

**UNITED NATIONS STATISTICAL COMMISSION STATISTICAL OFFICE OF THE
and ECONOMIC COMMISSION FOR EUROPE EUROPEAN UNION (EUROSTAT)**

CONFERENCE OF EUROPEAN STATISTICIANS

Joint Eurostat/UNECE Work Session on Demographic Projections
(28-30 April 2010, Lisbon, Portugal)

Item 11 – Beyond population projections by age and sex

**Projecting Race and Hispanic Origin for the U.S. Population and an Examination
of the Impact of Net International Migration**

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This paper is released to inform interested parties of research and to encourage discussion. Any views expressed on statistical, methodological, technical, or operational issues are those of the authors and not necessarily those of the U.S. Census Bureau.

1. INTRODUCTION

For more than 50 years, the U.S. Census Bureau has been producing population projections of varying levels of detail. Since the 1970s, the projections have included some level of information about the race and/or Hispanic makeup of the population. Inclusion of race and Hispanic origin has its origins in the uses of the U.S. projections data. Many of the end users of the projections require detailed race and Hispanic origin information. For example, the projections are used by the U.S. Bureau of Labor Statistics as inputs to their labor force projections where labor force participation rates are projected at different levels for different race groups. The most recent projections released by the U.S. Census Bureau include four supplemental series that provide projections based on alternative international migration levels. It is these supplemental series, and the original series released in 2008, that comprise what is discussed in this paper. In the following sections of this paper we present a summary of the data and methods used to produce the most recent U.S. projections series, discuss race and Hispanic origin methodology specifically, and present results comparing the different projections series.

2. DATA AND METHODS

The U.S. Census Bureau's 2008 and 2009 National Projections are based on Census 2000 and provide projections of the resident population of the United States and demographic components of change (births, deaths, and net international migration) by age, sex, race, and Hispanic origin for each year from July 1, 2000 to July 1, 2050. The projections were produced using a cohort-component method in which the components of population change were projected for each birth cohort (persons born in a given year). For each year in the projection series, we advanced the population one year of age

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using survival rates and levels of net migration projected for the year. A new birth cohort was added to form the population under one year of age by applying projected age-specific fertility rates to the female population aged 15 to 49, and updating the new cohort for the effects of mortality and net international migration.

The methodology for developing the mortality and fertility components was identical for the 2008 and 2009 series. Mortality was projected based on a time series analysis of vital statistics from 1984 to 2003. These projections include the assumption that overall life expectancy will increase by more than four years to 83.1 years in 2050. Mortality projections were made for three racial and ethnic groups: Hispanic, non-Hispanic Black alone, and non-Hispanic all other race categories. These groups were chosen because of limited availability of race and ethnicity information in the vital records over the historical time series. Table 1 contains the projected life expectancy at birth for the 2008 National Projections by race and Hispanic origin. Fertility was projected within the same racial and ethnic groups for women aged 15 to 49 using data from 1980 to 2003. Fertility projections for the non-Hispanic Black alone population and non-Hispanic all other races group were based on the assumption that fertility rates for these groups would remain at or near the replacement level.³ The fertility rate for the Hispanic population was assumed to be above replacement, though projected to decline over the projection period. In 2001, the total fertility rate (TFR) of the Hispanic population was 2.73, and it is projected to decrease to 2.29 by 2050 (Table 2).

Table 1. Projected Life Expectancy at Birth for the 2008 National Projections, by Race and Hispanic Origin: 2001-2050						
Year	Hispanic		Non-Hispanic Black alone		Non-Hispanic all other races	
	Male	Female	Male	Female	Male	Female
2001	77.2	82.7	68.3	75.2	75.1	80.1
2010	78.4	83.7	70.1	77.1	76.4	81.1
2025	79.7	84.7	73.6	80.0	78.1	82.7
2050	81.9	86.3	79.0	84.3	81.0	85.3

Note: The life expectancies presented in this table represent the input assumptions and may not match calculated life expectancies due to rounding and other processing.

Source: U.S. Census Bureau, 2008.

Table 2. Projected Total Fertility Rates for the 2008 National Projections, by Race and Hispanic Origin: 2001-2050				
Year	U.S. Total	Hispanic	Non-Hispanic Black alone	Non-Hispanic all other races
2001	2.02	2.73	2.10	1.84
2010	2.06	2.70	1.93	1.90
2025	2.06	2.53	1.91	1.90
2050	2.03	2.29	1.88	1.89

Note: The total fertility rates presented in this table represent the input assumptions and may not match calculated total fertility rates due to rounding and other processing.

Source: U.S. Census Bureau, 2008.

For the 2008 projections, international migration was projected principally using historical data on foreign-born immigration from 1972 to 2002, and also includes net migration from Puerto Rico, the net movement of the Armed Forces population between the United States and overseas, and the migration of the native born to and from the United States. The 2009 series provide results for four alternative net international migration assumptions: (1) High Net International Migration, (2) Low Net International Migration, (3) Constant Net International Migration, and (4) Zero Net International Migration. In the High and Low Net International Migration series, the projected net international migration from the 2008 series was increased and reduced, respectively, by the ratio of the net international migration data produced by the Population Estimates Program to the projected net international migration from the 2008 series for the years 2001 through

³ The "replacement level" of fertility is the theoretical level of fertility, which would, if maintained indefinitely in the absence of migration, ensure a stationary population in the long run. The replacement level is generally associated with a total fertility rate of about 2.1. In addition to the fertility level, the replacement of generations also depends on mortality rates and the age-specific patterns of fertility.

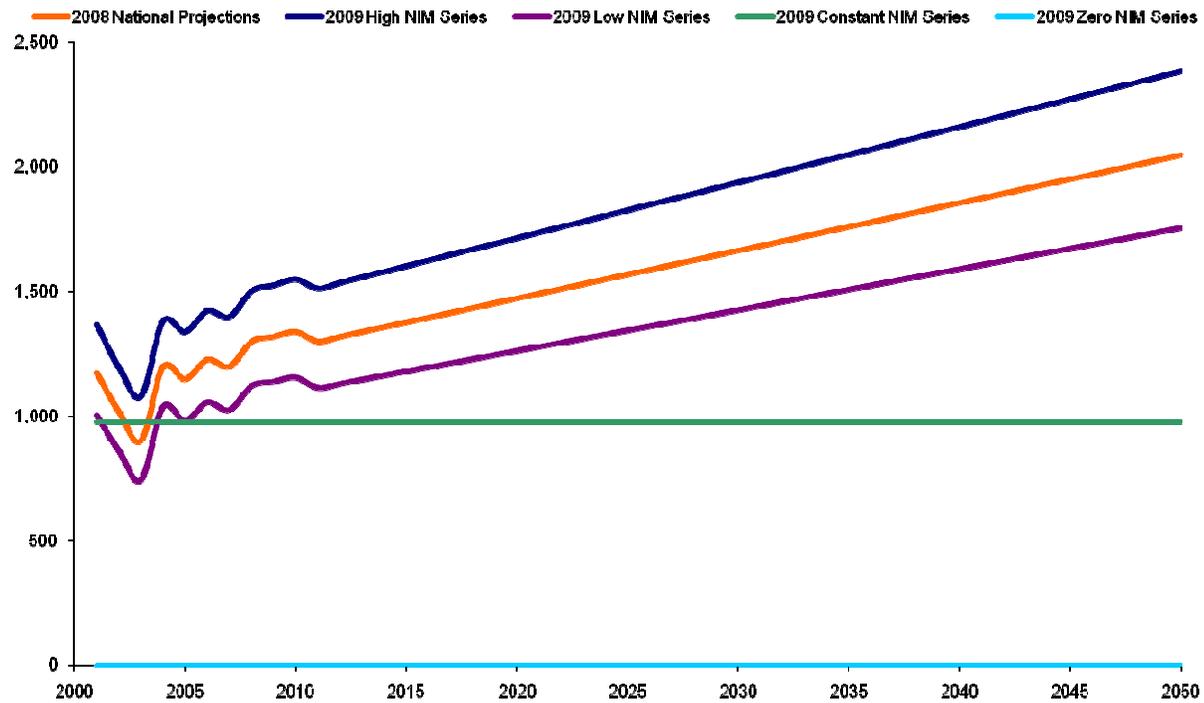
2008 (14.1 percent).⁴ In the Constant Net International Migration series, the level of net international migration is held constant at 975 thousand over the projection period.

This series illustrates the effect a level trend in international migration would have if maintained over the projection period. In the Zero Net International Migration series, net international migration is held constant at a value of zero for the entire projection period, thus assuming a closed population and no movement of individuals into or out of the United States. A comparison of the level of net international migration by year for each series is presented in

Figure 1. Race and Hispanic Origin

Figure 1. Projections of Net International Migration for the United States: 2001 to 2050

(In thousands)



NIM = Net International Migration
Source: U.S. Census Bureau, 2008 and 2009.

The U.S. Census Bureau has a long history of providing detailed race and ethnic information in its data products. The race and ethnic detail are particularly important to data users who produce other projection series, such as labor force projections. In addition, projections have been used by the U.S. National Institute on Aging for health planning for the older population, the U.S. National Cancer Institute for projecting the incidence of cancer, the U.S. Department of Education for projecting future school enrollment, and the U.S. Centers for Disease Control and Prevention for projecting incidence rates for diabetes. Projections for states or other small geographic areas can provide a useful planning tool for location of businesses or housing development, and even disaster planning. In each of these cases, the distribution of the population by race and Hispanic origin, as well as other characteristics, can have an important impact on both the outcome of other projections and the success of planning efforts.

⁴ The Population Estimates Program annually produces the official population estimates and components of change for the United States.

2.1. Understanding the Race and Hispanic Origin Concepts

The U.S. Office of Management and Budget (OMB) establishes the way in which race and ethnicity are collected and reported by the statistical agencies in the United States. In the U.S. federal statistical system, race and ethnicity (Hispanic origin) are considered two distinct concepts.

In 1997, the OMB revised the federal standards for collecting and presenting data on race and Hispanic origin.⁵ The 1997 guidelines established the practice of collecting and reporting race where respondents were able to self identify as being one or more races. Prior to 1997, each race category was characteristically defined as a mutually exclusive group, and respondents were only reported as being of a single race. The 1997 guidelines continued the practice of defining race and Hispanic origin as two separate and distinct concepts. There are two minimum categories for data on ethnicity: “Hispanic or Latino” and Not Hispanic or Latino.” Hispanics may be any race. OMB recognizes five standard race categories: White, Black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander. The response categories on Census Bureau questionnaires are the five OMB race categories plus Some Other Race. Respondents may identify with any one or more of the categories. The Some Other Race category is included for respondents who are unable to identify with 1 of the 5 OMB race categories. For the population projection products, like all the U.S. population estimates products, the original race data from Census 2000 are modified to eliminate the “Some Other Race” category. This modification is explained in the document entitled “Modified Race Data Summary File” that can be found on the Census Bureau website at <http://www.census.gov/popest/archives/files/MRSF-01-US1.html>.⁶

2.2. Projecting Race and Hispanic Origin

In projecting the population by race and Hispanic origin, the basic implementation only requires a base population that includes the race and Hispanic detail of interest, and development of specific assumptions about each group to be projected. We had the former in the form of tabulations from Census 2000. The latter were developed one way for the mortality and fertility assumptions and another for international migration.

Due to limitations in the availability of race and Hispanic origin data in the historical vital statistics, race and Hispanic origin for births and deaths were grouped into three main categories: Hispanic, non-Hispanic Black alone, and non-Hispanic all other. Specific assumptions for each group were developed in the form of age-specific fertility rates (for women aged 15-49) and survival ratios.

The projections were produced in two tiers. We first developed forecasts for the three main groups and then applied the assumptions for those groups to the detailed race groups by assigning them identical assumptions as their parent group. This means, for example, that we did not attempt to separately project age-specific fertility for non-Hispanic Asians, Native Hawaiians and Other Pacific Islanders, or American Indians and Alaska Natives. As noted earlier, this was due to a lack of sufficient historical data on these groups and also because there have been some discrepancies between reporting of race in the vital statistics and census enumerations.

One challenge to projecting births by race and Hispanic origin is the assignment of race to newborn children. With the revised guidelines for reporting race, we could no longer use the simplifying assumption that the race of child followed that of his/her mother. We addressed this problem by observing the racial and ethnic composition of family households in Census 2000. Using that information, race of child was determined (projected) based upon the race of the mother, the racial composition of men in the projected population, and the Census 2000 distribution of race and ethnicity of women and men with children less than 18 years of age in the household.⁷

International migration was primarily projected in numbers rather than rates since the determination of an affected population for a rate is not easy to establish. As noted earlier, the projections were developed using historical data on immigration of the foreign-born population and other administrative and survey data. Overall immigration was projected

⁵ Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity, see: www.whitehouse.gov/omb/fedreg_1997standards/.

⁶ In this paper, we refer to each of the races alone and use the Two or More Races category to represent the population reporting more than one race.

⁷ Further information on this method is reported in “Impact of Racial and Ethnic Exogamy and International Migration on Forecast Population Distributions for the United States in 2030: Results of a Macro-Simulation,” by Frederick W. Hollmann and W. Ward Kingkade. Presented at the XXVth International Population Conference of the International Union for the Scientific Study of Population, in Tours, France, July 18-23, 2005.

for four large country-of-birth groups deemed to be reasonably homogeneous with respect to race and Hispanic origin, and which offered historically consistent series of immigrant data. The four groups were as follows:

1. Mexico, the Spanish Caribbean islands, Central and South America
2. The non-Spanish Caribbean islands and sub-Saharan Africa
3. South Asia, Southeast Asia, East Asia, and Pacific Islands
4. Canada, Europe, Central Asian countries, and the Middle East

Specific details about which countries were included in each of these groups are available on our web site at: <http://www.census.gov/population/www/projections/countryofbirthlisting.xls>.

Detailed race and ethnicity were imputed within each of the 4 country-of-birth categories using Census 2000 data on the foreign-born population that arrived between 1995 and the census date in 2000. The four categories were also quite differentiated with respect to their propensity to migrate in or out of the United States, as well as the age and sex of migrants. Age and sex of migrants were assigned based on historical trends for each of the four categories.

3. THE IMPACT OF CHANGES IN THE LEVEL OF NET INTERNATIONAL MIGRATION

As noted earlier, the supplemental projections (released in 2009) included four new series that modified the original series (released in 2008) by changing the level of net international migration. The development of these series was partially motivated by differences between the projected level of net international migration in the 2008 projections and the level of net international migration used in the annual population estimates program. The series were also developed to provide data users alternatives for projections with respect to international migration, which seems to be the component most subject to short-term changes.

In comparing the results of the supplemental series, we found that changes in net international migration have the largest effect on the Asian and Hispanic populations (Table 3). This is a logical finding given the relative size of these populations and that these groups are the primary immigrant groups, with Asians making up 22 percent of the projected net international migration in 2010 (Table 4). Hispanics, who can be of any race, made up 49 percent of the projected net international migration in 2010. Both of these numbers refer to results from the 2008 projection series. Table 4 provides information on other years and race/ethnic groups from the 2008 projections series. In the following discussion of results, we focus on the four projections series where positive migration was assumed. The zero net international migration series was illustrative and is not reflective of any realistic “truth” for the future population; however, it does provide insights on the makeup of the projected migrant population.

Table 3. Projections of the U.S. Population by Race, Hispanic Origin, and Projection Series: 2010 to 2050

(Resident population as of July 1. Numbers in thousands.)

Race, Hispanic Origin, and Year ^{1,2}	2008 National Projections	2009 Net International Migration Series		
		High	Low	Constant
Total Population				
2010	310,233	312,504	308,282	307,907
2030	373,504	382,612	365,683	358,407
2050	439,010	458,176	422,554	398,528
One Race				
2010	304,734	306,971	302,812	302,442
2030	363,621	372,566	355,941	348,783
2050	422,828	441,594	406,717	383,129
White				
2010	246,630	248,137	245,336	245,300
2030	286,109	292,161	280,914	277,108
2050	324,800	337,631	313,783	299,755
Black				
2010	39,909	40,105	39,741	39,735
2030	48,728	49,533	48,036	47,276
2050	56,944	58,678	55,455	52,765
American Indian and Alaska Native				
2010	3,188	3,206	3,172	3,169
2030	4,313	4,388	4,249	4,192
2050	5,462	5,624	5,323	5,124
Asian				
2010	14,415	14,922	13,979	13,658
2030	23,586	25,561	21,890	19,393
2050	34,399	38,358	31,004	24,443
Native Hawaiian and Other Pacific Islander				
2010	592	601	584	581
2030	885	923	852	815
2050	1,222	1,303	1,153	1,042
Two or More Races				
2010	5,499	5,534	5,470	5,465
2030	9,883	10,046	9,742	9,624
2050	16,183	16,582	15,837	15,400
Non-Hispanic White Alone				
2010	200,853	201,235	200,524	200,639
2030	207,217	208,633	206,002	205,562
2050	203,347	206,118	200,967	198,888
Hispanic				
2010	49,726	50,918	48,702	48,531
2030	85,931	90,860	81,699	78,071
2050	132,792	143,527	123,576	110,743

¹ Race refers to each of the race groups alone and the Two or More Races category represents the population reporting more than one race.

² Hispanics may be of any race.

Note: The original race data from Census 2000 are modified to eliminate the "some other race" category. This modification is used for all Census Bureau projections products and is explained in the document entitled "Modified Race Data Summary File" that can be found on the Census Bureau website at <http://www.census.gov/popest/archives/files/MRSF-01-US1.html>.

Source: U.S. Census Bureau, 2008 and 2009.

Table 4. Projections and Distribution of Net International Migrants by Race and Hispanic Origin for the United States: 2010 to 2050 2008 National Projections					
Race and Hispanic Origin ^{1,2}	2010	2020	2030	2040	2050
	Number (in thousands)				
Total	1,338,370	1,472,777	1,664,183	1,855,450	2,046,690
Non-Hispanic	679,208	729,375	830,700	931,976	1,033,237
White	254,945	241,162	264,778	288,372	311,969
Black	106,642	115,917	135,624	155,304	174,969
Asian	299,717	353,449	408,762	464,075	519,398
AIAN	1,606	1,308	1,501	1,675	1,863
NHPI	3,796	4,213	4,860	5,512	6,154
Two or More Races	12,502	13,326	15,175	17,038	18,884
Hispanic	659,162	743,402	833,483	923,474	1,013,453
	Percent				
Total	100.0	100.0	100.0	100.0	100.0
Non-Hispanic	50.7	49.5	49.9	50.2	50.5
White	19.0	16.4	15.9	15.5	15.2
Black	8.0	7.9	8.1	8.4	8.5
Asian	22.4	24.0	24.6	25.0	25.4
AIAN	0.1	0.1	0.1	0.1	0.1
NHPI	0.3	0.3	0.3	0.3	0.3
Two or More Races	0.9	0.9	0.9	0.9	0.9
Hispanic	49.3	50.5	50.1	49.8	49.5

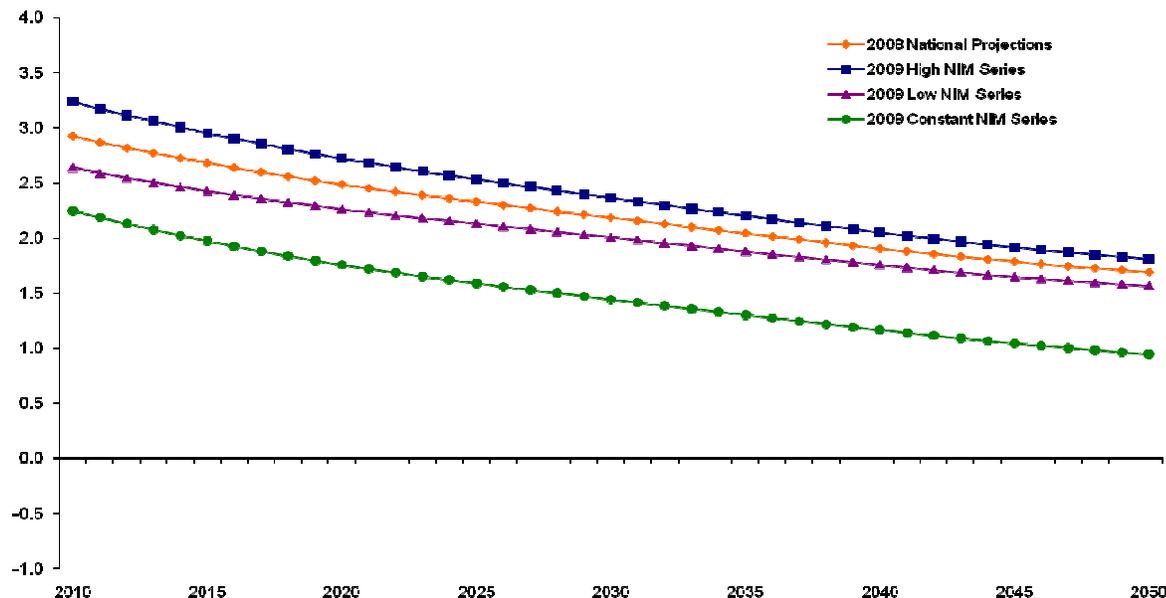
¹ Race refers to each of the race groups alone and the Two or More Races category represents the population reporting more than one race.
² Hispanics may be of any race.

Note: The original race data from Census 2000 are modified to eliminate the "some other race" category. This modification is used for all Census Bureau projections products and is explained in the document entitled "Modified Race Data Summary File" that can be found on the Census Bureau website at <http://www.census.gov/popest/archives/files/MRSF-01-US1.html>.

Source: U.S. Census Bureau, 2008.

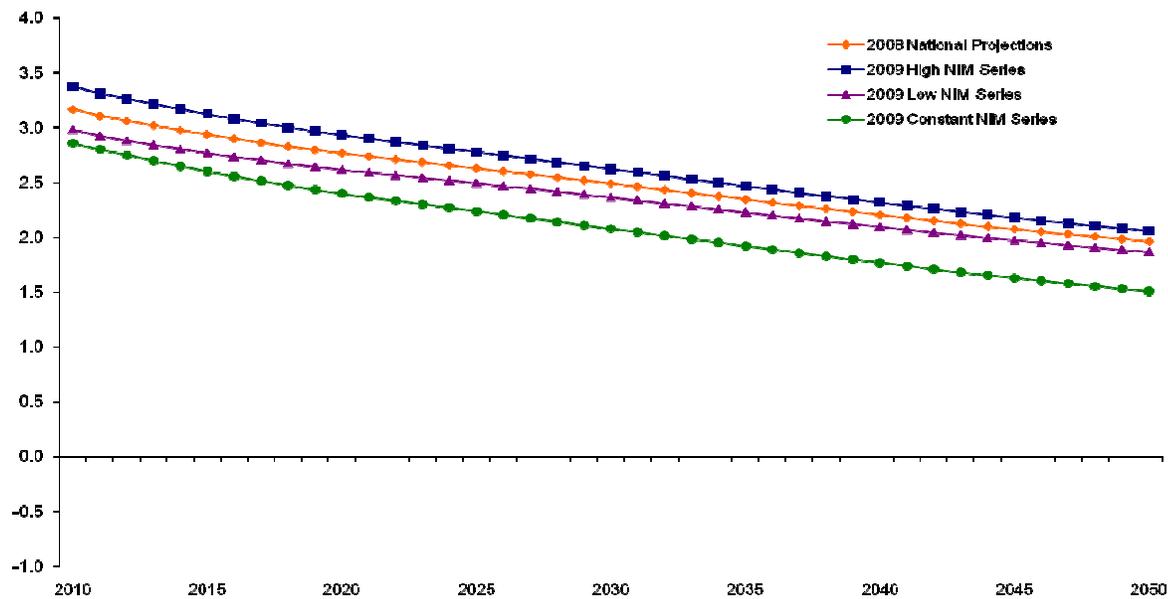
For low to high levels of net international migration, the Asian and Hispanic populations are projected to more than double in size by 2050. Even if net international migration were maintained at a constant level of nearly one million, the Hispanic population is still projected to more than double by 2050, while the Asian population is expected to increase by 79 percent. Although the populations are growing rapidly, the pace at which the Asian and Hispanic populations will grow is projected to slow considerably (Figures 2 and 3).

Figure 2. Projections of the Annual Growth Rate of the Asian Alone Population by Projection Series: 2010 to 2050 (Percent)



NIM = Net International Migration
 Note: The annual growth rate is calculated as the annual percent change in the size of the total population for each group.
 Source: U.S. Census Bureau, 2008 and 2009.

Figure 3. Projections of the Annual Growth Rate of the Hispanic Population by Projection Series: 2010 to 2050 (Percent)



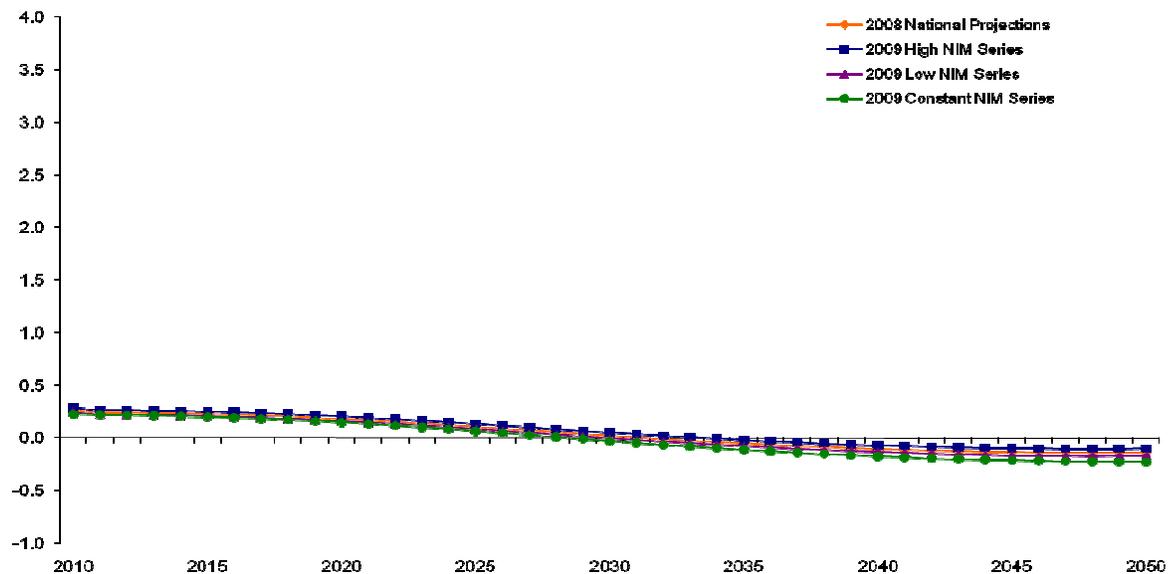
NIM = Net International Migration

Note: The annual growth rate is calculated as the annual percent change in the size of the total population for each group.

Source: U.S. Census Bureau, 2008 and 2009.

Most other race groups are projected to experience a moderate increase in size over the next four decades in all four projection series, and there is little difference in the projected growth rates for these groups across projection series. The one exception to this trend is for the non-Hispanic White alone population, which is projected to begin to decline in size in all series (Figure 4). This decline is projected to begin around 2030 for all series.

Figure 4. Projections of the Annual Growth Rate of the Non-Hispanic White Alone Population by Projection Series: 2010 to 2050 (Percent)



NIM = Net International Migration

Note: The annual growth rate is calculated as the annual percent change in the size of the total population for each group.

Source: U.S. Census Bureau, 2008 and 2009.

The projected level of migration also has meaningful effects on the proportional distribution of the population by race and Hispanic origin (Table 5). For example, the White alone population decreases as a percentage of the total population in all

series. The non-Hispanic White alone population is expected to experience a large decline in proportional representation (Figure 5). Although the level of net international migration affects the size of the Asian population, its share of the total population remains relatively low in all series (Figure 6). The Black, American Indian and Alaska Native, and Native Hawaiian and Other Pacific Islander populations are expected to maintain or slightly increase their percent share of the population in all series.

Figure 5. Percent Non-Hispanic White Alone by Projection Series: 2010, 2030, and 2050

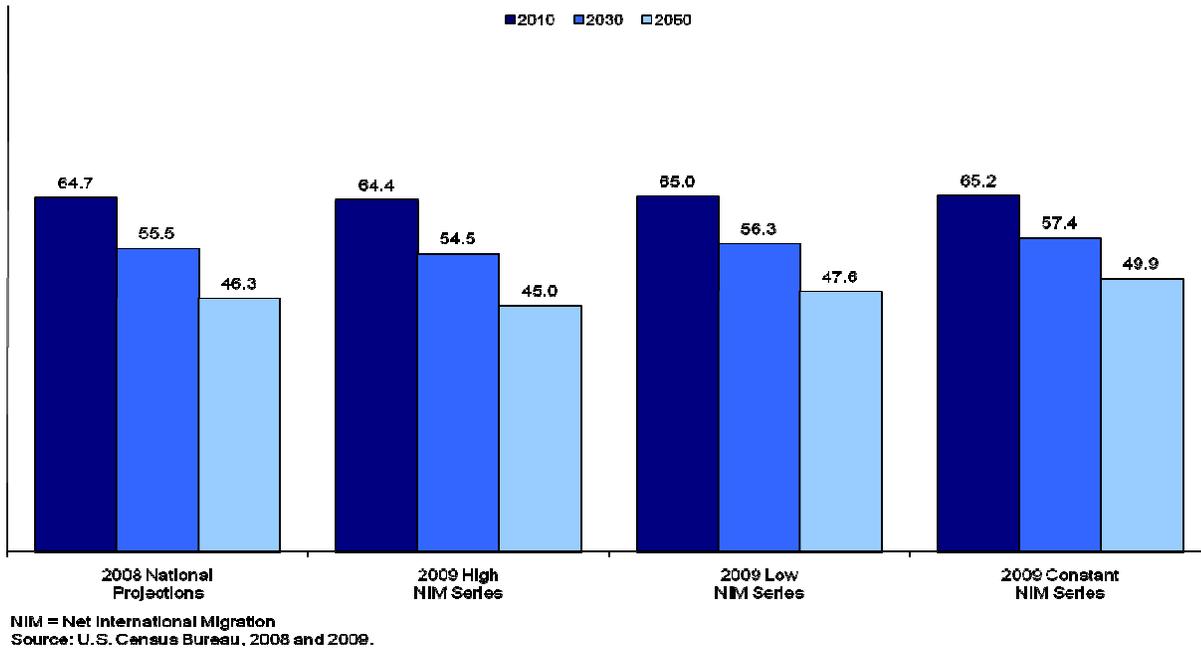


Figure 6. Percent Asian Alone by Projection Series: 2010, 2030, and 2050

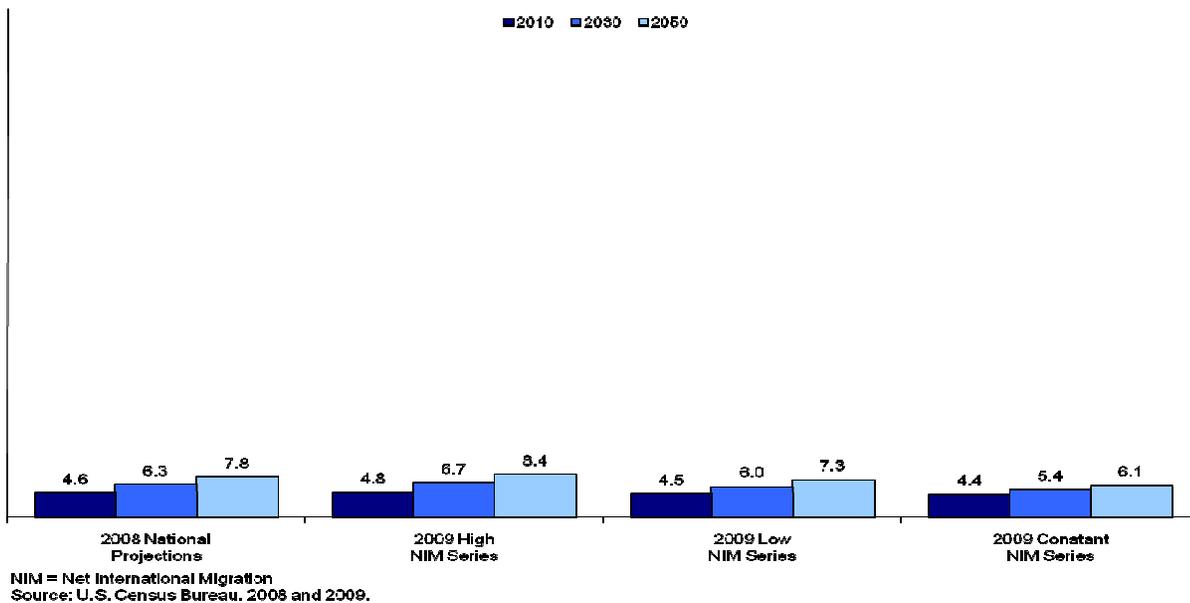


Table 5. Distribution of the U.S. Population by Race, Hispanic Origin, and Projection Series: 2010 to 2050

(Percent of total resident population as of July 1)

Race, Hispanic Origin, and Year ^{1,2}	2008 National Projections	2009 Net International Migration Series			
		High	Low	Constant	Zero
One Race					
2010	98.2	98.2	98.2	98.2	98.2
2030	97.4	97.4	97.3	97.3	97.2
2050	96.3	96.4	96.3	96.1	95.8
White					
2010	79.5	79.4	79.6	79.7	80.1
2030	76.6	76.4	76.8	77.3	78.4
2050	74.0	73.7	74.3	75.2	76.5
Black					
2010	12.9	12.8	12.9	12.9	13.1
2030	13.0	12.9	13.1	13.2	13.8
2050	13.0	12.8	13.1	13.2	14.4
American Indian and Alaska Native					
2010	1.0	1.0	1.0	1.0	1.0
2030	1.2	1.1	1.2	1.2	1.2
2050	1.2	1.2	1.3	1.3	1.4
Asian					
2010	4.6	4.8	4.5	4.4	3.8
2030	6.3	6.7	6.0	5.4	3.7
2050	7.8	8.4	7.3	6.1	3.3
Native Hawaiian and Other Pacific Islander					
2010	0.2	0.2	0.2	0.2	0.2
2030	0.2	0.2	0.2	0.2	0.2
2050	0.3	0.3	0.3	0.3	0.2
Two or More Races					
2010	1.8	1.8	1.8	1.8	1.8
2030	2.6	2.6	2.7	2.7	2.8
2050	3.7	3.6	3.7	3.9	4.2
Non-Hispanic White Alone					
2010	64.7	64.4	65.0	65.2	67.0
2030	55.5	54.5	56.3	57.4	62.4
2050	46.3	45.0	47.6	49.9	57.8
Hispanic					
2010	16.0	16.3	15.8	15.8	14.3
2030	23.0	23.7	22.3	21.8	17.6
2050	30.2	31.3	29.2	27.8	21.0

¹ Race refers to each of the race groups alone and the Two or More Races category represents the population reporting more than one race.

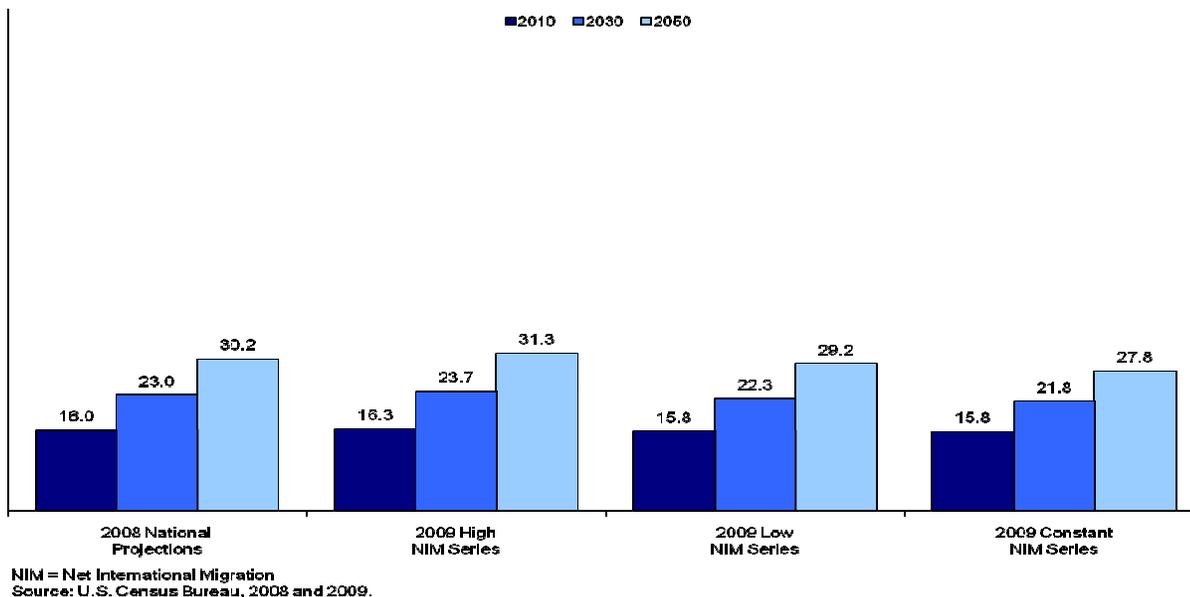
² Hispanics may be of any race.

Note: The original race data from Census 2000 are modified to eliminate the "some other race" category. This modification is used for all Census Bureau projections products and is explained in the document entitled "Modified Race Data Summary File" that can be found on the Census Bureau website at <http://www.census.gov/popest/archives/files/MRSF-01-US1.html>.

Source: U.S. Census Bureau, 2008 and 2009.

The percentage of the U.S. population that is projected to be Hispanic increases substantially in all series (Figure 7). This is even true for the zero migration series (not shown). This is largely due to the current age distribution of the Hispanic population and higher fertility rates that are assumed for them. In contrast, we find that the size and age structure of the Asian population is strongly linked to projected levels of migration.

Figure 7. Percent Hispanic by Projection Series: 2010, 2030, and 2050



The aging of the population is a common theme in examinations of population projections. The total population is projected to age to some degree in all projection series (Table 6). In the 2008 projection series, the median age is projected to increase from 36.9 years in 2010 to 39.0 years in 2050. Under the assumption of constant migration, the median age is projected to reach nearly 40 years by 2050. Because international migrants into the United States tend to be younger individuals (typically under the age of 35), changes in migration assumptions influence the extent to which the population is projected to age over the next forty years. Generally, higher levels of migration produce younger populations, while less migration results in an older population.

The largest effect on age is seen in the Asian population where, for example, the median age increases from 35.9 years in 2010 to 42.3 years in 2050 in the constant series. In the high migration series, the Asian population median age increases to 43.1. The Hispanic population is projected to experience a smaller increase in median age. Under the assumption of a higher level of migration, the median age of the Hispanic population is expected to be 30.9 years in 2050. In contrast, the median age is projected to rise to 33.1 years if net international migration is held constant at nearly one million people per year. Migration levels have minimal effect on the pace of aging for the non-Hispanic White alone population. For this group, the median age is projected to rise to approximately 45 years by 2050 in all scenarios. The median ages for the Black, American Indian and Alaska Native, and Native Hawaiian and Other Pacific Islander populations are projected to increase over time in all scenarios. As shown for the non-Hispanic White alone population, the level of international migration has little effect on how quickly these groups are projected to age.

Table 6. Projected Median Age of the U.S. Population by Projection Series, Race, and Hispanic Origin: 2010 to 2050

Race, Hispanic Origin, and Year ^{1,2}	2008 National Projections	2009 Net International Migration Series		
		High	Low	Constant
Total Population				
2010	36.9	36.7	37.0	37.1
2030	38.7	38.4	39.0	39.2
2050	39.0	38.6	39.3	39.7
White				
2010	38.4	38.3	38.5	38.6
2030	39.6	39.3	39.9	40.4
2050	39.4	38.9	39.8	40.8
Black				
2010	31.7	31.7	31.8	31.8
2030	36.6	36.4	36.7	37.0
2050	38.9	38.6	39.1	39.9
American Indian and Alaska Native				
2010	29.9	29.9	30.0	30.0
2030	33.8	33.6	34.0	34.3
2050	34.9	34.6	35.1	35.7
Asian				
2010	36.0	35.7	36.2	35.9
2030	41.1	40.7	41.4	40.2
2050	43.4	43.1	43.8	42.3
Native Hawaiian and Other Pacific Islander				
2010	30.5	30.4	30.6	30.5
2030	35.1	34.8	35.2	35.0
2050	36.8	36.5	37.0	37.0
Two or More Races				
2010	19.9	19.9	19.9	19.9
2030	22.1	22.0	22.1	22.1
2050	24.7	24.6	24.8	24.9
Non-Hispanic White Alone				
2010	41.3	41.3	41.4	41.4
2030	43.7	43.6	43.8	43.9
2050	44.6	44.5	44.7	45.0
Hispanic				
2010	27.5	27.3	27.7	28.0
2030	29.2	28.9	29.5	30.5
2050	31.2	30.9	31.5	33.1

¹ Race refers to each of the race groups alone and the Two or More Races category represents the population reporting more than one race.

² Hispanics may be of any race.

Note: The original race data from Census 2000 are modified to eliminate the "some other race" category. This modification is used for all Census Bureau projections products and is explained in the document entitled "Modified Race Data Summary File" that can be found on the Census Bureau website at <http://www.census.gov/popest/archives/files/MRSF-01-US1.html>.

Source: U.S. Census Bureau, 2008 and 2009.

Another interesting topic in discussion about the future of the U.S. population is whether (or when) the minority population will become the numeric majority.⁸ That is, when the non-Hispanic White alone population becomes less than 50 percent of the total population. As expected, we find that the level of net international migration affects the timing of the majority-minority crossover. In each of the four series where migration occurs, the size of the minority population is expected to increase to the point that they represent the numeric majority between 2040 and 2050 (Table 7). Higher levels of net international migration are projected to lead to an earlier crossover of the minority share of the population, while lower levels will delay the timing of this crossover.

Table 7. Projections of the Year of Majority-Minority¹ Crossover by Net International Migration Series for the United States	
Series	Year
2008 National Projections	2042
2009 High Net International Migration Series	2040
2009 Low Net International Migration Series	2045
2009 Constant Net International Migration Series	2050
¹ Minority is defined here as people who are races other than White alone or who are Hispanic.	
Source: U.S. Census Bureau, 2008 and 2009.	

4. SUMMARY

The most recent U.S. population projections were produced to provide comprehensive detail on the projected population by single year of age, sex, race, and Hispanic origin. The level of detail provided in the U.S. Census Bureau’s products is driven by the needs of end users and federal needs for detailed race and ethnic information. Specifically, the detailed projections provide useful information for planning and making projections of other topics of national interest.

The most recent projections series also provide valuable information about the impact of net international migration on the size and characteristics of the U.S. population. Although international migration affects all aspects of the population, the largest impact is seen for the Asian and Hispanic populations. Higher levels of net international migration also seem to temper the overall aging of the population.

⁸ The minority population is defined here as people who are races other than White alone or who are Hispanic.