include nonimmigrants (visitors, (continued...)

immigration to the United States was curtailed because of World War I, the introduction of numerical limits (or "quotas"), the economic depression of the 1930s, and World War II.³⁵ Starting in the 1950s, the volume of immigration flows to the United States has been steadily increasing. The average *annual* inflow was about 252,000 in the 1950s, about 332,000 in the 1960s, 449,000 in the 1970s, and jumped to 734,000 in the 1980s. More than 9 million foreigners were admitted as legal immigrants to the United States between 1991 and 2000, an average of almost 910,000 a year. The number of legal immigrants in the last decade has fluctuated, surpassing 1 million in 2001 and 2002, falling below 1 million annually for 2003 and 2004 and rising above 1.1 million for 2005 through 2008.³⁶

There are few timely and reliable estimates of emigration of persons who leave the United States to permanently take up residence elsewhere (whether native-born or foreign-born Americans). Partly because of inherent methodological difficulties, the collection of emigration statistics was discontinued in 1957 and no direct measure has been available since then.^{37,38} Using indirect demographic techniques, the Census Bureau estimated that the number of emigrants leaving the United States has been increasing over the past decades—reaching about 234,000 persons annually during the 1990s (compared to 910,000 annual immigrants during the same time period) (see **Table 2**). The Population Reference Bureau assumes roughly 300,000 annual emigrants for years 2000-2005.³⁹

Period	Immigrants to the United States (thousands, rounded)	Emigrants from the United States (thousands, rounded)	Estimated Net immigration (thousands, rounded)	Estimated Ratio: emigration/ immigration
2001-2008	8,328	2,421	5,907	0.29
1991-2000	9,081	2,338	6,743	0.26
1981-1990	7,255	1,600	5,655	0.22
1971-1980	4,399	1,176	3,223	0.27
1961-1970	3,322	900	2,422	0.27
1951-1960	2,515	425	2,090	0.17
1941-1950	1,035	281	754	0.27

Table 2. U.S. Immigration and Estimated Emigration, by Decade: 1931-2008

(...continued)

short-term workers, or students) or illegal immigrants.

³⁵ The period 1915-1965 has been referred to as one of "immigrant pause." See P. Martin and E. Midgley, Immigration: Shaping and Reshaping America, *Population Bulletin*, vol. 58, no. 2, June 2003.

³⁶ US Dept. of Homeland Security, *Yearbook of Immigration Statistics*, 2008, data tables available online at http://www.dhs.gov/files/statistics/publications/yearbook.shtm.

³⁷ U.S. Immigration and Naturalization Service, Statistical Yearbook of the Immigration and Naturalization Service, 2000, Government Printing Office, Washington, DC, 2002.

³⁸ For example, the Congressional Budget Office attempted to estimate emigration using Social Security Administration data These estimates are not comparable with estimates from the Census Bureau because they were not tracking U.S. citizens who emigrated but only foreign nationals who emigrated. See Schwabish, JA. Identifying Rates of Emigration in the United States Using Administrative Earnings Records. March 2009 (at http://www.cbo.gov/ ftpdocs/100xx/doc10029/2009-01.pdf).

³⁹ Population Reference Bureau, Estimates and Projections of Emigration from the United States, available at http://www.prb.org/Journalists/FAQ/USEmigration.aspx.

Period	Immigrants to the United States (thousands, rounded)	Emigrants from the United States (thousands, rounded)	Estimated Net immigration (thousands, rounded)	Estimated Ratio: emigration/ immigration
1931-1940	528	649	-121	1.23

Sources: For immigration, all years: U.S. Department of Homeland Security, Yearbook of Immigration Statistics, 2008 data tables available online at http://www.dhs.gov/files/statistics/publications/yearbook.shtm. For emigration, years 1931-1990: U.S. Immigration and Naturalization Service, Statistical Yearbook of the Immigration and Naturalization Service, 2000, GPO, Washington, DC, 2002. For 1991-2000: U.S. Census Bureau, Net International Migration and its Sub-Components for the Vintage 2000 Post-censal National Estimates: 1990 to 2000, Internet release date February 8, 2002. For 2001-2008, Population Reference Bureau, Estimates and Projections of Emigration from the United States, available at http://www.prb.org/Journalists/FAQ/USEmigration.aspx. Population Reference Bureau data is only estimated till 2005, 2006-2008 emigration is assumed to be the average of the prior five years. For net immigration and ratio: CRS computations based on sources cited.

Characteristics of Net Immigration

Highlights of American immigration in FY2008 include the following:⁴⁰

- Current U.S. policy on permanent immigration is based on four principles: the reunification of families, the admission of immigrants with special skills, the protection of refugees, and the diversity of admissions by country of origin.⁴¹
- The number of persons granted lawful permanent residence in the United States was relatively stable between 2007 and 2008 increasing from 1.05 million to 1.10 million.
- The leading regions of origin of legal immigrants were North America and Asia. These regions accounted for 36% and 35%, respectively, of all legal immigrants in 2008.
- The leading source countries (of birth) for legal immigrants in 2008 were Mexico (190,000 persons or 17%), followed by China (7%), India (6%), the Philippines (4.9%), Cuba (4.5%), Dominican Republic (2.9%), and Vietnam (2.8%).
- The primary destination states in 2008, as in every year since 1971, were California, New York, Texas, Florida, Illinois, and New Jersey.⁴² Sixty-three percent of all (legal) persons immigrating to the United States in 2008 lived in these six states.
- In 2008, 10 metropolitan areas were the intended residence of 35% of all legal immigrants. The leading destinations were New York-Northern New Jersey-Long Island, NY-NJ-PA; Los Angeles-Long Beach-Santa Ana, CA; Miami-Fort Lauderdale-Pompano Beach, FL; Washington-Arlington-Alexandria, DC-VA-MD-WV; Chicago-Naperville-Joliet, IL-IN-WI; and the San Francisco-Oakland-Fremont, CA metro area.

⁴⁰ US Dept. of Homeland Security, *Yearbook of Immigration Statistics*, 2008, data tables available online at http://www.dhs.gov/files/statistics/publications/yearbook.shtm.

⁴¹ CRS Report RL32235, U.S. Immigration Policy on Permanent Admissions, by Ruth Ellen Wasem.

⁴² There has been some fluctuation in the order within those six states.

• Unauthorized foreigners, also referred to as illegal aliens, deportable aliens, or undocumented workers, are persons in the United States in violation of U.S. immigration laws. One researcher estimated that there are more than 11.9 million unauthorized foreigners currently living in the United States which is approximately 4% of the population. The resident unauthorized alien population is estimated to increase by 500,000 people per year.⁴³ However, from 2005 to 2008, the number of undocumented immigrants entering the U.S. was less than the number of legal immigrants entering the U.S., a contrast to what had occurred throughout the 1990s.⁴⁴

The Changing Age Profile – The United States Is Getting Older

Aside from its total size, one of the most important demographic characteristics of a population for public policy is its age and sex structure. In general, a "young" population structure is seen in countries experiencing high fertility and rapid population growth, and the relevant policy considerations are whether there are sufficient schools and, later, enough jobs and housing to accommodate them. On the other hand, critical policy challenges in countries with "old" population structures are to develop retirement and health systems to serve the older population, often with simultaneous reductions in the number of working-age persons to support them.

The population of the United States had been relatively "young" in the first half of the 20th century, a consequence of a history of three demographic trends acting in concert—relatively high fertility, declining infant and childhood mortality, and high rates of net immigration to the United States by young workers and families. Since 1950, the United States has been in the midst of a profound demographic change: rapid population aging,⁴⁵ a phenomenon that is replacing the earlier "young" age-sex structure with that of an older population. As seen in **Table 3**, the population aged 65 and older has been increasing as a percentage of the total U.S. population. The older population represented 8.1% of the total population in year 1950. That percentage increased to 12.8% in 2009 (not in table), and is projected to reach 20.2% in 2050. Stated another way, one in five persons in 2050 will be aged 65 or older.

			<u> </u>		
Age/year	1950	1975	2000	2025	2050
Number (in thousands, rou	nded)				
Total	152,272	215,972	282,171	357,452	439,009
0-19	51,673	75,646	80,539	94,254	112,940
20-64	88,202	117,630	166,555	199,290	237,521
65-65+	12,397	22,696	35,077	63,908	88,548

Table	3.1	U.S.	Populatio	on. by	Age	Grour): 195 (0-2050
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⁴³ Jeffrey S. Passel, Trends in *Unauthorized Immigration: Undocumented Inflow Now Trails Legal Inflow*, Pew Hispanic Center, October 2, 2008, at http://www.pewhispanic.org.

⁴⁴ Ibid.

⁴⁵ Aging (of a population) is a process in which the proportions of adults and elderly increase, while the proportions of younger persons decrease, resulting in a rise in the median age of the population.

Age/year	1950	1975	2000	2025	2050
Percent in Age Group (rou	unded)				
0-19	33.9	35.0	28.5	26.4	25.7
20-64	57.9	54.5	59.0	55.8	54.1
65-65+	8.1	10.5	12.4	17.9	20.2

Source: CRS computations based on data in the U.S. Census Bureau, International Database, at

http://www.census.gov/ipc. CRS compilation dated July 22, 2009 based on the Census Bureau's June, 2009 data release.

Figure 4 graphically displays three population pyramids⁴⁶ of the United States population at three points in time—in census years 1950 and, 2000, and projected to year 2050. The figure shows the proportion of persons in each five-year age and sex group in these three selected years. Note the increasing numbers on the x-axis, which highlights the increasing size of the U.S. population over time.

Figure 4.Age-Sex Structure of the United States in Years 1950, 2000, and 2050



⁴⁶ A population pyramid is a bar chart, arranged vertically, that shows the distribution of a population by age and sex. By convention, the younger ages are at the bottom, with males on the left and females on the right.



Source: CRS extractions from U.S. Census Bureau, International Data Base (IDB), http://www.census.gov/ipc/ www/idb/country.php.

Notes: U.S. data are based on official estimates and projections. Population estimates for 1950-1999 are based on the resident population plus the armed forces overseas. Population estimates for 2000-2008 are for the resident population and are based on Census 2000. The estimates are produced using vital statistics through 2007 and survey data on international migration (supplemented with administrative data) through 2007. Population data in the IDB for 2009-2050 are projections of the resident population. The projections originate with a base population from Census 2000 and are produced using a cohort-component method—the most common method used for age structure projections because they take into account potential differences in the rates of mortality, fertility and migration at different ages . Projections are based on historical trends in vital statistics data through 2003 and administrative data on legal immigration through 2002.

In 1950, the U.S. population, which numbered 152 million persons, was relatively young and its population pyramid generally resembled a Christmas tree. The widest portion, representing the most populous age group, was at the base—where 16.4 million new births and children under age 5 accounted for 10.8% of the total population. Bars representing persons at older ages gradually narrow as deaths occur. The median age was 30.2 years⁴⁷ and births outnumbered deaths by a margin of 2.5 to 1.0.⁴⁸ Three characteristics of the 1950 pyramid are especially worth noting:

- The only significant departure from a pyramidal shape is notches representing persons aged 10-24 years. Unusual bulges or bites in population pyramids are usually caused by short-term fluctuations in birth and death rates that can be traced to such historical events as wars, epidemics, economic booms, or depressions. In this case of persons aged 10-24 years in this population pyramid, these persons were born primarily during the economic depression of the 1930's when birth rates were comparatively low.
- Early "baby boom" births are evident in the youngest age group.⁴⁹
- The number of persons aged 65 and older in the population was still relatively low—12.4 million persons, representing 8.1% of the U.S. population.

The population pyramid in year 2000, the most recent year in which the U.S. population was enumerated by the decennial census, is typical of a population experiencing slow growth. Reflecting lower fertility, fewer people entered the lowest bars of the pyramid, and as life expectancy has increased, a greater percentage of persons have survived until old age. As a result, the population has been aging. By 2000, the median age of the population had risen to 35.3 years while infants and children under the age of five numbered 19.2 million, accounting for only 6.8% of the population. Important characteristics of the U.S. population in year 2000 included:

• The U.S. population grew by roughly 85% between 1950 and 2000—from 152 million to 282 million persons. The pyramid, which is significantly larger in *all* age groups, reflects this fact (see x-axis scaling in **Figure 4**).

⁴⁷ Extraction from U.S. Census Bureau, International Data Base.

⁴⁸ D.G. Fowles, Pyramid Power—Analysis of Demographic Revolution, *Aging*, winter, 1991.

⁴⁹ In the post-war years, Americans were marrying and starting families at younger ages and in greater percentages than they had during the Great Depression. The surge in births in the 19-year period between 1946 and 1964 resulted from a decline in childlessness combined with larger family sizes (more women had three or more children). See C.L. Himes, Elderly Americans, *Population Bulletin*, Washington, DC: Population Reference Bureau, December 2001 (hereinafter cited as C. Himes, *Elderly Americans*).

- The bulge of the baby-boom generation, those born between 1946-1964, can be seen in the pyramid for ages 35-54 years in 2000. After 1964, birth rates moved downward until the late 1970s. As the last members of the baby boom approached their childbearing years during the 1980s, the number of births rose again, peaking in 1990. These children, the youngest generation, are represented by the slightly widening base of the pyramid. Even though the number of births per woman had been near an all time low, the population continued to grow in part because of the children and grandchildren of the huge baby-boom generation.⁵⁰
- The number of persons aged 65 and older had been steadily increasing and reached 35.1 million persons, representing 12.4% of the U.S. population.
- The fact that female survival chances exceed those of men, especially at the older ages, becomes noticeably more evident in the 2000 pyramid. About 4.3% of the total female population was aged 80 and above in 2000 compared to only 2.2% of men.

By year 2050, projections of the U.S. population suggest that the population "pyramid" will no longer resemble a Christmas tree; rather, it will be increasingly rectangular.

- In this population of 439.0 million persons, the most striking feature is the projected number of people who will be aged 65 and older—88.5 million, just over one in every five persons in the total U.S. population. To put these figures into perspective, the "oldest" state in the year 2000 census was Florida with 17.6% of the state's population in the age category 65 years and older.⁵¹
- By year 2050, the percent elderly in the *national* population will surpass the figures observed in the "oldest" states today. The oldest-old, those aged 80 and above and including the youngest of the baby boomers, will be the most populous age group—32.5 million persons or 7.4% of the entire U.S. population. The oldest-old women of the same age will account for 8.5% of all women.
- The "baby boom" generation will have accelerated population aging, but aging will continue to be one of the most important defining characteristics of the population, even after the youngest of the "baby boom" population has passed away. This reflects projections of continuing low fertility coupled with improving survival in the United States.⁵²

Race and Ethnicity—The United States Is Becoming More Diverse

The U.S. population is becoming more racially and ethnically diverse. This reflects two forces. *First*, immigration has been a major influence on both the size and the age structure of the U.S. population. Although most immigrants tend to be in their young adult ages, when people are most likely and willing to assume the risks of moving to a new country, U.S. immigration policy has

⁵⁰ Population Reference Bureau, Human Population: Fundamentals of Growth: Three Patterns of Population Change, at http://www.prb.org.

⁵¹ The "youngest" state was Alaska with 36,000 persons aged 65 and older in a population of 627,000, or 5.7%. Source: C.L. Himes, *Elderly Americans*.

⁵² See CRS Report RL32981, Age Dependency Ratios and Social Security Solvency, by Laura B. Shrestha.

also favored the entry of parents and other family members of these young immigrants.⁵³ *Second*, major racial and ethnic groups are aging at different rates, depending upon fertility, mortality, and immigration within these groups.

Federal standards for collecting and presenting data on race and Hispanic origin were established by the Office of Management and Budget (OMB) in 1997.⁵⁴ Race and Hispanic origin are considered to be two separate and distinct concepts and are considered separately in this report.

Race

The OMB standards require federal agencies to use a *minimum* of five *race* categories in their data collection and presentation efforts. The new standards were required to be used by the Census Bureau for the 2000 decennial census and by other federal programs "as soon as possible, but not later than January 1, 2003."⁵⁵

- *White* refers to people having origins in any of the original peoples of Europe, the Middle East, or North Africa.
- *Black or African American* refers to people having origins in any of the Black racial groups of Africa.
- American Indian and Alaska Native refers to people having origins in any of the original peoples of North and South America (including Central America), and who maintain tribal affiliation or community attachment.
- *Asian* refers to people having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent.
- *Native Hawaiian and Other Pacific Islander* refers to people having origins in the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

For respondents unable to identify with any of these five race categories, the OMB approved including a sixth category—"some other race."

Going beyond the minimum standards set by OMB, the census 2000 question on race included 15 separate response categories and three areas where respondents could write in a more specific group.⁵⁶ Individuals were instructed to mark "one or more races to indicate what this person considers himself/herself to be."⁵⁷ The response categories and write-in answers were combined by the Census Bureau to create the five minimum OMB race categories, as seen in **Table 4**. Based on data from the 50 states and the District of Columbia, the overwhelming majority of the U.S.

⁵³ C.L. Himes, *Elderly Americans*. See also CRS Report RL32235, U.S. Immigration Policy on Permanent Admissions, by Ruth Ellen Wasem.

⁵⁴ OMB, "*Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity*," *Federal Register* Notice, October 30, 1997, at http://www.whitehouse.gov/omb/fedreg/1997standards.html. These revised guidelines replace and supersede Statistical Policy Directive, no. 15.

⁵⁵ OMB, *ibid*.

⁵⁶ Q: what is this person's race? (1) White; (2) Black or African Am., or Negro; (3) American Indian or Alaska Native—print name of enrolled or principal tribe; (4) Asian Indian; (5) Chinese; (6) Filipino; (7) Japanese; (8) Korean; (9) Vietnamese; (10) Other Asian—print race; (11) Native Hawaiian; (12) Guamanian or Chamorro; (13) Samoan; (14) Other Pacific Islander—print race; and (15) Some other race—print race.

⁵⁷ Identification of both race and Hispanic origin are based on *self-identification* in the U.S. census.

population—almost 99%—reported only one race. The most prevalent group, accounting for about 81% of the U.S. population, was those who reported that they are white alone, followed by those who are Black or African American alone (with almost 13% of respondents). The smallest race group was the Native Hawaiian and other Pacific Islander alone population, with 463,000 members, representing less than 0.2% of the U.S. population.

	Race	Number (in thousands)	Percentage of total population
Total Population		281,422	100.00
One race		277,524	98.62
	White	228,104	81.05
	Black or African American	35,704	12.69
	Asian	10,589	3.76
	American Indian and Alaska Native	2,664	0.95
	Native Hawaiian and other Pacific Islander	463	0.16
Two races		3,578	1.27
Three races		289	0.10
Four or more races		31	0.02

Table 4. U.S. Population, by Race: 2000

Sources: CRS compilation based on: (1) U.S. Census Bureau, Census 2000 Summary File 1, Matrices P7 & P9, Race Alone or in Combination: 2000, based on Census Summary File 1 (SF 1), 100% data. http://factfinder.census.gov/, (2) Census Bureau, Modified Race Data Summary File, Technical Documentation, Issued September, 2002, at http://www.census.gov/popest/archives/files/MRSF-01-US1.html.

Notes: These figures update/modify those presented in E.M. Crieco and R.C. Cassidy, Overview of Race and Hispanic Origin, U.S. Census Bureau: Census 2000 Brief, C2KBR/01-1, issued March 2001.

Referring to **Table 5**, while about 81% of the population was white in 2000, that figure is projected to fall to 74% by year 2050.⁵⁸ Increases will be most dramatic for Asians and for persons in the "other races" category (which includes American Indians and Alaska Natives, Native Hawaiians and other Pacific Islanders, and individuals who identify with two or more races). Between 2000 and 2050, the number of Asians is expected to increase by 23.7 million persons, an increase of 220%, while the number in the "all other races" (which includes persons who identify with two or more races) category will increase by almost 15.8 million, or 223%.

⁵⁸ Comparisons with earlier censuses are not provided as the Census Bureau cautions that "the Census 2000 data on race are not directly comparable with data from the 1990 census or earlier censuses. Caution must be used when interpreting changes in the racial composition of the U.S. population over time." E.M. Crieco and R.C. Cassidy, Overview of Race and Hispanic Origin, U.S. Census Bureau: Census 2000 Brief, C2KBR/01-1, issued March 2001.

Population	2000	2010	2020	2030	2040	2050
	282,125	310,233	341,387	373,504	405,655	439,010
Total	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
	228,548	246,630	266,275	286,109	305,247	324,800
White alone	(81.0)	(79.5)	(78.0)	(76.6)	(75.2)	(74.0)
	35,818	39,909	44,389	48,728	52,868	56,944
Black alone	(12.7)	(12.9)	(13.0)	(13.0)	(13.0)	(13.0)
	10,684	14,415	18,756	23,586	28,836	34,399
Asian alone	(3.8)	(4.6)	(5.5)	(6.3)	(7.1)	(7.8)
	7,075	9,279	11,967	15,081	18,704	22,867
All other races ^a	(2.5)	(3.0)	(3.5)	(4.0)	(4.6)	(5.2)

Table 5. Projected U.S. Population, by Race: 2000-2050 (Numbers in Thousands)

Source: For years 2010-2050: U.S. Census Bureau, Population Division. "Table 4. Projections of the Population by Sex, Race, and Hispanic Origin for the United States: 2010 to 2050." (NP2008-T4). Release date: August 14, 2008. For year 2000: U.S. Census Bureau, "U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin," Internet release data: March 18, 2004, at http://www.census.gov/ipc/www/usinterimproj/.

Notes: In thousands, except as indicated. As of July 1. Resident population. Numbers may not add due to rounding.

a. "All other races" includes American Indian and Alaska Native alone, Native Hawaiian and Other Pacific Islander alone, and persons of Two or More Races.

Hispanic Origin

OMB defines Hispanic or Latino as "a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin *regardless of race*." Federal agencies are required to use a minimum of two ethnicities: "Hispanic or Latino" and "Not Hispanic or Latino" in data collection and presentation. The new standard was used by the Census Bureau in the 2000 decennial census; other federal programs were expected to adopt the standards no later than January 1, 2003.

In census 2000, respondents of all races were asked if they were Spanish, Hispanic, or Latino, and were given the opportunity to differentiate between: (1) Mexican, Mexican American, Chicano; (2) Puerto Rican; (3) Cuban; and (4) other Spanish/Hispanic/Latino.⁵⁹ Based on this definition, almost 36 million persons, or about 12.6% of the U.S. population, identified themselves as Hispanic. The remaining 246 million people, or 87.4%, were not Hispanic.⁶⁰

As mentioned earlier, OMB and the U.S. Census Bureau consider race and Hispanic origin to be distinct concepts. The results from census 2000, however, suggest that such a distinction is not made by persons of Hispanic origin themselves. The most commonly reported race for Hispanics was white alone—almost 17 million persons or almost 48% of the Hispanic population. But, a staggering 14.9 million Hispanics—or 42.2%—reported that they belonged to "some other race,"

⁵⁹ E.M. Crieco and R.C. Cassidy, ibid.

⁶⁰ U.S. Census Bureau, "U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin," at http://www.census.gov/ ipc/www/usinterimproj/, internet release date: March 18, 2004.

indicating that they did not identify with any of the 14 other categories offered on the census questionnaire.⁶¹

Table 6 presents modified estimates of the Hispanic and non-Hispanic populations of the United States. The modification reconciles the census 2000 race categories with those race categories that appear in the data from administrative records, which are used to produce population estimates and projections.⁶² These are also consistent with the recommended set of five categories by OMB.

		Hispanic or Latino			Not Hispanic or Latino		
	Race	Number (in 000s)	Percent of Hispanics	Percent of Total	Number (in 000s)	Percent of non- Hispanics	Percent of Total
Total		35,306	100.00	12.55	246,116	100.00	87.45
One race		34,814	98.61	12.37	242,710	98.62	86.24
	White	32,529	92.13	11.56	195,576	79.46	69.50
	Black	1,391	3.94	0.49	34,313	13.94	12.19
	Asian	232	0.66	0.08	10,357	4.21	3.68
	American Indian	566	1.60	0.20	2,097	0.85	0.75
	Hawaiian	95	0.27	0.03	367	0.15	0.13
Two races		434	1.23	0.15	3,144	1.28	1.12
Three or m	ore races	57	0.16	0.02	262	0.11	0.09

Table 6. The Hispanic and Non-Hispanic Population in the United States,by Race: 2000

Source: U.S. Census Bureau, Modified Race Data Summary File.

With the release of the results of the 2000 census, the growing role of Hispanics in the United States became apparent.⁶³ Numbering over 35 million at that time—and growing by more than 1.5 annually from both immigration and natural increase—Hispanics are now the nation's largest minority.⁶⁴ If current demographic trends continue, the population of Hispanic or Latino origin is projected to steadily increase as a percentage of the total U.S. population through 2050, rising from 12.6% in 2000 (or about one in seven persons) to 30.2% in 2050 (approaching one in every three persons) (see **Figure 5**).

⁶¹ For comparison, only 0.2% of non-Hispanics chose the "some other race" category.

⁶² U.S. Census Bureau, "Modified Race Data Summary File.

⁶³ National Research Council (2006). Multiple Origins, Uncertain Destinies: Hispanics and the American Future. Panel on Hispanics in the United States. M. Tienda and F. Mitchell, eds. Committee on Population, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.

⁶⁴ Ibid.



Figure 5. Hispanics and Non-Hispanics as Percentage of U.S. Population: 2000-2050

Source: For years 2010-2050: U.S. Census Bureau, Population Division. Table 6. Percent of the Projected Population by Race and Hispanic Origin for the United States: 2010 to 2050. (NP2008-T6). Release Date: August 14, 2008. For year 2000: CRS extractions from: U.S. Census Bureau, 2004, U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin, at http://www.census.gov/ipc/www/usinterimproj/, internet release date: March 18, 2004 the U.S. Census Bureau.

The National Research Council (2006) characterizes the Hispanic population in the U.S. as having "a youthful age structure; a large number of foreign born, including many 'undocumented'; [with] low levels of education; and a disproportionate concentration in low-skill, low-wage jobs. Of particular policy interest is the Hispanic second generation, the children of Spanish-speaking immigrants, who are coming of age as the white majority population is aging."

Some Policy Considerations

The changing demographic profile will impact upon a wide range of social and economic issues in the United States. The following section presents a short discussion of some major policy considerations that are related to these changes. Neither the list nor the discussions are comprehensive.

Work, Retirement, and Pensions

The increasing financial pressure faced by public pension systems, such as Social Security, is often attributed to demographic trends that have led to aging populations. However, beyond the simple mathematics of the worsening age dependency ratio,⁶⁵ decreasing labor force participation rates have contributed to financial imbalances within pension programs, further increasing the number of retired persons relative to those in the workforce.

The declining labor force participation of older men is one of the most dramatic economic trends of the past four decades in the United States. Between 1963 and 2006, labor force participation rates declined from 90% to 75% among men aged 55-61. Over this period, labor force participation rates dropped from 76% to 52% for men aged 62-64 and from 21% to 14% for men aged 70 and over.⁶⁶ For all of these groups, most of the declines occurred prior to the early 1980s.⁶⁷

An individual's decision of whether to stay in the workforce or to retire is based on the complex interaction of a number of factors including, but not limited to the following:

- Eligibility for Social Security benefits.
- Availability of and benefits under an employer-financed pension plan.
- Work incentives to stay in the labor force (such as continued benefit accrual after attaining the early retirement age, options for phased retirement or to work reduced hours, etc.).
- The physical and cognitive health of the worker and potentially other family members (spouse, an aging parent, an adult child with a disability).
- Availability (and eligibility for) disability and unemployment insurance programs.
- The worker's relative preference for "leisure" compared to employment.

Policy levers are, however, available to influence labor force participation and retirement decision-making. For instance, the federal government influences employers' decisions about whether to offer benefits like pensions and health insurance through direct legislation, such as ERISA and the Age Discrimination Act; through social insurance programs, such as Social Security and Medicare; and through the financial incentives created for both employers and employees by the Internal Revenue Code.⁶⁸

⁶⁵ The ratio of the number of "dependent" persons in a population (children and older persons) to the number of persons of "working age." See CRS Report RL32981, *Age Dependency Ratios and Social Security Solvency*, by Laura B. Shrestha.

⁶⁶ Federal Interagency Forum on Aging-related Statistics, 2008, *Older Americans 2008: Key Indicators of Well-Being*. Indicator #11, based on data from the Bureau of Labor Statistics, Current Population Survey. Available at http://www.agingstats.gov.

⁶⁷ For a more in-depth discussion, see CRS Report RL30629, *Older Workers: Employment and Retirement Trends*, by Patrick Purcell.

⁶⁸ Ibid.

Private Wealth and Income Security⁶⁹

Income security during retirement, coupled with an increase in the number of post-retirement years during which individuals can enjoy family and leisure, is one of the primary social achievements of the 20th century. At the same time, this accomplishment has introduced some fundamental public policy challenges associated with population aging. From an individual's perspective, the two most basic challenges are to ensure that they have sufficient income security during their retirement years and that they have protection against the increasing risk of experiencing periods of poor health and/or disability.

For policy-makers, there are fundamental questions with respect to what the federal role should be in helping individuals meet these objectives. A major domestic political challenge of the 21st century will be how to adapt our old-age income security and health insurance systems to ensure financial solvency while ensuring that there is an adequate safety net to protect the most vulnerable in the population. One option that is likely to be considered involves relying on individual private savings and wealth accumulation to offset any reductions that may take place in the level of public-tier support. The underlying question is how realistic it is to assume that individuals will save sufficiently over their lifetimes to contribute significantly to their own income needs during retirement. Another central question regarding income security for older persons is whether individuals and families will assume greater responsibility for their own retirements if current government programs are scaled back because of budgetary pressures.

The Federal Budget and Inter-generational Equity

Several decades of population aging have occurred in the United States wherein the proportion of young persons has declined while the number of older persons has expanded dramatically. The changing age structure has raised philosophical questions around the theme of inter-generational equity. Many analysts might expect such demographic changes to have favorable consequences for children and troubling ones for older persons. Fewer children should mean less competition for resources in the home as well as greater availability of social services earmarked for children, especially public schooling. The sharp rise in the number of elderly should put enormous pressure on resources directed towards the older ages, such as medical care facilities, nursing homes, and social security funds.⁷⁰ However, Preston, in his 1984 presidential address to the membership of the Population Association of America documented that exactly the opposite had occurred: conditions for children had, in fact, deteriorated and improved dramatically for older Americans.

Now, over two decades later, the issue continues to be one of considerable debate. Analysts⁷¹ have argued that, without an overhaul of entitlement programs (which largely favor older persons) or tax-revenue reform, the ever-expanding Social Security, Medicare, and Medicaid budgets will tighten the squeeze on other domestic spending (including programs for children, welfare, education, the environment, community development, housing, energy, and justice—programs that reach the majority of *all* Americans.) But, others argue that there are potentially catastrophic

⁶⁹ National Research Council, *Preparing for an Aging World*, 2001.

⁷⁰ S. H. Preston, *Children and the Elderly: Divergent Paths for America's Dependents*. Demography, vol. 21, no. 4, 1984 (hereinafter cited as Preston, *Children and the Elderly*, 1984).

⁷¹ A. Carasso, C.E. Steuerle, G. Reynolds, T. Vericker, and J. Ehrle-Macomber, *Kids' Share 2008: How Children Fare in the Federal Budget*. Washington, DC: The Urban Institute, 2008; C. E. Steuerle, *The Incredible Shrinking Budget for Working Families and Children*, Washington, DC: The Urban Institute: National Budget Issues, no. 1, December 2003.

outcomes associated with the redistribution of federal resources among age categories. For instance, the safety nets for the most vulnerable may be interrupted. Costs might be transferred to the states, with limited capacity to absorb the additional expenditures. Individuals may be unable to assume the additional responsibilities asked of them.

There is no generally accepted rule in welfare economics for how an age group's interests ought to be represented in public decision-making. As noted by Preston,⁷² however, we are continually faced with two questions. First, do we care about our collective future—the commonwealth—or only about our individual futures? And, if we have collective concerns, we face an even more difficult decision about what mix of private and public responsibilities will best serve the needs of the generations.

Health, Healthcare, and Health Spending

Health policy is interrelated with population change. Changes in the population size, racial and ethnic composition, and age structure affect the healthcare resources needed, spending levels, and health conditions observed. For example, recent fertility changes with more births occurring to women at the beginning and end of childbearing years—to teenagers and women over 40 respectively—could have profound consequences on the health of the children born to these mothers. Specifically, there have been large increases in the birth rate of women over the age of 40. Children born to mothers at later ages are at greater risk for a number of health conditions including Downs Syndrome. Infants born to women at later ages are also more likely to be low birth weight which is associated with higher infant mortality rates, premature birth, and a number of other health problems.⁷³ Increasing numbers of women delaying childbearing past age 40 may increase the number of children born with health conditions which may, among other things, increase health spending and increase the need for specific health resources such as neonatal intensive care. At the other end of the age spectrum, babies born to teenage mother are also at increased risk for a number of health conditions. Babies born to teenage mothers are more likely to be premature and low birth weight. Additionally, teenage mother receive less prenatal care than women giving birth at later ages which may exacerbate or cause adverse outcomes.⁷⁴

Changes in the racial and ethnic composition of the population will also have profound effects on the health and healthcare needs of the population. There are observed differences in how different groups use health services with non-Hispanic whites more likely to visit physicians in an office-setting while non-Hispanic blacks more frequently seek care in emergency rooms. There are also differences in the types of care sought and utilized by race and ethnicity,⁷⁵ differences in health conditions experienced, and differences in both mortality rates and mortality rates for specific conditions.⁷⁶ These differences, which are in part related to socioeconomic differences across

⁷² CRS analysis based on S. H. Preston, *Children and the Elderly*, 1984.

⁷³ Marianne F MacDorman and T.J. Mathews, *Recent Trends in Infant Mortality in the United States*, National Center for Health Statistics, NCHS Databrief 9, Hyattsville, MD, October 2008.

⁷⁴ William J Hueston, Robert G. Quattelbaum, and Joseph J. Benich, "How Much Money Can Early Prenatal Care for Teen Pregnancies Save?: A Cost-Benefit Analysis," *Journal of the American Board of Family Medicine*, vol. 21, no. 3 (2008), pp. 184-190.

⁷⁵ Michael J .Dill and Edward S. Salsberg, *The Complexities of Physician Supply and Demand: Projections Through* 2025, Association of American Medical Colleges, Washington, DC, November 2008, http://services.aamc.org/publications/showfile.cfm?file=version122.pdf&prd_id=244&prv_id=299&pdf_id=122.

⁷⁶ National Vital Statistics Reports, *Deaths: Final Data for 2006*, DHHS/CDC/NCHS, vol. 57, no. 14, April 2009.

racial and ethnic groups could mean that there will be a growing proportion of the population in poorer health, with higher incidence of certain health conditions, less access to health insurance and health services, and higher mortality rates at certain ages. Current racial and ethnic differentials coupled with future population growth create challenges for healthcare planning in terms of the services needed and the workforce required to best serve an increasingly diverse population.

The Health and Healthcare Needs of an Aging Population

Beyond the increasing diversity of the population, the aging of the population can have profound impacts on the health and health services needed. Although population aging may or may not result in increasing *proportions* of older persons in poor health, the *numbers* experiencing that condition are almost certain to rise. Thus, as the U.S. population ages, the social and economic demands on individuals, families, communities, and the government will grow, with a substantial impact on the formal and informal health and social care systems and on the financing of medical services in general. A report issued by the Institute of Medicine in 2008 found that the U.S. healthcare workforce will be too small and not appropriately organized or trained to meet the health needs of a growing aging population. They cited both a lack of physicians and other providers who specialize in providing care for older adults and a lack of competence in providing care for older adults throughout the health workforce.⁷⁷

In conjunction with, and driven by, the growing numbers of older persons, the United States faces secular change in health status, as reflected in rates and outcomes of various conditions and disabilities. Trends in cognitive impairment and dementia have enormous policy implications, but whether changes in disease and disability rates will alter the rates of long-term care in institutions or in other settings is unclear. The use of long-term care, because of cognitive impairment or other health conditions, is expected to increase as Americans live longer.⁷⁸ The future need for long-term care has financial implications for states, and for the federal government as the majority—nearly three quarters—of long-term care expenses are funded by public programs most commonly Medicaid.⁷⁹

While recognizing the necessity to address the changing health needs of the older population, critical questions remain regarding the best mechanisms for health system organization, delivery of and access to services, administration, and financing. Ongoing efforts to reform the health system may alleviate some of these concerns, but critics contend that current reform proposals may exacerbate provider shortages and do little to control growing healthcare costs or reduce inefficiency.

Immigration Policy

Immigration has historically been a major contributor to population growth in the United States. According to Wasem,⁸⁰ "The number of foreign-born people residing in the United States is at the

⁷⁷ Committee on the Future Health Care Workforce for Older Americans, Institute of Medicine, *Retooling for an Aging America :Building the Health Care Workforce*, Institute of Medicine, Washington, DC, April 14, 2008, http://www.iom.edu/CMS/3809/40113/53452.aspx.

⁷⁸ CRS Report IS40279, CRS Issue Statement on the Aging of Society, coordinated by Janemarie Mulvey.

⁷⁹ CRS Report R40718, Long-Term Care (LTC): Financing Overview and Issues for Congress, by Julie Stone.

⁸⁰ CRS Report R40501, *Immigration Reform Issues in the 111th Congress*, by Ruth Ellen Wasem.

highest level in U.S. history and has reached a proportion of the U.S. population-12.6%-not seen since the early 20th century. Of the 38 million foreign-born residents, approximately onethird are naturalized citizens, one-third are legal permanent residents, and one-third are estimated to be unauthorized (illegal) residents." The growing number of illegal immigrants has given rise to a consensus that the immigration system is seriously flawed. Despite this consensus, there are major disagreements over proposed solutions.⁸¹ U.S. policy on permanent immigration has been based on four principles: the reunification of families, the admission of immigrants with special skills, the protection of refugees, and the diversity of admissions by country of origin,⁸² the balance of these four principles and whether the balance changes has implications for the size and composition of the U.S. population. For example, those who immigrate under family reunification policies tend to be older; while those entering for employment reasons are generally younger. The number of immigrants seeking to enter the U.S. and the needs of businesses seeking workers are linked to economic conditions and trends. The current recession has lowered immigration levels, but companies still want an immigration policy that allows the entry of both highly skilled workers and low-skilled temporary workers.⁸³ Other argue that immigration policies could adversely affect the economic well-being of the U.S population by creating competition for jobs in a context of high unemployment.

Immigration issues and potential reform have broad implications for a number of policy areas. Immigration may stimulate the economy by providing both low and high skilled workers.⁸⁴ Pursuing an immigration strategy that favors workers entering for employment reasons may also slow U.S. population aging thus averting or delaying a number of the policy challenges that could arise from population aging. Immigration may also create a number of policy challenges. For example, immigrants are often concentrated in certain geographic areas which may strain local governments and infrastructure. The number and type of immigrants seeking to enter the U.S. may also impact areas such as homeland security, the workforce, and crime and law enforcement policy. The country of origin of immigrants will also affect the racial and ethnic composition of the U.S. population and contributes to the increasing diversity in the U.S. which, as discussed below, has a number of policy implications.

America's Changing Color Lines

The U.S. population is becoming more racially and ethnically diverse. Once a mainly biracial society with a large white majority and relatively small black minority—and an impenetrable color line dividing these groups—the United States is now a society composed of multiple racial and ethnic groups. Along with increased immigration are rises in the rates of racial/ethnic intermarriage, which in turn have led to a sizeable and growing multiracial population.⁸⁵ These trends are projected to continue for the next decades.

This diversity presents policy challenges in a number of areas. For instance:

⁸¹ Ibid.

⁸² Ibid.

⁸³ Ibid.

 ⁸⁴For a broader discussion see CRS Report R40753, *Policy Challenges in International Migration*, by Chad C. Haddal.
⁸⁵ J. Lee and F.D. Bean. America's Changing Color Lines: Immigration, Race/Ethnicity, and Multiracial Identification, *Annual Review of Sociology*, vol. 30 pp. 221-242, August 2004.

- Assimilation. Many Asian Americans speak their native languages at home and maintain their distinct ethnic cultures and values, signaling that they either face difficulties fully assimilating into the American mainstream or purposefully resist full assimilation.⁸⁶ The continued flows of Latino immigrants ensure that the Spanish language and diverse Latino cultures will endure in the United States.⁸⁷ The degree to which there are language barriers or lack of assimilation of immigrants has important implications for both entry into and achievement in the educational system and the labor force.
- *Income Disparities.* There are persistent differences in household incomes among racial/ethnic groups in the United States. For instance, in 2008, the real median income level for a black household—at about \$34,000—was about \$21,000 lower than that of a non-Hispanic white household (about \$56,000).⁸⁸ One consequence of this disparity had been that low-income/low-wealth persons had faced hurdles when attempting to become homeowners.⁸⁹ Key findings from a study from the Department of Housing and Urban Development showed that subprime loans are three times more likely in low income neighborhoods than in high-income ones, and that predatory lending practices made homeownership far more costly for poor families.⁹⁰
- *Poverty.* The official poverty rate in 2008 was 13.2 percent, up from 12.5 percent in 2007; the most recent figure is the highest poverty rate since 1997. Nonetheless, it was still 9.2 percentage points lower than in 1959, the first year for which poverty estimates are available.⁹¹ In 2008, 39.8 million people were counted as poor—an increase of 2.6 million persons from 2007.⁹² According to Gabe,⁹³ the most recent increase in poverty reflects the worsening economic conditions since the onset of the economic recession in December 2007 and is expected to remain comparatively high even after the economy begins to recover.

America's racial minorities continue to have disproportionately high poverty rates. In 2008, African Americans and Hispanics had poverty rates that exceed those of whites by several times. In 2008, 24.7% of blacks (9.4 million) and 23.2% of Hispanics (11.0 million) had incomes below poverty, compared to 8.6% of non-Hispanic whites (17.0 million) and 11.8% of Asians (1.6 million).⁹⁴ Poverty and welfare receipt are inextricably linked. Government programs may help low-income persons meet their basic daily needs (through cash assistance

⁸⁶ U.S. Census Bureau, *Income, Poverty, and Health Insurance Coverage in the United States: 2008.* Note that the comparable figures for Asians and Hispanics are \$66,000 and \$38,000, respectively.

⁸⁷ R. Saenz, *Latinos and the Changing Face of America*, Russell Sage Foundation and the Population Reference Bureau, 2004.

⁸⁸ M.A. Stoll, *African Americans and the Color Line*, Russell Sage Foundation and the Population Reference Bureau, 2004.

⁸⁹ M. Duda and E.S. Belsky, *The Anatomy of the Low-Income Homeownership Boom in the 1990s*, Harvard University: Joint Center for Housing Studies, Low-Income Homeownership Working Paper Series, LIHO.01-1, July 2001.

⁹⁰ Department of Housing and Urban Development, Unequal Burden: Income and Racial Disparities in Subprime Lending in America (April 2000).

⁹¹U.S. Census Bureau, Income, Poverty, and Health Insurance Coverage in the United States: 2008.

⁹² Ibid.

⁹³ CRS Report RL33069, *Poverty in the United States: 2008*, by Thomas Gabe.

⁹⁴ Ibid.

programs such as TANF,⁹⁵ Medicaid,⁹⁶or food stamps,⁹⁷ though some observers fear that welfare creates economic dependency and perpetuates the cycle of poverty.

⁹⁵ CRS Report RL32748, *The Temporary Assistance for Needy Families (TANF) Block Grant: A Primer on TANF Financing and Federal Requirements*, by Gene Falk and CRS Report R40157, *The Potential Role of the Temporary Assistance for Needy Families (TANF) Block Grant in the Recession*, by Gene Falk.

⁹⁶ CRS Report RL33202, *Medicaid: A Primer*, by Elicia J. Herz.

⁹⁷ CRS Report R40397, Child Nutrition and WIC Programs: A Brief Overview, by Joe Richardson.

Appendix. U.S. Population Growth Rates, Birth Rates, Death Rates, and Net Immigration Rates: 1950-2050

Year	Growth Rate	Birth Rate	Death Rate	Net Immigration Rate
1950	16.5	24.1	9.6	2.0
1960	16.0	23.7	9.5	1.8
1970	11.0	18.4	9.5	2.1
1980	10.8	15.9	8.8	3.7
1990	10.3	16.7	8.6	2.2
2000	9.3	14.4	8.5	4.1
2010	9.7	13.8	8.3	4.3
2020	9.4	13.4	8.4	4.3
2030	8.6	13.0	8.9	4.5
2040	8.0	13.0	9.6	4.6
2050	7.9	12.9	9.7	4.7

(per 1,000 population)

Sources: *Estimates* (Years 1950-2000): *Birth Rates*: For years 1950, 1960, 1970: Vital Statistics of the United States, 1999, vol. 1, Natality, Table 1-1, at website http://www.cdc.gov/nchs/datawh/stataib/unpubd/natality/ nata99.htm. For years 1980, 1990, 2000: NVSR: *Births: Final Data for 2002*, 52(10): Table 1.

Death Rates: National Vital Statistics Report (NVSR): Deaths: Final Data for 2002, 53(5): Table 1.

Net Immigration Rates: For year 1950: U.S. Census Bureau. Statistical Abstract of the United States: 1980. Table 4. For years 1960, 1970, and 1980: Statistical Abstract of the United States: 1990. Table 14, for year 1990, Statistical Abstract of the United States: 2001, Table 4, at http://www.census.gov/statab/www/. Note that Statistical Abstracts for selected years (back to 1878) are available at this site. For year 2000: U.S. Census Bureau Population Estimates: Components of Population Change, at http://www.census.gov/popest/states/NST-comp-chg.html.

Growth Rates: CRS computations based on data on birth, death, and net immigration rates above.

Projections (Years 2010-2050): U.S. Census Bureau, Components of Change for the Total Resident Population, Middle Series 2010-2100, at http://www.census.gov/population/www.projections.

Notes: Data on 1980 births are based on 100% of births in selected states and on a 50% sample in all other states.

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