Methodology and Assumptions for the 2012 National Projections

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Introduction

The U.S. Census Bureau periodically produces projections of the United States resident population by age, sex, race, and Hispanic origin. These projections are produced using a cohort-component method and are based on assumptions about demographic components of change (future births, deaths, and net international migration). This document presents the methodology and assumptions used to produce the 2012 National Projections – the first based on the 2010 Census – for 2012 through 2060.

Methods

The projections were produced using a cohort-component method beginning with an estimated base population for July 1, 2011.[1] First, components of population change (mortality, fertility, and net international migration) were projected. Next, for each passing year, the population was advanced one year of age and the new age categories were updated using the projected survival rates and levels of net international migration for that year. A new birth cohort was then added to form the population under one year of age by applying projected age-specific fertility rates to the average female population aged 10 to 54 years and updating the new cohort for the effects of mortality and net international migration.

The assumptions for the components of change were based on time series analysis of historical trends. This section provides details about the methods used to project fertility rates, mortality rates, and future levels of net international migration.

Fertility

One series of fertility rates was projected for the 2012 National Projections. Age-specific fertility rates were calculated and projected for women aged 10 to 54 years from birth registration data for 1989 to 2009, which were compiled by the National Center for Health Statistics (NCHS). Births to non-resident women were excluded from the time series.[2]

The birth registration data were used in conjunction with the Census Bureau's Intercensal Estimates to produce a series of age-specific fertility rates by mother's race and Hispanic origin (U.S. Census Bureau, 2011). These data include four categories of race for the mother – White, Black, American Indian or Alaska Native, and Asian or Pacific Islander – and two categories for Hispanic origin – Hispanic and Not Hispanic. The intercensal estimates were only available by the four races prior to 2000. For the period from 2000 to 2009, the intercensal estimates were produced for a total of 31 race groups consistent with the revised Office of Management and Budget (OMB) standards for data on race and ethnicity (Office of Management and Budget, 1997). To maintain continuity of the estimates across the time series, bridged race intercensal estimates were used for 2000 to 2009.[3]

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[1] The base population was derived from the Census Bureau's Vintage 2011 Population Estimates, which were based on the 2010 Census (U.S. Census Bureau, 2012a).

[2] Non-resident women are defined as women whose state of residence is *not* one of the 50 states or the District of Columbia.

[3] Bridged race estimates are those where multiple-race responses are converted back to the single-race categories consistent with the 1977 Office of Management and Budget standards for data on race and ethnicity.

For the purposes of these projections, rates were produced for five race and Hispanic origin groups: (1) non-Hispanic White, (2) non-Hispanic Black, (3) non-Hispanic American Indian or Alaska Native (AIAN), (4) non-Hispanic Asian or Pacific Islander (API), and (5) Hispanic (of any race).

Assigning Race, Hispanic Origin, and Sex to Projected Births

Race and Hispanic origin was assigned to projected births based on the race of the mother, the racial composition of men in the projected population, and the 2010 Census distribution of race and ethnicity of women and men with children less than 18 years of age in the household.

To produce population estimates, information on the mother and father from each birth record is used to determine the race and Hispanic origin of the child. Race and Hispanic origin is assigned to each birth based on distributions of race reporting by parents of children aged 0 to 17 years from census data. This method and the underlying data have been described in previous work in population estimates and projections (e.g., Hollmann and Kingkade 2005, Smith and Jones 2003, Devine et al. 2010). The current application of this method is referred to as the Kid Link Method.

The Kid Link Method uses information on the relationship to the householder to define children as natural-born sons and daughters of the householder and parents as persons who are the householder, spouse of the householder, or unmarried partner of the householder. Records are kept where there is only one parent in the household. Records with same-sex parents are dropped since the intent is to provide a comparable measure to the parents' records on the birth certificate and compare the relationship between biological parents' race and Hispanic origin with the race and Hispanic origin reported for children.

The distributions of race and Hispanic origin for children aged 0 to 17 years are derived from a series of cross-tabulations of the reported race of the child for every race and Hispanic origin combination of parents. The result is a series of child race and Hispanic origin proportions for every combination of parents' race and Hispanic origin, which we refer to as Kid Link Proportions. Race and Hispanic origin are then assigned to births by multiplying the births by the respective child race proportions for that parental race-origin combination. Further documentation and additional applications of the Kid Link Method are discussed elsewhere (Guarneri and Dick 2012).

A comparable approach is adopted to assign race and Hispanic origin to projected births. The method for allocating births by race and Hispanic origin must be modified somewhat because births were projected by the race and Hispanic origin of the mother, but did not include information on the race and Hispanic origin of the father. To address this limitation, a pool of potential fathers was created from the projected male population based on the race and Hispanic origin composition of fathers relative to that of the entire male population in the 2010 Census.

The potential fathers were linked to mothers by age – each age of mother category has a specified age range for potential fathers based on 2010 Census data. The age range was generated by calculating the mean age of fathers for mothers from the census data, then adding and subtracting one standard deviation from the mean age to create the age range for each age of mother category. Once prospective fathers were linked to the mothers, race and Hispanic origin were assigned to each birth using the Kid Link proportions. Since the Kid Link proportions remain constant for all projected years, changes in the race and Hispanic origin composition of the mothers and fathers will drive changes in the race and Hispanic origin composition of births over time.

Sex was assigned to projected births within each race and Hispanic origin group. The sex ratios (males per 100 females) of future births were set to equal the average of the sex ratios of births for the period from 1989 to 2009, within each of the five race and Hispanic origin groups.

Fertility Projections

For the 2012 National Projections, age-specific fertility rates were projected to 2060 by assuming convergence by 2100 of the age-specific fertility rates of all five race and Hispanic origin groups to the average age-specific fertility rates of the non-Hispanic White group for the years 1989-2009 (1.83 births per woman).

Results

Table 1 presents the total fertility rates by race and Hispanic origin for 2012 to 2060.[4] The fertility rates for the non-Hispanic White group are projected to remain constant, below replacement level.[5] Those for the non-Hispanic Black group are projected to fall below replacement level. The rate for the non-Hispanic AIAN group is projected to fall just below replacement level at 2.01. The rate for the non-Hispanic API group remains below replacement level. The Hispanic fertility rate is projected to decline to 2.15 – just above replacement level.

Figures 1 and 2 show the age-specific fertility rates for each of the five race-Hispanic origin groups in 2009 and 2060, respectively. As expected, the age distribution of the fertility rates for all groups become more in line with the age distribution of rates for non-Hispanic White females. Rates for non-Hispanic Blacks, non-Hispanic AIAN, and Hispanics remain slightly higher in the young adult ages compared to rates for the non-Hispanic White and non-Hispanic API groups.

Mortality

Only one series of mortality rates was projected for the 2012 National Projections. Mortality rates were calculated from NCHS-compiled death registration data for 1989 to 2009, and they were used in conjunction with the Population Estimates Program's Intercensal Estimates to produce a series of mortality rates by age and sex for three race and Hispanic origin groupings (U.S. Census Bureau, 2011). Death data included four categories of race – White, Black, American Indian or Alaska Native, and Asian or Pacific Islander – and two categories for Hispanic origin – Hispanic and Not Hispanic. The intercensal estimates are available by four races prior to 2000. For the period from 2000 to 2009, the intercensal estimates were produced for a total of 31 race groups consistent with the revised OMB standards for data on race and ethnicity (Office of Management and Budget, 1997). To maintain continuity of the estimates across the time series, we used the bridged race intercensal estimates for 2000 to 2009. Deaths to non-residents were excluded from the series.[6]

Due to concerns about the quality of race reporting in the death data over the time series, the non-Hispanic race groups were collapsed into two categories. Groups with similar mortality patterns were combined. As a result, mortality rates were produced for three race and Hispanic origin groups: (1) non-Hispanic White and Asian or Pacific Islander (API), (2) non-Hispanic Black and American Indian or Alaska Native (AIAN), and (3) Hispanic (of any race).

Mortality Projections

Mortality was projected based on projections of the life expectancy at birth (e_0) by sex. Changes in life expectancy at birth by sex were modeled assuming that the complement of the life expectancy (difference between an upper bound value, A, and life expectancy values) would decline exponentially.

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[4] The projected age-specific fertility rates by the five race and Hispanic origin groupings are provided in Technical Appendix 1, available at: http://www.census.gov/population/projections/data/national/2012/2012methodology.html.

[5] Replacement fertility is considered to be about 2.1 births per woman.

[6] Non-residents are defined as persons whose reported state of residence is *not* one of the 50 states or the District of Columbia.

Thus,

$$C(t) = A - e_0(t) \qquad [1]$$

Where: C(t) = The observed complement of life expectancy at birth at time t

A = The upper asymptote of life expectancy

$e_0(t)$ = The life expectancy at birth at time t

The complement of life expectancy was then projected for future dates as:

$$\hat{C}(t) = \hat{C}(t_0)e^{r(t-t_0)} \qquad [2]$$

Where: $\hat{C}(t)$ = The observed complement of life expectancy at birth at time t

r = The rate of change in the complement of life expectancy at birth

$\hat{C}(t_0)$ = The model complement of life expectancy at time t_0

The parameters r, $\hat{C}(t_0)$, and A were estimated simultaneously by minimizing the sum of squared errors (SSE) between the model and the observed values of life expectancy, by sex, for the years 1999 through 2009.[7]

It was assumed that the complement of life expectancy for each of the three race and Hispanic origin groups would change at the same rate as for the total country for each sex. Projected values for the complement of life expectancy for each group for selected years from 2010 through 2060 were produced using the Census Bureau's subnational toolkit workbook, which is a planned addition to the Census Bureau's Population Analysis System (U.S. Census Bureau, forthcoming). This workbook assumes that the rate of change in the complement of e_0 is the same for each subpopulation as it is for the total country.

Mortality rates by age were then produced using the most recent observed rates by sex and race-origin group, the trajectory of life expectancy values, and an ultimate life table. To get an ultimate age pattern of mortality by sex, the United Nations' single age versions of the extended Coale and Demeny model life tables were used (United Nations 2010, United Nations 2012). The West model mortality rates with life expectancy values of 87 for males and 91 for females were selected.

Using the Coale-Demeny West model, age-specific central death rates were projected for each of the three race-origin groups by sex using the Census Bureau's Rural-Urban Projection (RUP) program. The RUP algorithm creates life tables for years that have intermediate life expectancy estimates by finding the interpolation factors for the most recent and next death rate inputs that would result in the desired life expectancy at birth value (Arriaga and Associates, 2003). The interpolation is done on the logarithms of the death rate values.

While the difference in life expectancy between Hispanics and non-Hispanics was projected to grow smaller over time, the projected life expectancy at birth for Hispanic males and females remained higher in all years than for the non-Hispanic groups. We questioned whether the differential in life expectancy for the observed years was real or an artifact produced by issues in the underlying mortality and population data used to produce the measure (e.g., misclassification of deaths by race and Hispanic origin). This issue will lead to further research in subsequent years, but for the

[7] These calculations were performed using Microsoft Excel's "Solver" add-in tool.

purposes of producing the 2012 National Projections, the projections of life expectancy for the Hispanic population were modified by assuming they would converge to the life expectancy of the non-Hispanic White and API group in 2035. From 2035 through 2060, the Hispanic group is given the same projected life expectancy as the non-Hispanic White and API group.

Results

Table 2 presents estimates and projections of life expectancy at birth and at age 65 for 2010 through 2060.[8] Life expectancy at birth is projected to increase for all groups. The increase in life expectancy is largest for the non-Hispanic Black and AIAN category. Between 2010 and 2060, life expectancy for this group is projected to increase from 71.2 years to 80.4 years for males and increase from 77.6 years to 84.7 years for females. The second largest increase is for the non-Hispanic White and API category, increasing from 76.8 years to 83.2 years for males and increasing from 81.5 years to 87.2 years for females. Life expectancy for Hispanic males is projected to increase from 78.8 years in 2010 to 83.2 years in 2060. Hispanic females are projected to increase from 83.7 years in 2010 to 87.2 years in 2060.

Figure 3 shows the mortality rates by age for the three race and Hispanic origin groups by sex in 2009. Rates are highest for non-Hispanic Black and AIAN and lower for all others. Figure 4 presents the projected mortality rates for the same groups in 2060. While rates decrease for several ages, the overall patterns are projected to remain the same. Rates are highest for the non-Hispanic Black and AIAN group. Rates for the non-Hispanic White and API and Hispanic groups are the same, since Hispanic life expectancy at birth and mortality rates were assumed to converge on the non-Hispanic White and API rates in 2035.

Net International Migration

The 2012 National Projections include a main series and three alternative series. These four series of projections provide results for differing assumptions of net international migration. The main series was released in December of 2012. The alternative series, released in May of 2013, were based on assumptions of low, high, and constant levels of net international migration.

The Constant series was produced by holding the level of net international migration from the Middle series for 2012 constant from 2012 to 2060. The Low and High series were produced by varying the level of net international migration of the foreign born from the projection used in the Middle series. All other methodology and assumptions used in the Low, High, and Constant series are the same as those used in the Middle series. The three alternative series are useful for analyzing potential outcomes of different levels of net international migration relative to the Middle series. The methodology used to produce the various series is presented below.

The projections of net international migration for the 2012 National Projections consist of three components:

1. Foreign-born immigration
2. Foreign-born emigration
3. Net native-born migration

[8] The projected input life expectancies at birth, mortality rates, and survival ratios by the three race and Hispanic origin groupings are provided in Technical Appendices 2 through 4, available at: http://www.census.gov/population/projections/data/national/2012/2012methodology.html.

Foreign-Born Immigration

Projections of foreign-born immigration were based on rates of emigration from sending countries. This approach shifts the perspective to the source countries by incorporating information on the trends in population in sending countries. Rates of emigration were calculated from annual estimates of foreign-born immigration and population estimates for the sending countries. Both sets of estimates are described below.

Estimates of Foreign-Born Immigration: 1980-2010

Estimates of foreign-born immigration were developed using data from the 1990 and 2000 Censuses and the 2000-2010 single-year American Community Survey (ACS) data files. Using single-year ACS data, foreign-born immigration was measured as the foreign-born population who reported their year of entry to the United States as one year prior to the survey year. For example, if a foreign-born respondent in the 2009 ACS reported their year of entry as 2008, then that person would be counted in the 2008 estimate of foreign-born immigration.

Using the decennial census data to estimate immigration from 1980 to 2000 is more complex because the data are not collected on an annual basis, as the ACS is, but instead represent time points that are ten years apart. In addition, because of the 10-year period, estimates of immigration must be adjusted to account for emigration and death. Census data do not include information on immigrants that emigrate or die before the census date. For instance, immigrants who entered the United States in 1994 and then emigrated in 1998 would not be included in the 2000 Census. Not accounting for those who emigrate before the census date would produce downwardly biased estimates of immigration.

To account for emigration during the decade, the census-based year of entry estimates for each year were adjusted using emigration rates. First, foreign-born immigration was estimated for the years 1991 to 2000 using the foreign-born population in the 2000 Census who reported a year of entry between 1990 and 1999 by sex, race, and Hispanic origin. Next, each annual estimate was adjusted for emigration by applying an emigration rate of 1.44 to each year.[9] The same method was applied to 1990 Census data to develop estimates of foreign-born immigration between 1980 and1989. Deaths that occurred to the foreign born each year were estimated using the mortality rates produced for the years 1989 through 2000. Hispanic origin is missing in a substantial number of death records prior to 1989, which led to the decision to use data from 1989 forward to produce the time series of death estimates. For the same reason, mortality rates for 1989, based on more complete reporting of Hispanic origin in death records, were used to generate immigration estimates for 1980 through 1989. For all other years, 1990 through 2000, the mortality rates for that year are used.

Estimates and Projections of Population in Sending Countries: 1980-2060

The Census Bureau produces estimates and projections of populations in other countries, which are compiled into the International Data Base (IDB) and are available to the public on the Census Bureau's website (U.S. Census Bureau, 2012b). The IDB projections are available through 2050. To extend the series to 2060, we extrapolated the populations from 2050 to 2060 by assuming that the growth rates for that period would decline at the same rate as in the 2040 to 2050 period. The

[9] The emigration rate of 1.44 is the emigration rate for recent arrivals (e.g., those entering within the past 10 years) used for the Vintage 2011 estimates of foreign-born emigration. Emigration rates for the 1980s were calculated by Ahmed and Robinson (1994), but they were calculated only for arrivals before 1980. Earlier arrival cohorts are expected to have a lower rate of emigration than the more recent arrivals for which we are producing estimates, so we chose to use more current data on the emigration of recent immigrants.

extrapolation was performed within country-of-birth groupings, which are described in the next section.

Country of Birth Groupings

The foreign-born immigration estimates and sending country population estimates and projections were categorized into four country-of-birth groupings:

1. Europe, Central Asia, and the Middle East,
2. Asia and Pacific Islands,
3. Non-Spanish Caribbean and Sub-Saharan Africa, and
4. Spanish Caribbean and Latin America.

These groupings were devised to place migrants into categories that correspond to the race and Hispanic origin groups for which the population projections are produced. The race and Hispanic origin distributions that were used to determine the race and Hispanic origin categorization of the foreign-born immigrants in each of the four country-of-birth groupings were derived from 2006-2010 ACS 5-year estimates.

Table 3 provides information about the race and Hispanic origin of foreign-born immigrants based on data from the 2006-2010 ACS 5-year estimates. According to the ACS data, three of the four country of birth groups are predominately non-Hispanic. The Spanish Caribbean and Latin America group is the only predominately Hispanic group. Within the country of birth groupings, 88.7 percent of the Europe, Central Asia, and the Middle East region are non-Hispanic White alone, 95.6 percent of the Asia and Pacific Islands region are non-Hispanic Asian alone, 90.7 percent of the non-Spanish Caribbean and Sub-Saharan Africa region are non-Hispanic Black alone, and 87.3 percent of the Spanish Caribbean and Latin America region are Hispanic White alone. The projected foreign-born immigrants within each of these country-of-birth groupings are distributed based on the distribution of race and Hispanic origin within the group from the 2006-2010 ACS 5-year estimates. For example, when race and Hispanic origin are assigned to immigrants from the Europe, Central Asia, and the Middle East region, 88.7 percent are assigned as non-Hispanic White alone, 1.4 percent as non-Hispanic Black alone, etc. When race and Hispanic origin are assigned to immigrants from the Non-Spanish Caribbean and Sub-Saharan Africa region, 5.7 percent are assigned as non-Hispanic White alone, 90.7 percent as non-Hispanic Black alone, etc.

Estimates and projections of the population for each country-of-birth grouping are presented in Figure 5. Asia remains the region with the largest population, reaching over 4 billion in 2060. The Non-Spanish Caribbean and Sub-Saharan Africa region is projected to have the second highest population, exceeding the level for the Europe, Central Asia, and the Middle East region by 2060. The population in the Spanish Caribbean and Latin America region is projected to be 723 million in 2060.

The exponential growth rate for each grouping is presented in Figure 6. The rate of growth is projected to decline in all regions, with the rate for the Non-Spanish Caribbean and Sub-Saharan Africa region remaining the highest overall. The rates for Europe, Central Asia, and the Middle East are projected to be nearly zero by 2060 and the rates for Asia and Pacific Islands and for the Spanish Caribbean and Latin America are projected to fall just below zero.

Emigration Rates from Sending Countries (to the United States)

Emigration rates for each of the four country-of-birth groupings were calculated by dividing the number of immigrants to the United States by the estimated population in that grouping. Rates were produced for the years 1980 through 2010 using this method. The emigration rates were

projected into the future by assuming the current rates will move toward an ultimate rate that can be thought of simplistically as a weighted average of the observed rates. The model used to project the emigration rates from sending countries is specified as:

$$E'_{t+1} = E_t + a(E_t - U) \qquad [3]$$

Where: E'_{t+1} = The model estimate for year t+1

E_t = The observed data for year t (or the model value during projection)

a = The recovery rate (pace at which the previous rate moves toward the ultimate value as a function of the distance from the ultimate)

U = The ultimate level of the rate[10]

Estimated and projected rates of emigration for each sending country grouping are presented in Figure 7. Because future emigration rates are projected to stay constant over the long term, at around the average of the rates for the observed years, changes in the level of emigration from these countries to the United States in our projections are driven by the changes in population size within each sending region. Rates for the Spanish Caribbean and Latin America region have historically been the highest, therefore remain the highest in these projections at a rate of about 1.15 emigrants per 1,000 in the population. Rates for the other three region groupings are much lower, falling at just below 0.2 emigrants per 1,000 in the population.

Foreign-Born Immigration Projections: 2011 to 2060

A preliminary projection of immigrants to the United States was calculated for each year by multiplying the projected emigration rate from the sending countries by the projected population in the sending countries within each region. Figure 8 presents the projections of foreign-born immigration within each of the four country of birth groupings. The total number of foreign-born immigrants is projected to be almost 2 million in 2060. The largest number of immigrants in 2060, 833 thousand, is projected to come from Spanish Caribbean and Latin America. The second largest number of immigrants in 2060 is projected to come from Asia and the Pacific Islands, at a level of 474 thousand. The level of immigration from Africa and the Non-Spanish Caribbean is projected to be 365 thousand and the level from Europe, Central Asia, and the Middle East is projected to be 316 thousand.

The foreign-born immigration projections were distributed by age, sex, race, and Hispanic origin detail based on the distributions of characteristics of immigrants within each of the four country of birth groupings from the 2006-2010 ACS. These distributions were held constant in all years of the projections. Changes in the demographic characteristics of immigrants result from changes in their origins. Once the foreign-born immigrants were distributed by age, sex, race, and Hispanic origin, the projected total number of immigrants for 2011 was controlled to the total level of foreign-born immigration estimated in the Vintage 2011 population estimates. There were no controls to the age, sex, race, or Hispanic origin distribution of the immigrants, only the total number of immigrants was controlled. Linear interpolation was used to re-project the foreign-born immigrants from the

[10] The model parameters *a* and *U* were calculated by the Microsoft Excel "Solver" add-in. The "Solver" tool simultaneously solves for *a* and *U* by minimizing the sum of squared errors between the model and observed emigration rates for each of the four country-of-birth groupings.

controlled 2011 value to the preliminary level projected for 2030.[11] The preliminary results were retained for projections for the years 2030 through 2060.

Low and High Series

The foreign-born immigration projections described above were used to produce the Middle series. To produce the Low and High series, the emigration rates from sending countries to the United States were increased and decreased by 30 percent. These emigration rates were then applied to the projected population within country-of-birth grouping to produce the total projected number of foreign-born immigrants.

Long-term trends in migration to the United States since 1947 were evaluated to determine the percent by which to increase and decrease the emigration rates. These trends were assessed based on 21-year moving averages of the total emigration rate from sending countries. The mean of the moving average rates was calculated and used to determine the range between the highest and lowest average rate (range = maximum value – minimum value). To determine what percent was used to generate the High and Low series, the range was divided in half. That result was then divided by the mean of the moving averages. This resulted in a value of 30 percent.

Figure 9 presents the total projected foreign-born immigration for the Low, Middle, High and Constant series. The High series has a projected level of foreign-born immigration of just fewer than 2.6 million in 2060. The Low series projection reaches almost 1.4 million in 2060.

Foreign-Born Emigration

Emigration of the foreign-born population from the United States was projected by first estimating a set of emigration rates and then applying those rates to the foreign-born population.

Rates of Foreign-Born Emigration

Foreign-born emigration rates were estimated using a residual method. These rates were held constant for all projected years. The rates were produced and applied by arrival cohort, age, sex, and Hispanic origin. Rates were produced for three arrival cohorts: (1) immigrants who arrived in the past 0-9 years, (2) immigrants who arrived in the past 10-19 years, and (3) immigrants who arrived 20 or more years ago.

The residual rates were estimated using Census 2000 as the base population and the 2010 ACS as the target population. A residual estimate was calculated by adding half of the annual immigrants to the initial population, surviving that population forward to the next year, and then adding the other half of the immigrants and half of the immigrants for the next period.[12] This process was repeated until the target population of July 1, 2010 was reached. The result was the expected population, from which the target population provided by the 2010 ACS is subtracted to provide a residual estimate of emigration. This estimate of foreign-born emigration was converted into a rate by dividing the annual estimate by the number of person years lived during the period. The rates were smoothed using penalized least squares. For the ages where the rates become negative, they are modeled using mathematical curves between the non-negative points.

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[11] Setting the point of convergence in 2030 rather than 2060 allows the projections to return to the trajectory of immigration consistent with the long-term trends in the time series.

[12] Due to the continuous nature of migration, with migrants arriving throughout the year rather than all at one point in time, migrants are not at risk of dying for the full year. If we were to add in all of the immigrants at the beginning of the interval and survive them forward by subtracting out deaths to the group, we would overestimate the number of deaths for the immigrant arrivals in that year. Instead, we add half of the immigrants at the beginning of the period and survive them forward to the end of the interval by subtracting out deaths. We then add in the other half of the immigrants, which were not subjected to mortality.

Foreign-Born Emigration Projections

A preliminary level of foreign-born emigration was projected by applying the emigration rates to the foreign-born population. The same set of rates, by arrival cohort, age, sex, and Hispanic origin, were used for all projected years. For example, to estimate foreign-born emigration between 2010 and 2011, the emigration rates were applied to the foreign-born population from the 2010 ACS. To project foreign-born emigration between 2010 and 2011, the foreign-born population is projected for 2011 by aging the foreign-born population from the 2010 ACS forward one year, subtracting out deaths and emigrants, and adding the projected number of immigrants for that year.[13] The residual rates are then applied to the projected foreign-born population for 2011. This process is repeated each year until 2060.

The total number of projected emigrants for 2011 was controlled to the level estimated in the Vintage 2011 population estimates. Linear interpolation was used to re-project the foreign-born emigrants from the controlled 2011 value to the preliminary level projected for 2030. The preliminary results for projections were used for the years 2030 through 2060. The number of foreign-born emigrants in the Middle series is projected to increase from just over 281 thousand in 2011 to 753 thousand in 2060.

Net Native-Born Migration

The net international migration of the native-born population includes the net international migration of the native born between the United States and other countries, including Puerto Rico. The estimates of native-born and Puerto Rican migration from the Vintage 2011 estimates were held constant for all years in the projections. There were 24,745 migrants from Puerto Rico and 45,228 native-born migrants leaving the United States. The total net native-born migration for the 2012 National Projections is -20,483.

Net International Migration Projections

The projected net international migration of the foreign born was calculated by subtracting the foreign-born emigration projections from the foreign-born immigration projections. The immigration and emigration projections that were controlled to the Vintage 2011 population estimates of the total number of immigrants and emigrants for 2011 were used for this calculation. The projections of net international migration were created by adding together the net foreign-born migrants and net native-born migrants.

Figure 10 presents the projections of net international migration by race and Hispanic origin from 2012 to 2060. The distribution of the net international migration follows closely the trends seen for foreign-born immigration. Hispanics are the largest group of net international migrants, increasing to just fewer than half a million in 2060. Non-Hispanic Asians are the next largest group, projected to increase to a net level of 293 thousand in 2060. Non-Hispanic Black migrants are projected to overtake non-Hispanic Whites, reaching a level of 227 thousand net international migrants in 2060 compared to 189 thousand for non-Hispanic Whites. The remaining 12 thousand migrants are non-Hispanic other races.

Table 4 shows the distribution and sex ratios of net international migration by race and Hispanic origin from 2012 to 2060 for the four projection series. In the Middle series, the percentage of net international migration that is projected to be non-Hispanic White remains stable at around 15.7 percent. The percent non-Hispanic Black is projected to increase from 10.1 percent in 2012 to 18.6 percent in 2060, while the percent non-Hispanic Asian is projected to decrease from 33.2 percent in

[13] Deaths are calculated using the projected survival ratios that were developed for the mortality component of the 2012 National Projections.

2011 to 24.1 percent in 2060. Hispanics are projected to remain stable, accounting for around 40 percent of net international migration. The sex ratios, which reflect the projected number of males per 100 females, indicate that Hispanic net international migration is projected to be predominantly male, while there are slightly more females than males for all of the non-Hispanic groups. The Low and High series projections of net international migration exhibit distributions similar to what is observed in the Middle series projections. The projected immigrants for all series were distributed by age, sex, race, and Hispanic origin based on the same ACS distributions. As a result, the projected distributions remain similar over the projections even though the level of net international migration for each group varies across projection series. The distributions for the Constant series remain level at the values observed in 2012 in the Middle series.

Population Projections

The projected fertility rates, mortality rates, and future levels of net international migration were used to generate projections of the U.S. resident population as well as projections of births and deaths for the years 2012 through 2060. The first section presents results from the Middle series released in December 2012, with results from the 2008 National Projections included for comparison. Results from the alternative series are discussed in the second section. Additional summary tables and detailed downloadable files with data for all the national projection series are available on the Census Bureau's website: <http://www.census.gov/population/projections>.

Results from the 2012 National Projections, Middle Series

Table 5 presents the projections of the resident population for 2012 through 2060. The population is projected to increase from 314 million in 2012 to 420 million in 2060. The projected populations from the Middle series are lower than the projections from the 2008 series. The difference between series was around 2.3 million in 2012 and increased to a difference of 39.2 million in 2050. Most of the difference is explained by a decrease in the level of net international migration in the Middle series compared to the 2008 series, though growing differences in the projected level of natural increase also contribute to these differences.

Trends in population growth are shown in Table 6. In the early years of the projections, the population is projected to increase by around 2.4 to 2.5 million each year. Around 2030 – the year in which the net international migration projections converge on the uncontrolled projected level of migration – the pace of growth begins to slow. The annual numeric change in population decreases from 2.4 to 2.0 million over the 2030s and dips just below 2.0 million in the 2040s. In the final two decades of the projections, the numeric change in population is projected to increase to just around 2 million each year. The level of numeric change is notably lower than the level projected for the 2008 series. In the projections released in 2008, the population was projected to increase at around 3 million a year in 2012, which would increase to 3.4 million in 2050.

The annual percent change in population is projected to be around 0.77 percent in 2012 and falls gradually over the projection period to 0.50 percent in 2046 (see Table 6). In contrast, the 2008 series projected a growth rate of 0.97 percent for 2012, which was projected to decrease to 0.79 percent in 2044. The 2012 National Projections, which are based on assumptions of lower fertility and a lower level of net international migration, suggest that the pace of growth will be much more moderate in the coming years.

Table 7 presents the projected total number of births and deaths by year. The number of births is projected to be around 4.2 million in 2012 and is projected to increase to just fewer than 5 million births per year in 2060. The projected births in the Middle series are lower than what was

projected in the 2008 series. In the 2008 series, births were projected to be around 4.4 million in 2012 and increase to just fewer than 5.7 million in 2050. Fertility assumptions for the 2008 National Projections were based on a time series of birth data ending in 2003. After 2007, the annual number of births in the United States began to decrease. The time series of data used to project fertility rates for the 2012 National Projections incorporates this decline and projects an overall lower level of fertility relative to the 2008 series. The number of deaths is projected to increase from around 2.5 million in 2012 to just over 4 million in 2060. The projected number of deaths in the Middle series is slightly lower than the 2008 series.

The projections of natural increase, calculated as the number of births minus the number of deaths for a given year, are provided in Table 8. Because the 2012 National Projections incorporate lower levels of fertility than the 2008 series, the level of natural increase in the Middle series is lower than what was projected in the 2008 series. Natural increase for the Middle series is projected to be just fewer than 1.7 million in 2012 and decrease to 891 thousand per year in 2060. The level of natural increase is projected to drop below one million in 2036. This is notable, since the projected level of natural increase did not fall below 1.3 million in the 2008 series.

Table 8 also presents the projections of net international migration. As in the case of natural increase, the projections of net international migration are markedly lower in the Middle series as compared to the 2008 series. For the Middle series, net international migration is projected to be 725 thousand in 2012, which increases to 1.2 million migrants per year in 2060. In contrast, the 2008 series projected net international migration to be around 1.3 million in 2012 and to reach 2.0 million migrants per year by 2048. Net international migration is projected to overtake natural increase as the driver of population growth for the United States in 2032 (see Figure 11). This was projected to occur in 2027 in the 2008 National Projections.

Projections of the percent non-Hispanic White alone are presented in Table 9. In the 2008 National Projections, the non-Hispanic White population was projected to become the numerical minority in 2042. The timing of this "majority-minority crossover" is projected to occur in 2043 in the Middle series.

The distribution of the projected population by age and sex is shown in Figure 12. The Middle series projections for 2012 are represented by the red bars, blue represents the projections for 2035, and black represents the projections for 2060. One notable feature is the growth of the older ages over time. As the baby boom generation ages forward, the population in the older ages is projected to increase substantially.[14]

Dependency ratios provide an alternative way to examine changes in the age structure of the population by providing an indicator of the potential burden on those in the working-age population. Figure 13 presents the projections of the youth, old-age, and total dependency ratios. The ratios represent the number of dependents, in the youngest and oldest age groups, relative to the size of the working-age population. Here, the working-age population is defined as those aged 18 to 64 years. Overall, the total dependency ratio is projected to increase from 59.5 in 2012 to 75.9 in 2060. Most of the increase is attributable to the increase in the old-age dependency ratios, represented by the red bars in this figure. The size of the older population is projected to grow larger relative to the working age population as the Baby Boom cohorts and their children enter this age group. An interesting artifact of the current projections is that the dependency ratio is

[14] The baby boom generation includes those born between 1946 and 1964, which includes the population between the ages of 48 and 66 years in 2012. The baby boom generation will be between the ages of 71 and 89 years in 2035. By 2060, the baby boom generation will be aged 96 years and over.

projected to reach 75.0 by 2032, and then decrease to 73.6 by 2044 before increasing to 75.9 by 2060.

The distribution of the projected population by race and Hispanic origin is provided in Figure 14. As noted previously, the percent non-Hispanic White is projected to decrease from 63.0 percent in 2012 to 42.6 percent in 2060. The percent non-Hispanic Black is projected to increase slightly, from 12.3 percent in 2012 to 13.2 percent in 2060. The percent of the population that is non-Hispanic Asian is projected to grow from just fewer than 5 percent in 2012 to almost 8 percent by 2060. The percent non-Hispanic AIAN is projected to stay at around 0.7 percent and the percent non-Hispanic NHPI is projected to remain at around 0.2 percent. The non-Hispanic Two or More Races population is projected to increase from just fewer than 2 percent in 2012 to 4.8 percent in 2060. The Hispanic population is projected to increase from 17.0 percent in 2012 to nearly 31 percent in 2060.

Results from the 2012 National Projections, Alternative Series

Table 10 compares the projections of the total population in all four series. The projections of total population in 2060 are between 392.7 million in the Constant series and 442.4 million in the High series. The largest projected increases in the total population (+128.3 million) are for the High series, which corresponds to the assumption of the highest level of net international migration. In contrast, the smallest projected increases in the total population (+78.7 million) are for the Constant series, which has the lowest levels of net international migration. The population is projected to cross the 400 million mark by 2051 in the Middle series. In the High series, the population is projected to reach 400 million several years earlier, in 2044. The population is not projected to reach 400 million in the Constant and Low series.

The growth of the population is projected to slow in all four series (see Table 11). Lower levels of net international migration correspond to greater decreases in the pace at which the nation grows, while higher levels of net international migration bolster the growth of the population and keep the level of growth slightly higher over the time period. In the Low series, the annual percent change in the size of the population is projected to decrease from 0.77 percent in 2012 to 0.37 percent by 2045. In the Constant series, the annual percent change is projected to decrease from 0.77 percent in 2012 to 0.29 percent by 2060. In contrast, the annual percent change in the High series is projected to drop from 0.78 in 2012 to 0.62 percent by 2049.

Assumptions about future levels of net international migration also have implications for the number of projected births and deaths in each series (see Table 12). Higher levels of net international migration result in a higher number of projected births – in 2060 there were 5.2 million births in the High series compared to 4.9 million births projected in the Middle series. In the Low series, births are projected to be around 4.6 million in 2060. The projected number of deaths is also higher in the series with higher levels of net international migration. Because assumptions of higher levels of net international migration produce larger projected populations, there are more projected individuals at risk of dying in that series compared to the series with lower levels of net international migration. By 2060, deaths are projected to reach 4.1 million in the High series and almost 4 million in the Low series.

Table 13 provides a comparison of how natural increase (calculated as births minus deaths) and net international migration are projected to contribute to the growth of the population in the coming years. In all four series, net international migration is projected to overtake natural increase as the driver of population growth. This occurs in 2032 in the Middle series. In the Low series, net international migration is projected to overtake natural increase in 2039 while this shift is projected to occur in 2028 in the High series.

The projected age distribution of the population is provided in Table 14. In all projection series, the percentage of the population under age 65 is projected to decrease, while the percentage of the population 65 years and older is projected to increase. Different levels of net international migration have the largest impact on projections of the population in the working ages (18 to 64 years) and older ages (65 years and over).

While the population in all age groups is projected to grow between 2012 and 2060 in all four series, these projections show a shift in how the population is distributed by age. In the Constant series, with the lowest overall level of net international migration, the population under 18 years is projected to decrease from 23.5 percent of the total population in 2012 to 20.8 percent in 2060. In the High series, the population under 18 years is projected to decrease to 21.4 percent in 2060. The population aged 18 to 44 years is projected to decrease from 36.3 percent in 2012 to between 33 and 34 percent in 2060 in the Middle, Low, and High series. The population aged 45 to 64 years is projected to drop from 26.4 percent in 2012 to around 23 percent in 2060 in all four series. Overall, the working age population (18 to 64 years) in the High series is projected to decrease from 62.7 percent in 2012 to 57.3 percent in 2060. The projected decreases in the size of the working age population are the largest in the Constant series, with the working age population projected to become 56.0 percent of the population in 2060. The population in the oldest ages is projected to increase in all series, from 13.7 percent in 2012 to over 20 percent in all four series. The older population (65 years and over) is projected to outnumber the young (under 18 years) in the Constant series (in 2038), Low series (in 2046), and the Middle series (in 2056).

The differences in the age distribution across projection series are also evident in the projected dependency ratios calculated for each series (see Table 15). Projected levels of net international migration moderate the changes in these ratios. Higher levels of migration bolster the size of the working age population, resulting in smaller projections of dependency. In the High series, the total dependency ratio is projected to increase from 59.5 in 2012 to 74.5 by 2060. The total dependency ratios in 2060 are projected to be 77.5 in the Low series and 78.9 in the Constant series.

The distribution of the projected population by race and Hispanic origin is presented in Table 16. The alternative assumptions about the future level of net international migration have the most impact on the percentage of the population projected to be non-Hispanic Asian alone, Hispanic (of any race), and non-Hispanic White alone. In 2012, the non-Hispanic Asian alone population is projected to be 4.9 percent of the population. In the Low series, this group is projected to increase to 7.0 percent. In the High series, the non-Hispanic Asian alone population is projected to represent 8.7 percent of the total population. The percent Hispanic is projected to increase from 17 percent in 2012 to 31.3 percent in 2060 in the High series. Under the assumption of constant net international migration, the percent Hispanic is projected to increase to 29.2 percent. The percentage of the population that is non-Hispanic White alone is projected to decrease in all four projection series. In 2012, 63 percent of the population is projected to be non-Hispanic White alone. This is projected to drop to 44.1 percent in 2060 in the Low series and in the High series the percent non-Hispanic White alone is projected to decline to 41.2 percent. Table 17 shows the projected percent of the population that is non-Hispanic White alone in each year of the projections. The year in which the non-Hispanic White alone population is projected to become a numerical minority is projected to be between 2041 (High series) and 2046 (Constant series).

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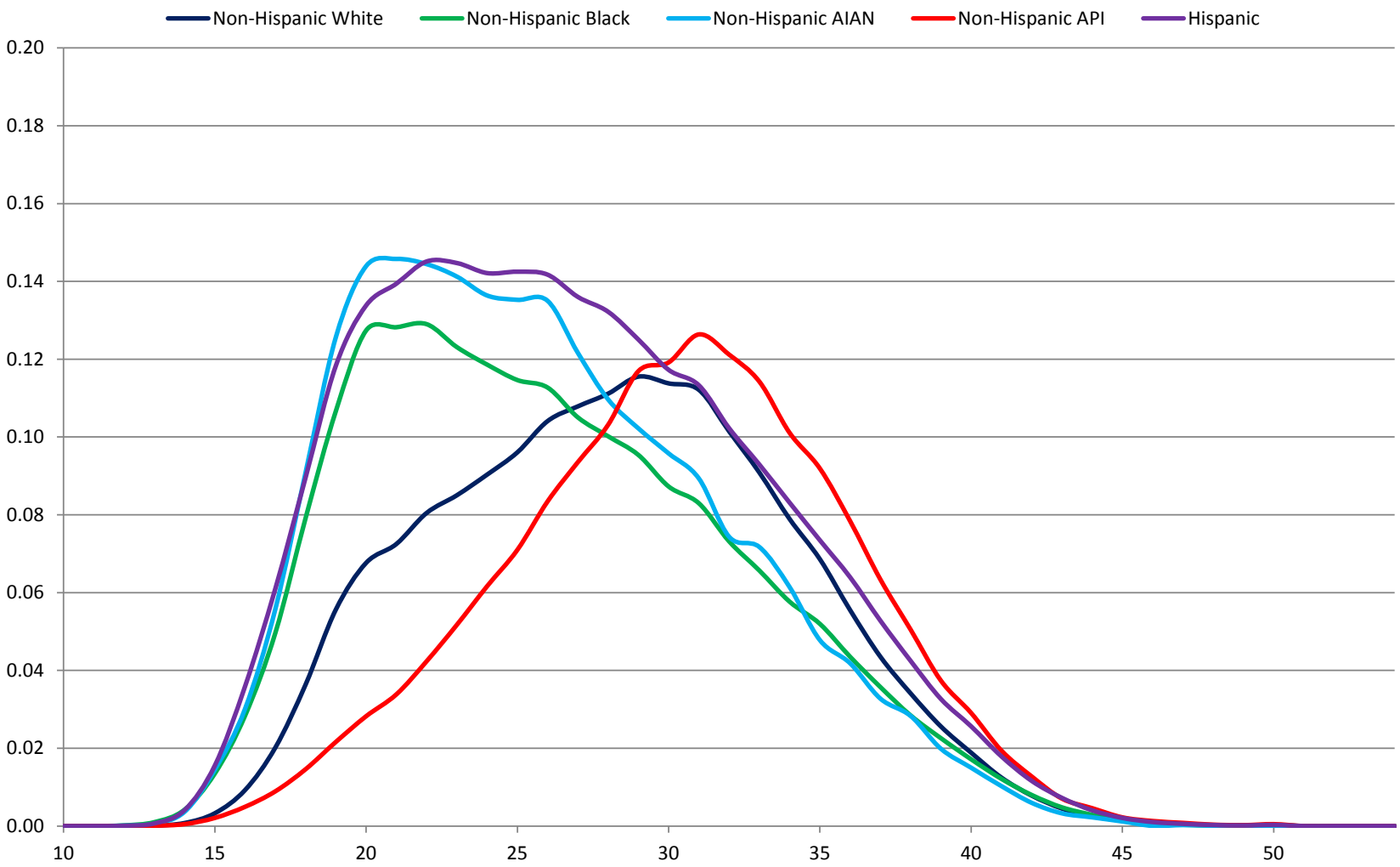
Tables and Figures

Table 1. Total Fertility Rates by Race and Hispanic Origin: 2012-2060

Year	Total	Non-Hispanic				Hispanic
		White	Black	American Indian and Alaska Native	Asian and Pacific Islander	
2012	2.00	1.83	2.03	2.23	1.72	2.53
2013	1.99	1.83	2.03	2.22	1.73	2.52
2014	1.99	1.83	2.02	2.22	1.73	2.51
2015	1.99	1.83	2.02	2.21	1.73	2.51
2016	1.99	1.83	2.02	2.21	1.73	2.50
2017	1.99	1.83	2.02	2.20	1.73	2.49
2018	1.99	1.83	2.01	2.20	1.73	2.48
2019	1.98	1.83	2.01	2.19	1.73	2.47
2020	1.98	1.83	2.01	2.19	1.73	2.47
2021	1.98	1.83	2.01	2.19	1.74	2.46
2022	1.98	1.83	2.01	2.18	1.74	2.45
2023	1.98	1.83	2.00	2.18	1.74	2.44
2024	1.97	1.83	2.00	2.17	1.74	2.43
2025	1.97	1.83	2.00	2.17	1.74	2.43
2026	1.97	1.83	2.00	2.16	1.74	2.42
2027	1.97	1.83	1.99	2.16	1.74	2.41
2028	1.97	1.83	1.99	2.15	1.74	2.40
2029	1.97	1.83	1.99	2.15	1.75	2.39
2030	1.96	1.83	1.99	2.15	1.75	2.39
2031	1.96	1.83	1.99	2.14	1.75	2.38
2032	1.96	1.83	1.98	2.14	1.75	2.37
2033	1.96	1.83	1.98	2.13	1.75	2.36
2034	1.96	1.83	1.98	2.13	1.75	2.36
2035	1.95	1.83	1.98	2.12	1.75	2.35
2036	1.95	1.83	1.97	2.12	1.75	2.34
2037	1.95	1.83	1.97	2.11	1.76	2.33
2038	1.95	1.83	1.97	2.11	1.76	2.32
2039	1.95	1.83	1.97	2.11	1.76	2.32
2040	1.94	1.83	1.97	2.10	1.76	2.31
2041	1.94	1.83	1.96	2.10	1.76	2.30
2042	1.94	1.83	1.96	2.09	1.76	2.29
2043	1.94	1.83	1.96	2.09	1.76	2.28
2044	1.94	1.83	1.96	2.08	1.76	2.28
2045	1.94	1.83	1.95	2.08	1.77	2.27
2046	1.93	1.83	1.95	2.07	1.77	2.26
2047	1.93	1.83	1.95	2.07	1.77	2.25
2048	1.93	1.83	1.95	2.07	1.77	2.24
2049	1.93	1.83	1.95	2.06	1.77	2.24
2050	1.93	1.83	1.94	2.06	1.77	2.23
2051	1.92	1.83	1.94	2.05	1.77	2.22
2052	1.92	1.83	1.94	2.05	1.77	2.21
2053	1.92	1.83	1.94	2.04	1.78	2.21
2054	1.92	1.83	1.93	2.04	1.78	2.20
2055	1.92	1.83	1.93	2.03	1.78	2.19
2056	1.92	1.83	1.93	2.03	1.78	2.18
2057	1.91	1.83	1.93	2.02	1.78	2.17
2058	1.91	1.83	1.93	2.02	1.78	2.17
2059	1.91	1.83	1.92	2.02	1.78	2.16
2060	1.91	1.83	1.92	2.01	1.78	2.15

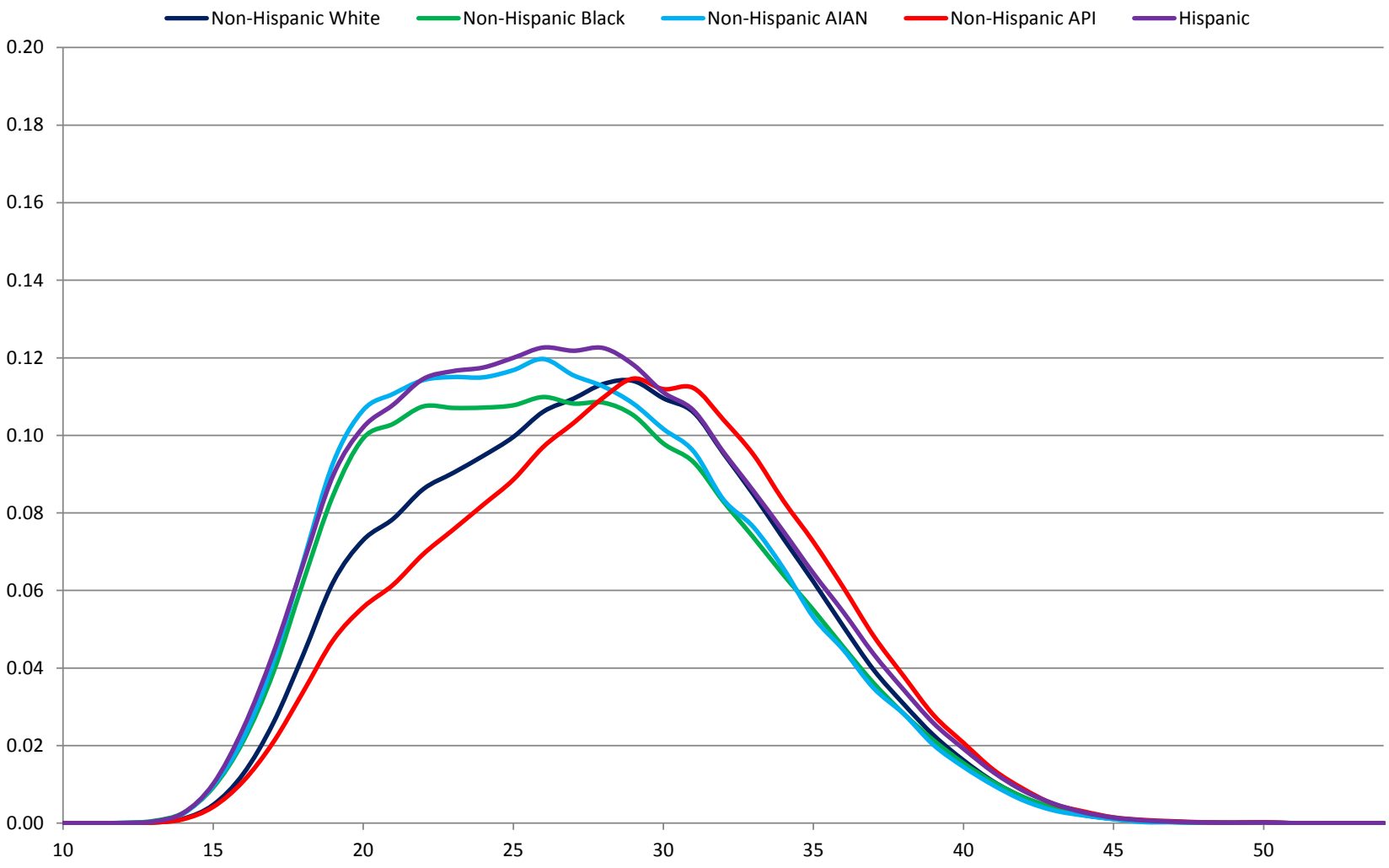
Source: U.S. Census Bureau, Population Division.

Figure 1. Age-Specific Fertility Rates by Race and Hispanic Origin: 2009



AIAN=American Indian and Alaska Native; API=Asian and Pacific Islander
Source: U.S. Census Bureau, Population Division.

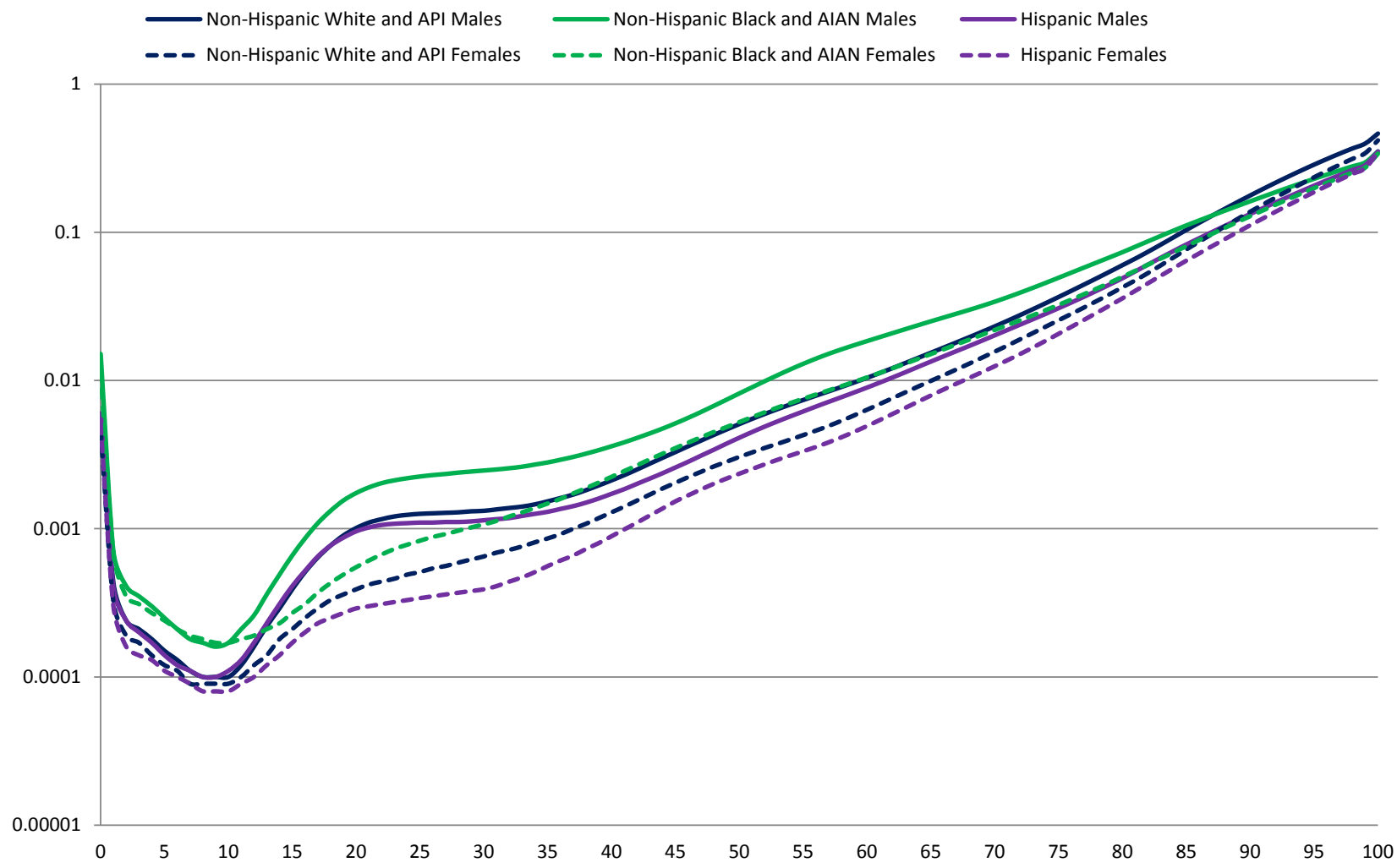
Figure 2. Age-Specific Fertility Rates by Race and Hispanic Origin: 2060



AIAN=American Indian and Alaska Native; API=Asian and Pacific Islander
Source: U.S. Census Bureau, Population Division.

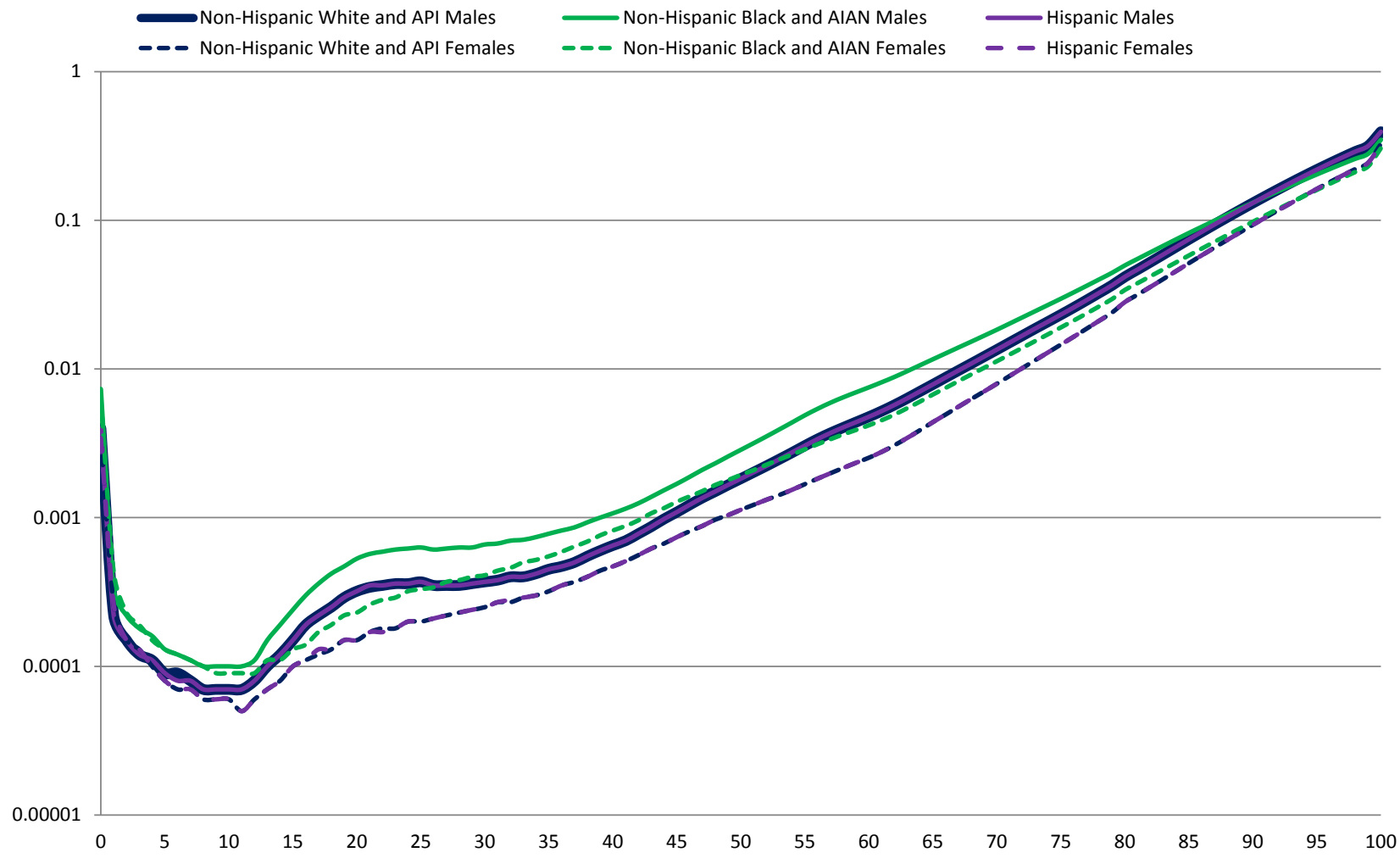
Table 2. Life Expectancy at Birth and Age 65 by Sex, Race, and Hispanic Origin: 2010 to 2060						
	Life Expectancy at Birth					
	Male			Female		
Year	Non-Hispanic White and API	Non-Hispanic Black and AIAN	Hispanic	Non-Hispanic White and API	Non-Hispanic Black and AIAN	Hispanic
2010	76.8	71.2	78.8	81.5	77.6	83.7
2020	78.4	73.5	79.5	82.8	79.3	84.0
2030	79.9	75.6	80.2	84.1	80.8	84.4
2040	81.1	77.4	81.1	85.2	82.2	85.2
2050	82.2	79.0	82.2	86.2	83.5	86.2
2060	83.2	80.4	83.2	87.2	84.7	87.2
	Life Expectancy at Age 65					
	Male			Female		
	Non-Hispanic White and API	Non-Hispanic Black and AIAN	Hispanic	Non-Hispanic White and API	Non-Hispanic Black and AIAN	Hispanic
2010	18.0	16.1	19.5	20.6	19.3	22.1
2020	18.7	16.9	19.6	21.3	20.1	22.2
2030	19.3	17.7	19.6	22.1	20.9	22.4
2040	20.0	18.5	20.0	22.8	21.6	22.8
2050	20.6	19.2	20.6	23.5	22.3	23.5
2060	21.1	19.8	21.1	24.2	23.0	24.2
AIAN=American Indian and Alaska Native; API=Asian and Pacific Islander						
Source: U.S. Census Bureau, Population Division.						

Figure 3. Mortality Rates by Age, Sex, Race, and Hispanic Origin: 2009



AIAN=American Indian and Alaska Native; API=Asian and Pacific Islander
Source: U.S. Census Bureau, Population Division.

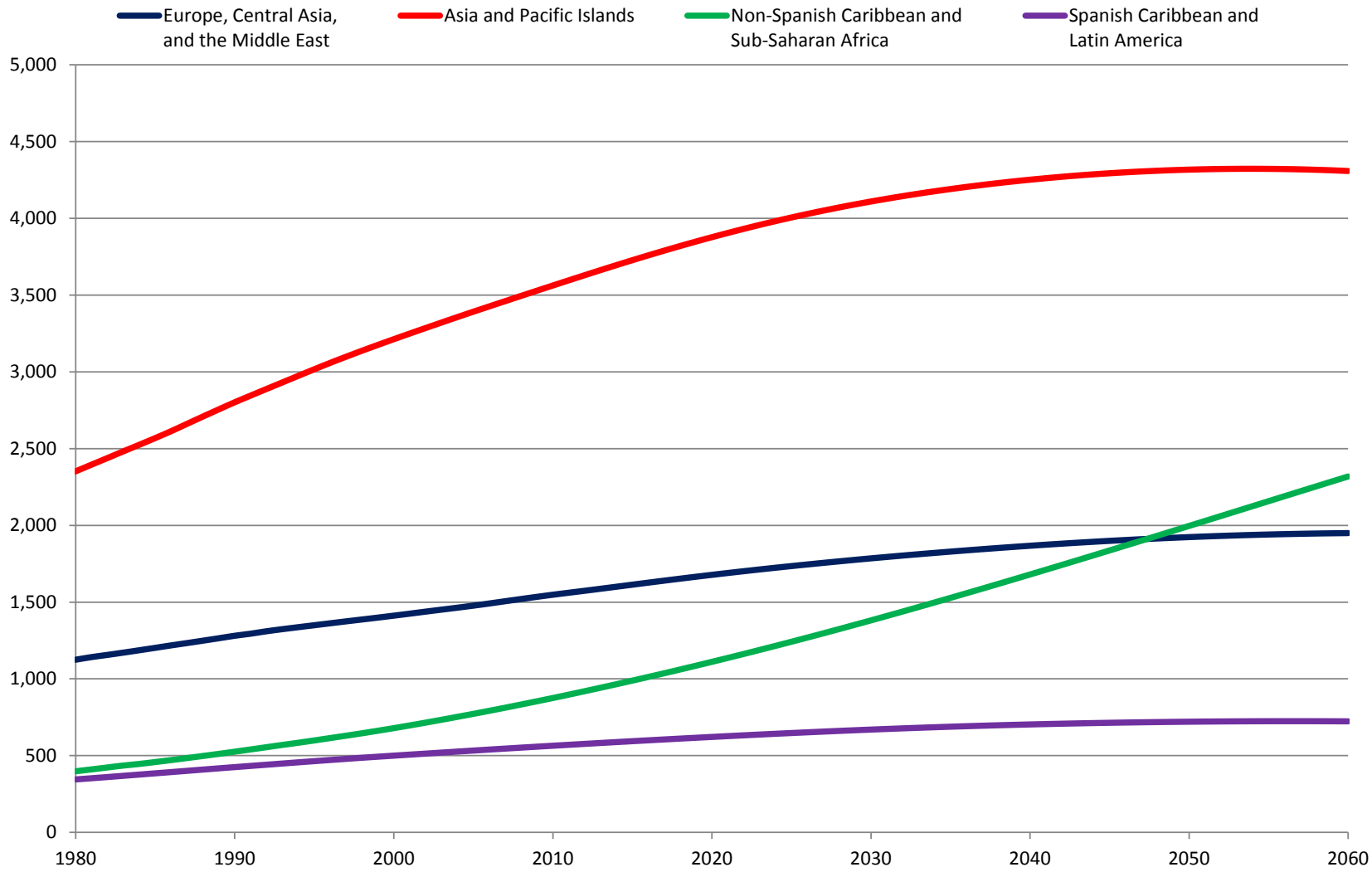
Figure 4. Mortality Rates by Age, Sex, Race, and Hispanic Origin: 2060



AIAN=American Indian and Alaska Native; API=Asian and Pacific Islander
Source: U.S. Census Bureau, Population Division.

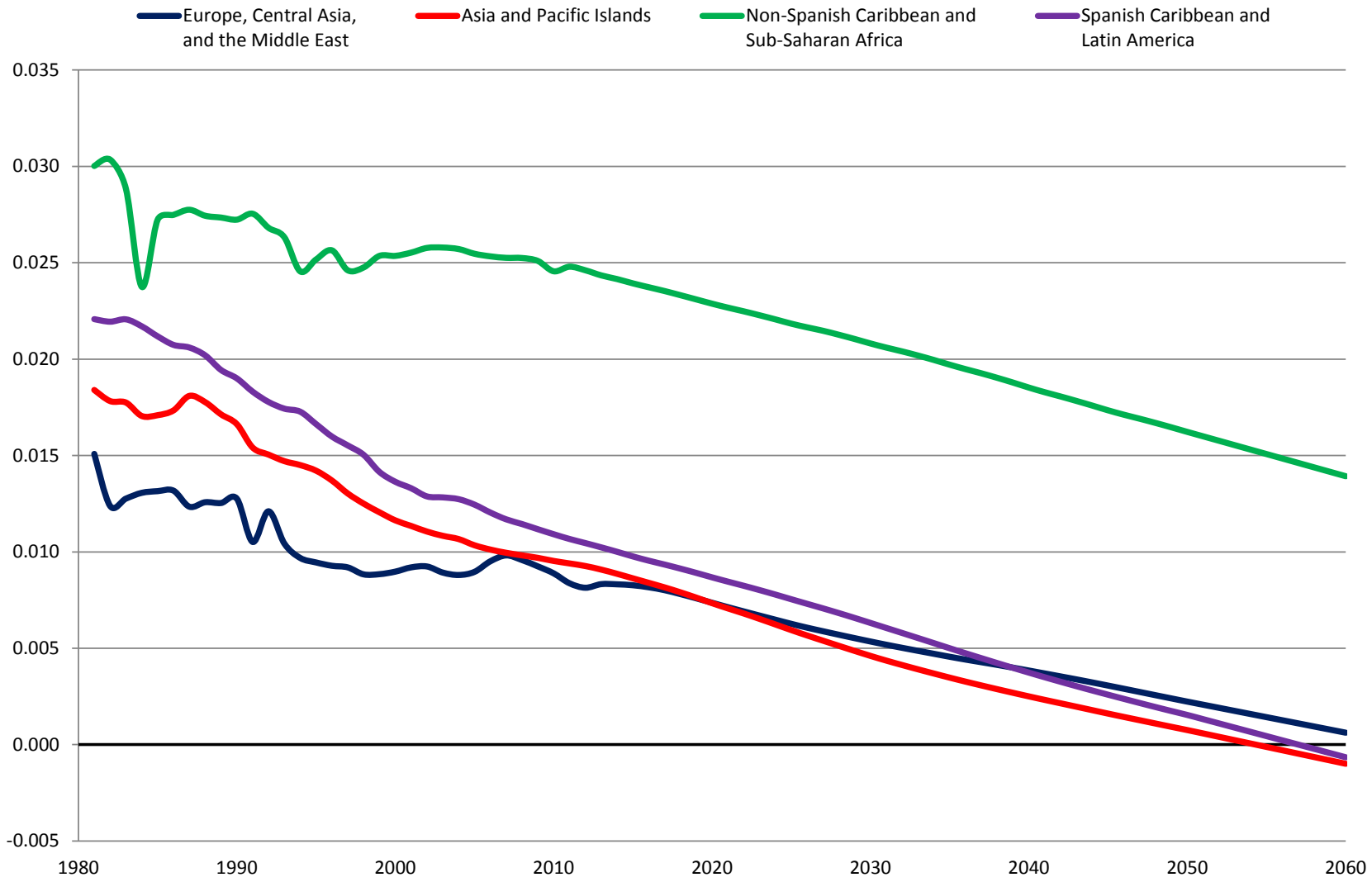
Table 3. Distribution of Foreign-Born Immigrants by Country of Birth Grouping, Race, and Hispanic Origin: 2006-2010					
Race and Hispanic Origin	**Total**	**Europe, Central Asia, and the Middle East**	**Asia and Pacific Islands**	**Non-Spanish Caribbean and Sub-Saharan Africa**	**Spanish Caribbean and Latin America**
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Non-Hispanic	66.5	97.5	99.8	99.1	6.5
White alone	23.2	88.7	2.1	5.7	4.9
Black alone	7.6	1.4	0.3	90.7	0.9
AIAN alone	-	0.1	-	0.1	-
Asian alone	34.5	5.7	95.6	1.9	0.5
NHPI alone	0.4	0.1	1.0	0.1	-
Two or More Races	0.7	1.5	0.7	0.6	0.2
Hispanic	33.5	2.5	0.2	0.9	93.5
White alone	31.2	2.4	-	0.2	87.3
Black alone	1.0	0.1	-	0.5	2.6
AIAN alone	0.6	-	-	-	1.8
Asian alone	0.2	-	0.2	-	0.3
NHPI alone	-	-	-	-	0.1
Two or More Races	0.5	-	-	0.1	1.4
- Rounds to 0.0.					
AIAN=American Indian and Alaska Native; NHPI=Native Hawaiian and Other Pacific Islander					
Source: U.S. Census Bureau, Population Division, 2006-2010 *American Community Survey 5-year Estimates* .					

Figure 5. Estimates and Projections of Population in Sending Regions: 1980 to 2060
(In millions)



Source: U.S. Census Bureau, Population Division, *International Data Base*, 2012b.

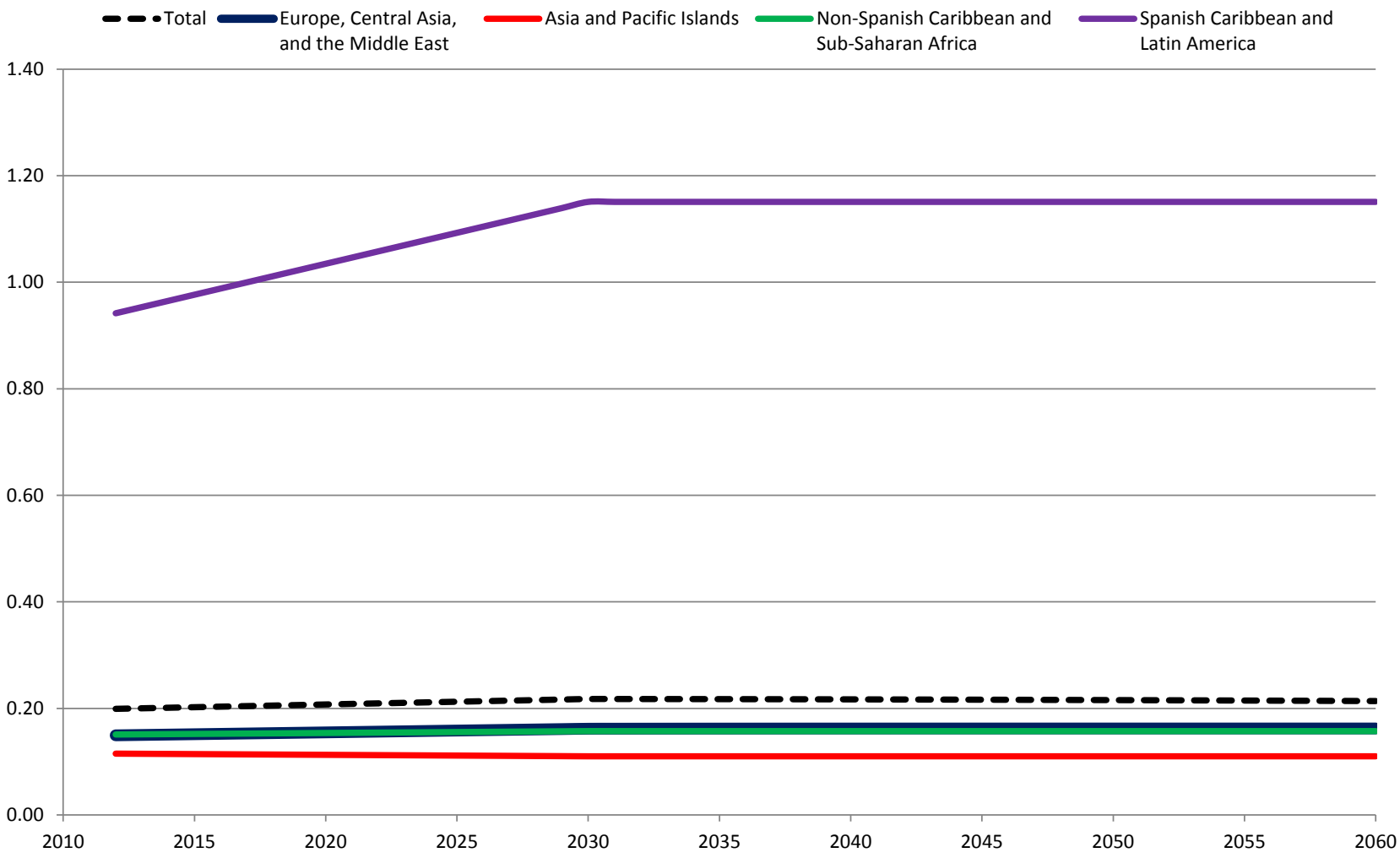
Figure 6. Estimated and Projected Exponential Growth Rate of Population within Sending Regions: 1980 to 2060
(Percent)



Source: U.S. Census Bureau, Population Division, *International Data Base*, 2012b.

Figure 7. Middle Series Projections of Rates of Emigration from Sending Regions to the United States: 2012 to 2060

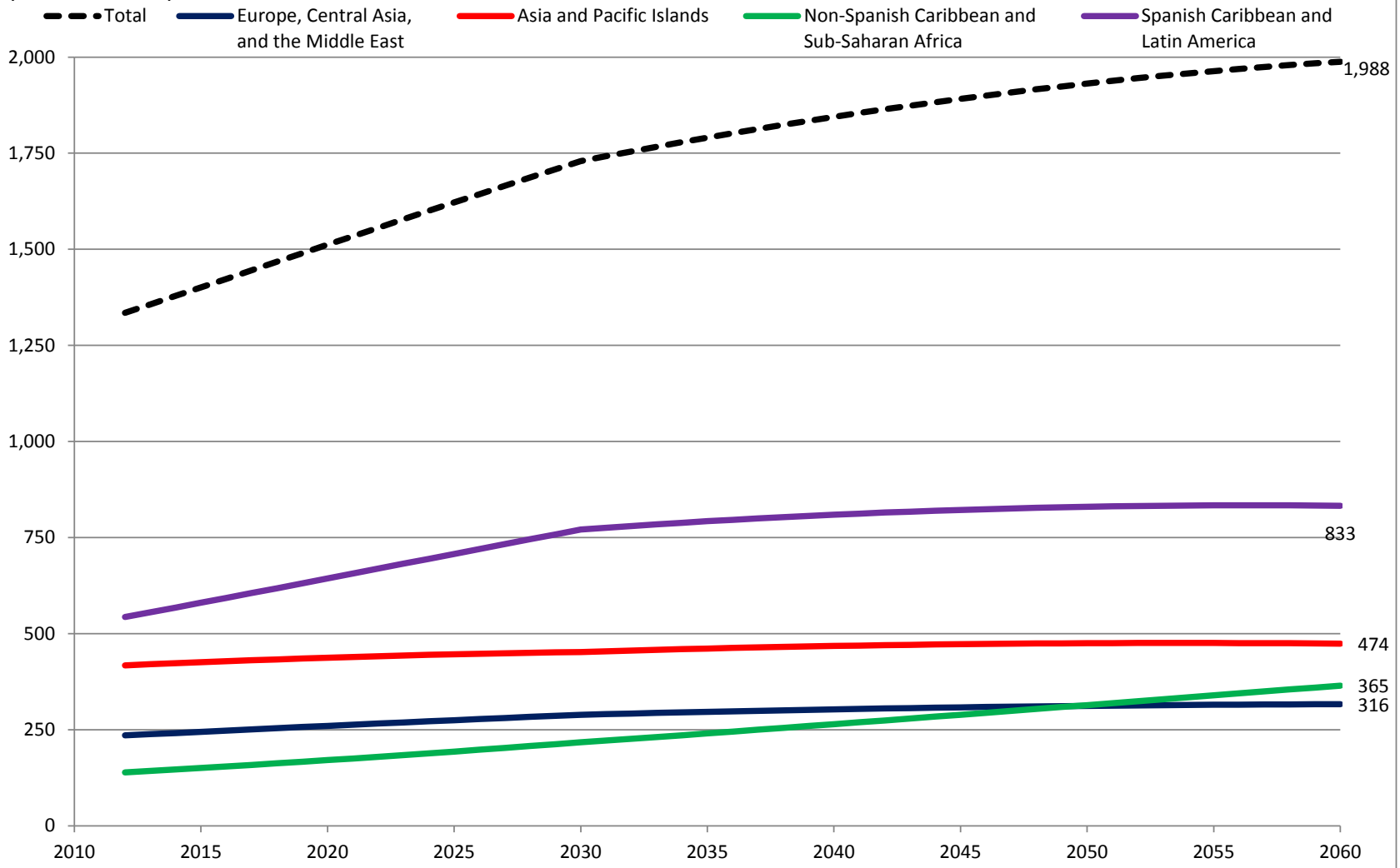
(Migrants per 1,000 population)



Source: U.S. Census Bureau, Population Division.

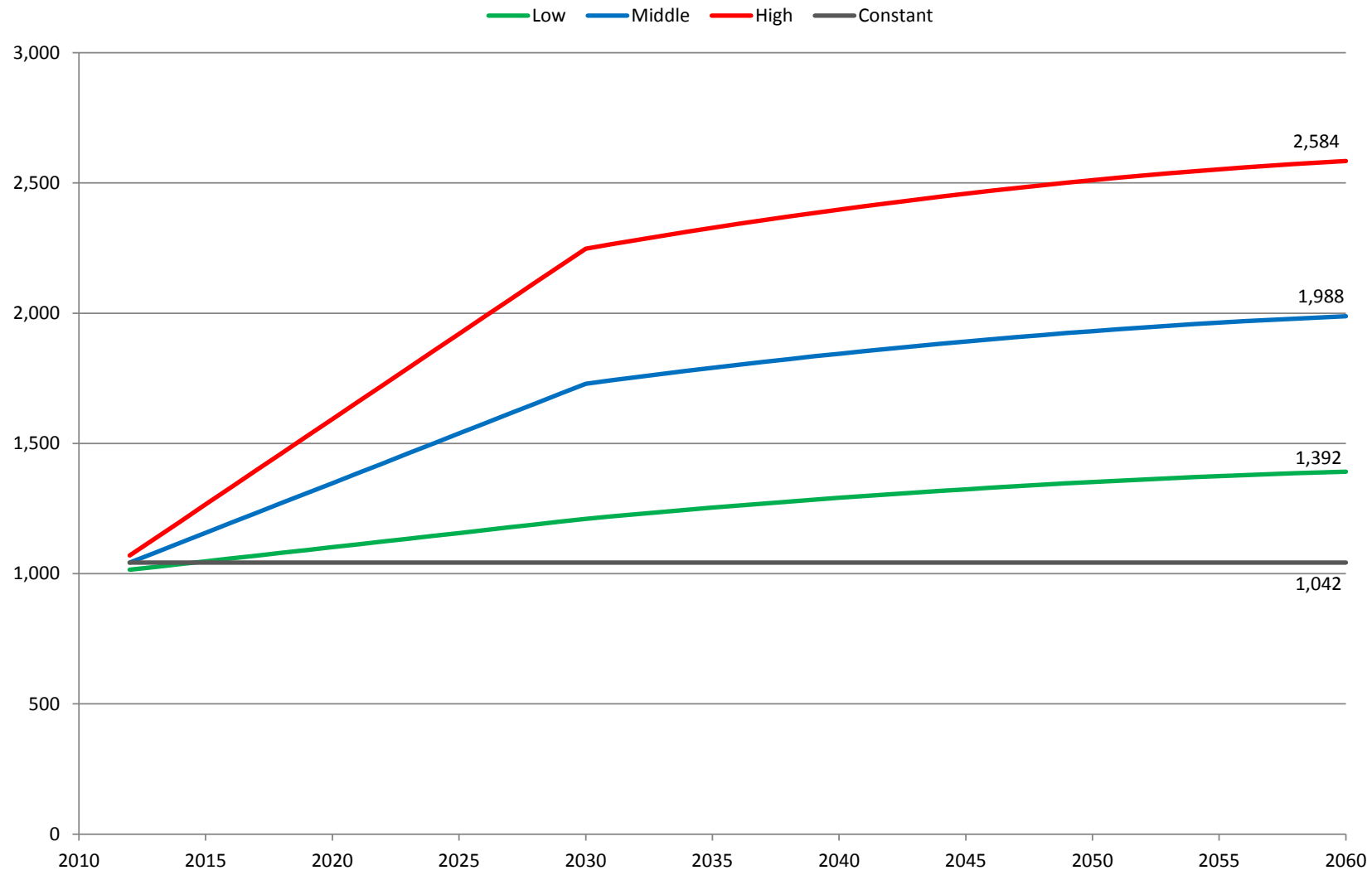
Figure 8. Middle Series Projections of Foreign-Born Immigration to the United States by Sending Region: 2012 to 2060

(In thousands)



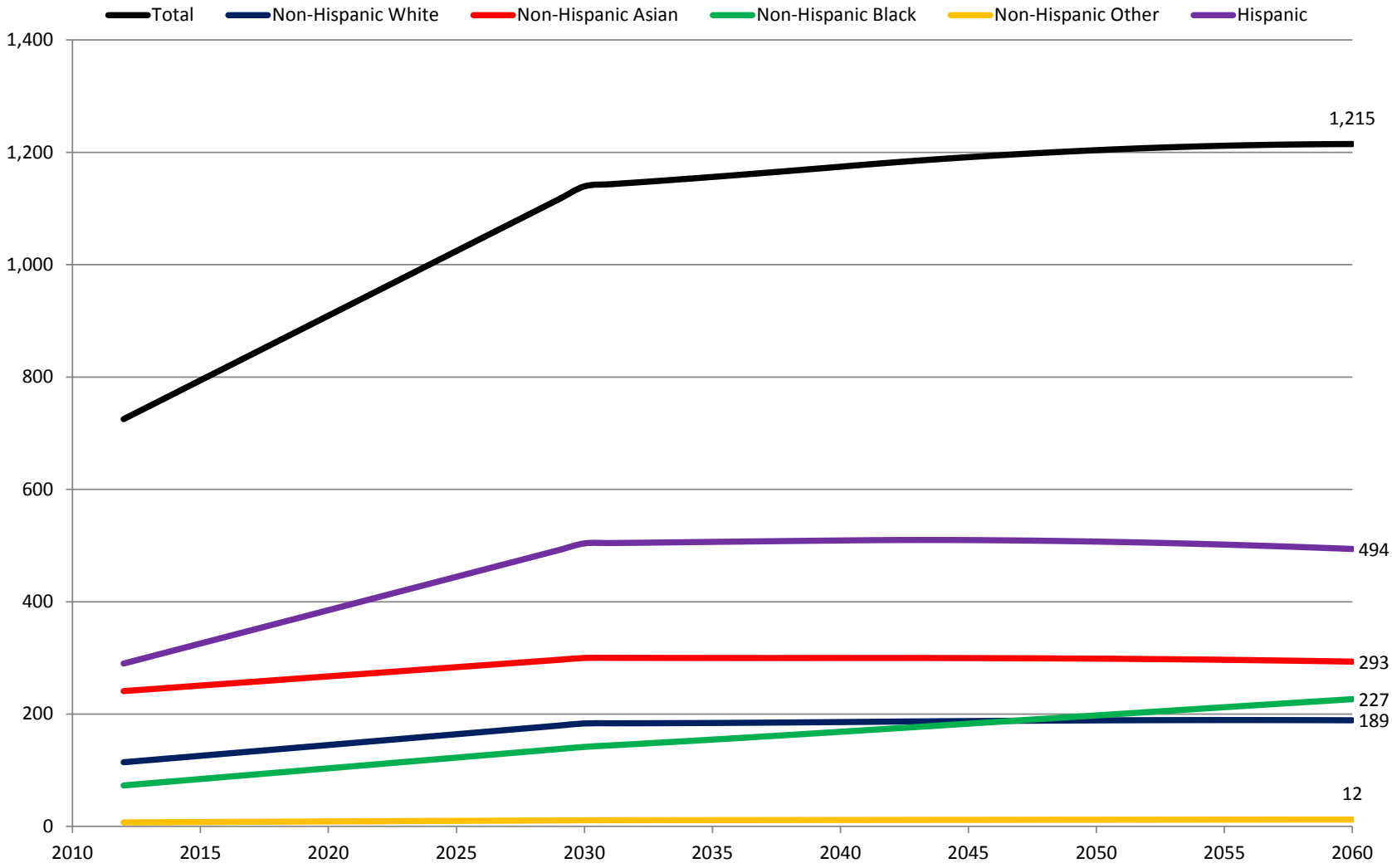
Source: U.S. Census Bureau, Population Division.

Figure 9. Projections of Foreign-Born Immigration to the United States by Series: 2012 to 2060
(In thousands)



Source: U.S. Census Bureau, Population Division.

Figure 10. Middle Series Projections of Net International Migration by Race and Hispanic Origin: 2012 to 2060
(In thousands)



Source: U.S. Census Bureau, Population Division.

Table 4. Distributions and Sex Ratios of Net International Migration by Projection Series, Race, and Hispanic Origin: 2012 to 2060
(Numbers in thousands)

Projection series and year	Total	Non-Hispanic White			Non-Hispanic Black			Non-Hispanic Asian			Non-Hispanic Other			Hispanic		
		Number	Percent	Sex Ratio	Number	Percent	Sex Ratio	Number	Percent	Sex Ratio	Number	Percent	Sex Ratio	Number	Percent	Sex Ratio
Middle Series																
2012	725	114	15.7	93.3	73	10.1	88.9	241	33.2	83.7	7	1.0	80.7	290	40.0	134.1
2020	909	145	15.9	91.7	103	11.4	87.9	267	29.4	82.2	9	1.0	82.3	385	42.3	134.9
2030	1,140	183	16.1	90.5	142	12.4	87.2	300	26.3	80.8	11	1.0	83.7	504	44.2	135.4
2040	1,174	186	15.8	89.2	168	14.3	86.4	300	25.5	80.0	11	1.0	83.1	509	43.3	131.3
2050	1,204	189	15.7	88.9	198	16.4	86.0	299	24.8	79.9	12	1.0	83.3	507	42.1	128.2
2060	1,215	189	15.6	88.6	227	18.6	85.7	293	24.1	79.8	12	1.0	83.4	494	40.7	126.5
Low Series																
2012	702	110	15.7	93.2	70	10.0	88.8	235	33.5	83.6	7	1.0	80.4	280	39.9	134.0
2020	707	108	15.2	90.8	80	11.3	87.4	215	30.4	81.6	7	1.0	80.3	298	42.1	133.7
2030	713	105	14.7	87.6	91	12.8	86.0	190	26.6	78.5	7	0.9	81.3	320	44.9	133.4
2040	773	113	14.6	87.8	113	14.6	86.1	199	25.8	79.1	7	1.0	81.9	340	44.0	131.3
2050	808	118	14.5	88.0	135	16.7	86.0	202	25.0	79.6	8	1.0	83.1	346	42.8	128.6
2060	824	119	14.5	88.1	156	18.9	85.8	201	24.4	79.9	8	1.0	83.5	340	41.3	126.5
High Series																
2012	747	118	15.8	93.3	76	10.1	88.9	247	33.0	83.7	7	1.0	80.5	299	40.1	134.3
2020	1,111	182	16.4	92.3	127	11.4	88.2	319	28.7	82.7	11	1.0	83.5	472	42.5	135.7
2030	1,565	262	16.7	91.7	192	12.2	87.8	410	26.2	81.9	15	1.0	84.9	687	43.9	136.4
2040	1,576	259	16.4	89.8	224	14.2	86.6	400	25.4	80.4	15	1.0	83.6	678	43.0	131.3
2050	1,599	260	16.3	89.2	260	16.3	86.1	395	24.7	80.0	16	1.0	83.3	669	41.8	128.1
2060	1,606	259	16.1	88.9	297	18.5	85.6	386	24.0	79.8	16	1.0	83.1	648	40.3	126.5
Constant Series																
2012	725	114	15.7	93.3	73	10.1	88.9	241	33.2	83.7	7	1.0	80.7	290	40.0	134.1
2020	725	114	15.7	93.3	73	10.1	88.9	241	33.2	83.7	7	1.0	80.7	290	40.0	134.1
2030	725	114	15.7	93.3	73	10.1	88.9	241	33.2	83.7	7	1.0	80.7	290	40.0	134.1
2040	725	114	15.7	93.3	73	10.1	88.9	241	33.2	83.7	7	1.0	80.7	290	40.0	134.1
2050	725	114	15.7	93.3	73	10.1	88.9	241	33.2	83.7	7	1.0	80.7	290	40.0	134.1
2060	725	114	15.7	93.3	73	10.1	88.9	241	33.2	83.7	7	1.0	80.7	290	40.0	134.1

Note: Non-Hispanic Other includes Non-Hispanic American Indian and Alaska Native, Non-Hispanic Native Hawaiian and Other Pacific Islander, and Non-Hispanic Two or More Races.

Source: U.S. Census Bureau, Population Division.

Table 5. Projections of the Population for the United States: 2012 to 2060
(Numbers in thousands)

Year	2012 National Projections, Middle Series	2008 National Projections	Difference (2012 Series - 2008 Series)
2012	314,004	316,266	-2,262
2013	316,439	319,330	-2,891
2014	318,892	322,423	-3,531
2015	321,363	325,540	-4,177
2016	323,849	328,678	-4,829
2017	326,348	331,833	-5,485
2018	328,857	335,005	-6,148
2019	331,375	338,190	-6,815
2020	333,896	341,387	-7,491
2021	336,416	344,592	-8,176
2022	338,930	347,803	-8,873
2023	341,436	351,018	-9,582
2024	343,929	354,235	-10,306
2025	346,407	357,452	-11,045
2026	348,867	360,667	-11,800
2027	351,304	363,880	-12,576
2028	353,718	367,090	-13,372
2029	356,107	370,298	-14,191
2030	358,471	373,504	-15,033
2031	360,792	376,708	-15,916
2032	363,070	379,912	-16,842
2033	365,307	383,117	-17,810
2034	367,503	386,323	-18,820
2035	369,662	389,531	-19,869
2036	371,788	392,743	-20,955
2037	373,883	395,961	-22,078
2038	375,950	399,184	-23,234
2039	377,993	402,415	-24,422
2040	380,016	405,655	-25,639
2041	382,021	408,906	-26,885
2042	384,012	412,170	-28,158
2043	385,992	415,448	-29,456
2044	387,965	418,743	-30,778
2045	389,934	422,059	-32,125
2046	391,902	425,395	-33,493
2047	393,869	428,756	-34,887
2048	395,841	432,143	-36,302
2049	397,818	435,560	-37,742
2050	399,803	439,010	-39,207
2051	401,796	(NA)	(X)
2052	403,798	(NA)	(X)
2053	405,811	(NA)	(X)
2054	407,835	(NA)	(X)
2055	409,873	(NA)	(X)
2056	411,923	(NA)	(X)
2057	413,989	(NA)	(X)
2058	416,068	(NA)	(X)
2059	418,161	(NA)	(X)
2060	420,268	(NA)	(X)

(NA)=Not available. (X)=Not applicable.

Note: Resident population as of July 1.

Source: U.S. Census Bureau, Population Division.

Table 6. Projections of Population Growth for the United States: 2012 to 2060
(Numbers in thousands)

Period	Numeric Change		Percent Change	
	2012 National Projections, Middle Series	2008 National Projections	2012 National Projections, Middle Series	2008 National Projections
2012	2,413	3,033	0.77	0.97
2013	2,434	3,065	0.78	0.97
2014	2,454	3,093	0.78	0.97
2015	2,471	3,117	0.77	0.97
2016	2,486	3,138	0.77	0.96
2017	2,499	3,156	0.77	0.96
2018	2,510	3,172	0.77	0.96
2019	2,517	3,185	0.77	0.95
2020	2,521	3,196	0.76	0.95
2021	2,520	3,205	0.75	0.94
2022	2,515	3,211	0.75	0.93
2023	2,506	3,215	0.74	0.92
2024	2,493	3,217	0.73	0.92
2025	2,478	3,217	0.72	0.91
2026	2,459	3,215	0.71	0.90
2027	2,438	3,213	0.70	0.89
2028	2,414	3,210	0.69	0.88
2029	2,389	3,208	0.68	0.87
2030	2,364	3,206	0.66	0.87
2031	2,321	3,204	0.65	0.86
2032	2,278	3,204	0.63	0.85
2033	2,237	3,204	0.62	0.84
2034	2,197	3,206	0.60	0.84
2035	2,159	3,209	0.59	0.83
2036	2,126	3,212	0.58	0.82
2037	2,095	3,217	0.56	0.82
2038	2,067	3,223	0.55	0.81
2039	2,043	3,231	0.54	0.81
2040	2,022	3,240	0.53	0.81
2041	2,005	3,251	0.53	0.80
2042	1,991	3,264	0.52	0.80
2043	1,980	3,278	0.52	0.80
2044	1,973	3,295	0.51	0.79
2045	1,969	3,315	0.51	0.79
2046	1,968	3,337	0.50	0.79
2047	1,967	3,360	0.50	0.79
2048	1,971	3,387	0.50	0.79
2049	1,977	3,417	0.50	0.79
2050	1,985	3,450	0.50	0.79
2051	1,993	(X)	0.50	(X)
2052	2,002	(X)	0.50	(X)
2053	2,013	(X)	0.50	(X)
2054	2,024	(X)	0.50	(X)
2055	2,037	(X)	0.50	(X)
2056	2,051	(X)	0.50	(X)
2057	2,065	(X)	0.50	(X)
2058	2,079	(X)	0.50	(X)
2059	2,093	(X)	0.50	(X)
2060	2,106	(X)	0.50	(X)

(X)=Not applicable.

Note: Period refers to the year beginning July 1 of the preceding year and ending June 30 of the indicated year.

Source: U.S. Census Bureau, Population Division.

Table 7. Projections of Births and Deaths for the United States: 2012 to 2060
(Numbers in thousands)

Period	Births			Deaths		
	2012 National Projections, Middle Series	2008 National Projections	Difference (2012 Series - 2008 Series)	2012 National Projections, Middle Series	2008 National Projections	Difference (2012 Series - 2008 Series)
2012	4,210	4,351	-141	2,522	2,636	-114
2013	4,239	4,388	-149	2,553	2,662	-109
2014	4,266	4,423	-157	2,583	2,688	-105
2015	4,290	4,455	-165	2,613	2,715	-102
2016	4,312	4,484	-172	2,643	2,743	-100
2017	4,333	4,512	-179	2,673	2,772	-99
2018	4,351	4,539	-188	2,704	2,802	-98
2019	4,367	4,565	-198	2,736	2,834	-98
2020	4,380	4,590	-210	2,768	2,867	-99
2021	4,390	4,615	-225	2,803	2,902	-99
2022	4,398	4,639	-241	2,839	2,939	-100
2023	4,404	4,663	-259	2,877	2,978	-101
2024	4,409	4,687	-278	2,917	3,020	-103
2025	4,413	4,712	-299	2,959	3,064	-105
2026	4,416	4,738	-322	3,004	3,110	-106
2027	4,419	4,765	-346	3,052	3,158	-106
2028	4,422	4,794	-372	3,102	3,209	-107
2029	4,426	4,825	-399	3,154	3,262	-108
2030	4,433	4,858	-425	3,208	3,316	-108
2031	4,443	4,893	-450	3,265	3,372	-107
2032	4,456	4,931	-475	3,324	3,429	-105
2033	4,470	4,970	-500	3,383	3,487	-104
2034	4,487	5,011	-524	3,443	3,545	-102
2035	4,505	5,052	-547	3,503	3,604	-101
2036	4,525	5,095	-570	3,559	3,661	-102
2037	4,545	5,138	-593	3,613	3,718	-105
2038	4,567	5,180	-613	3,666	3,774	-108
2039	4,589	5,223	-634	3,717	3,828	-111
2040	4,612	5,265	-653	3,765	3,881	-116
2041	4,636	5,307	-671	3,809	3,931	-122
2042	4,660	5,348	-688	3,851	3,978	-127
2043	4,684	5,388	-704	3,889	4,023	-134
2044	4,707	5,428	-721	3,922	4,064	-142
2045	4,729	5,467	-738	3,951	4,103	-152
2046	4,750	5,505	-755	3,976	4,138	-162
2047	4,769	5,542	-773	3,999	4,171	-172
2048	4,788	5,579	-791	4,016	4,201	-185
2049	4,804	5,616	-812	4,029	4,226	-197
2050	4,820	5,653	-833	4,038	4,249	-211
2051	4,834	(NA)	(X)	4,047	(NA)	(X)
2052	4,846	(NA)	(X)	4,052	(NA)	(X)
2053	4,858	(NA)	(X)	4,055	(NA)	(X)
2054	4,869	(NA)	(X)	4,055	(NA)	(X)
2055	4,879	(NA)	(X)	4,054	(NA)	(X)
2056	4,889	(NA)	(X)	4,051	(NA)	(X)
2057	4,899	(NA)	(X)	4,048	(NA)	(X)
2058	4,909	(NA)	(X)	4,044	(NA)	(X)
2059	4,920	(NA)	(X)	4,041	(NA)	(X)
2060	4,930	(NA)	(X)	4,039	(NA)	(X)

(NA)=Not available. (X)=Not applicable.

Note: Period refers to the year beginning July 1 of the preceding year and ending June 30 of the indicated year.

Source: U.S. Census Bureau, Population Division.

Table 8. Projections of Natural Increase and Net International Migration for the United States: 2012 to 2060
(Numbers in thousands)

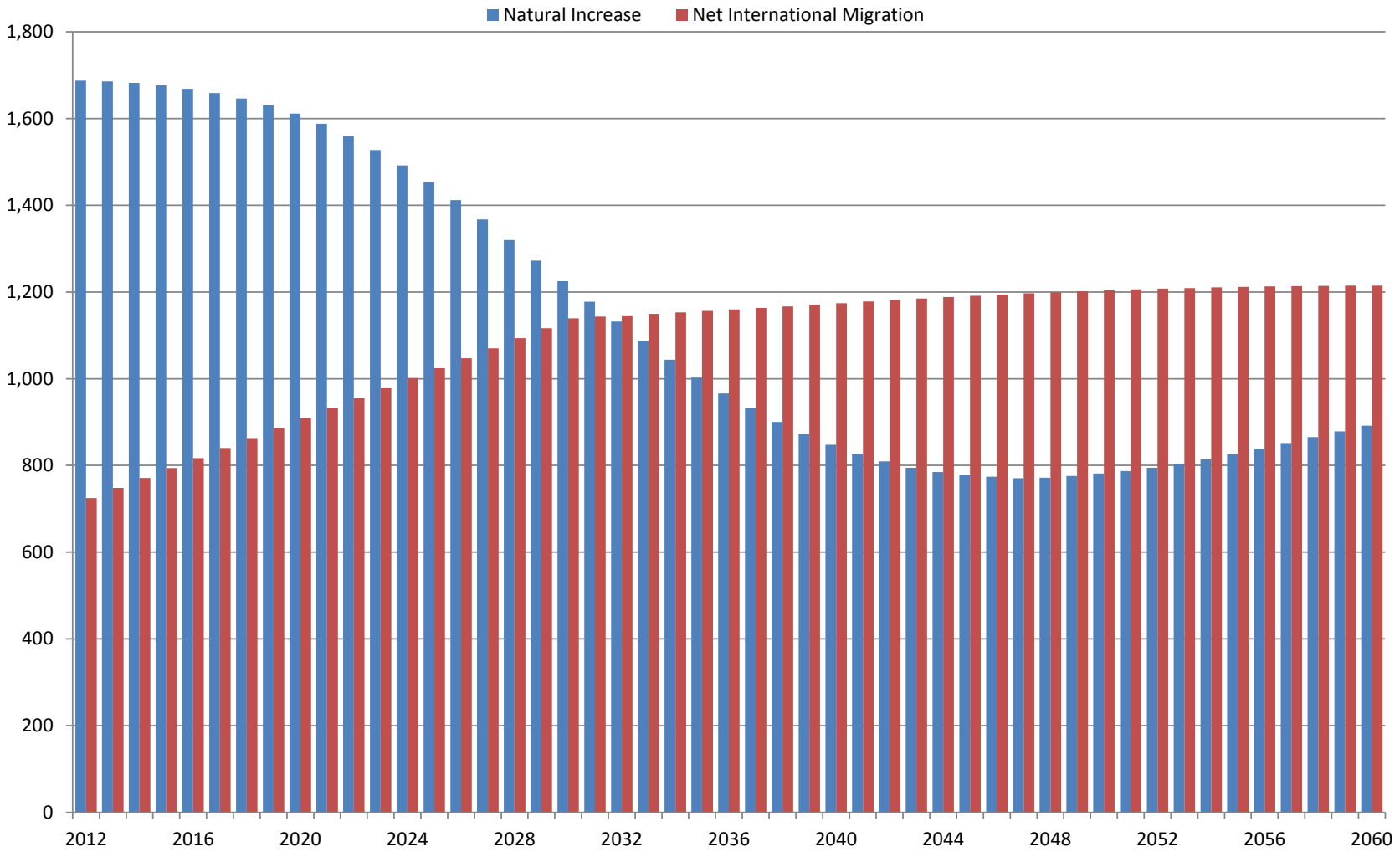
Period	Natural Increase			Net International Migration		
	2012 National Projections, Middle Series	2008 National Projections	Difference (2012 Series - 2008 Series)	2012 National Projections, Middle Series	2008 National Projections	Difference (2012 Series - 2008 Series)
2012	1,688	1,714	-26	725	1,319	-594
2013	1,686	1,726	-40	748	1,338	-590
2014	1,683	1,735	-52	771	1,358	-587
2015	1,677	1,740	-63	794	1,377	-583
2016	1,669	1,742	-73	817	1,396	-579
2017	1,659	1,741	-82	840	1,415	-575
2018	1,647	1,737	-90	863	1,434	-571
2019	1,631	1,732	-101	886	1,454	-568
2020	1,612	1,723	-111	909	1,473	-564
2021	1,588	1,713	-125	932	1,492	-560
2022	1,559	1,700	-141	955	1,511	-556
2023	1,527	1,685	-158	978	1,530	-552
2024	1,492	1,667	-175	1,001	1,549	-548
2025	1,453	1,648	-195	1,024	1,569	-545
2026	1,412	1,628	-216	1,047	1,588	-541
2027	1,367	1,606	-239	1,070	1,607	-537
2028	1,320	1,584	-264	1,093	1,626	-533
2029	1,272	1,563	-291	1,116	1,645	-529
2030	1,225	1,542	-317	1,139	1,664	-525
2031	1,178	1,521	-343	1,143	1,683	-540
2032	1,132	1,502	-370	1,146	1,702	-556
2033	1,087	1,483	-396	1,149	1,722	-573
2034	1,044	1,465	-421	1,153	1,741	-588
2035	1,002	1,449	-447	1,156	1,760	-604
2036	966	1,433	-467	1,160	1,779	-619
2037	932	1,419	-487	1,163	1,798	-635
2038	900	1,406	-506	1,167	1,817	-650
2039	873	1,395	-522	1,171	1,836	-665
2040	848	1,385	-537	1,174	1,855	-681
2041	827	1,376	-549	1,178	1,875	-697
2042	809	1,370	-561	1,182	1,894	-712
2043	795	1,365	-570	1,185	1,913	-728
2044	785	1,364	-579	1,188	1,932	-744
2045	778	1,364	-586	1,191	1,951	-760
2046	774	1,367	-593	1,194	1,970	-776
2047	770	1,371	-601	1,197	1,989	-792
2048	772	1,379	-607	1,199	2,008	-809
2049	776	1,390	-614	1,202	2,028	-826
2050	781	1,403	-622	1,204	2,047	-843
2051	787	(NA)	(X)	1,206	(NA)	(X)
2052	794	(NA)	(X)	1,208	(NA)	(X)
2053	804	(NA)	(X)	1,209	(NA)	(X)
2054	814	(NA)	(X)	1,211	(NA)	(X)
2055	825	(NA)	(X)	1,212	(NA)	(X)
2056	838	(NA)	(X)	1,213	(NA)	(X)
2057	852	(NA)	(X)	1,214	(NA)	(X)
2058	865	(NA)	(X)	1,214	(NA)	(X)
2059	879	(NA)	(X)	1,215	(NA)	(X)
2060	891	(NA)	(X)	1,215	(NA)	(X)

(NA)=Not available. (X)=Not applicable.

Note: Period refers to the year beginning July 1 of the preceding year and ending June 30 of the indicated year.

Source: U.S. Census Bureau, Population Division.

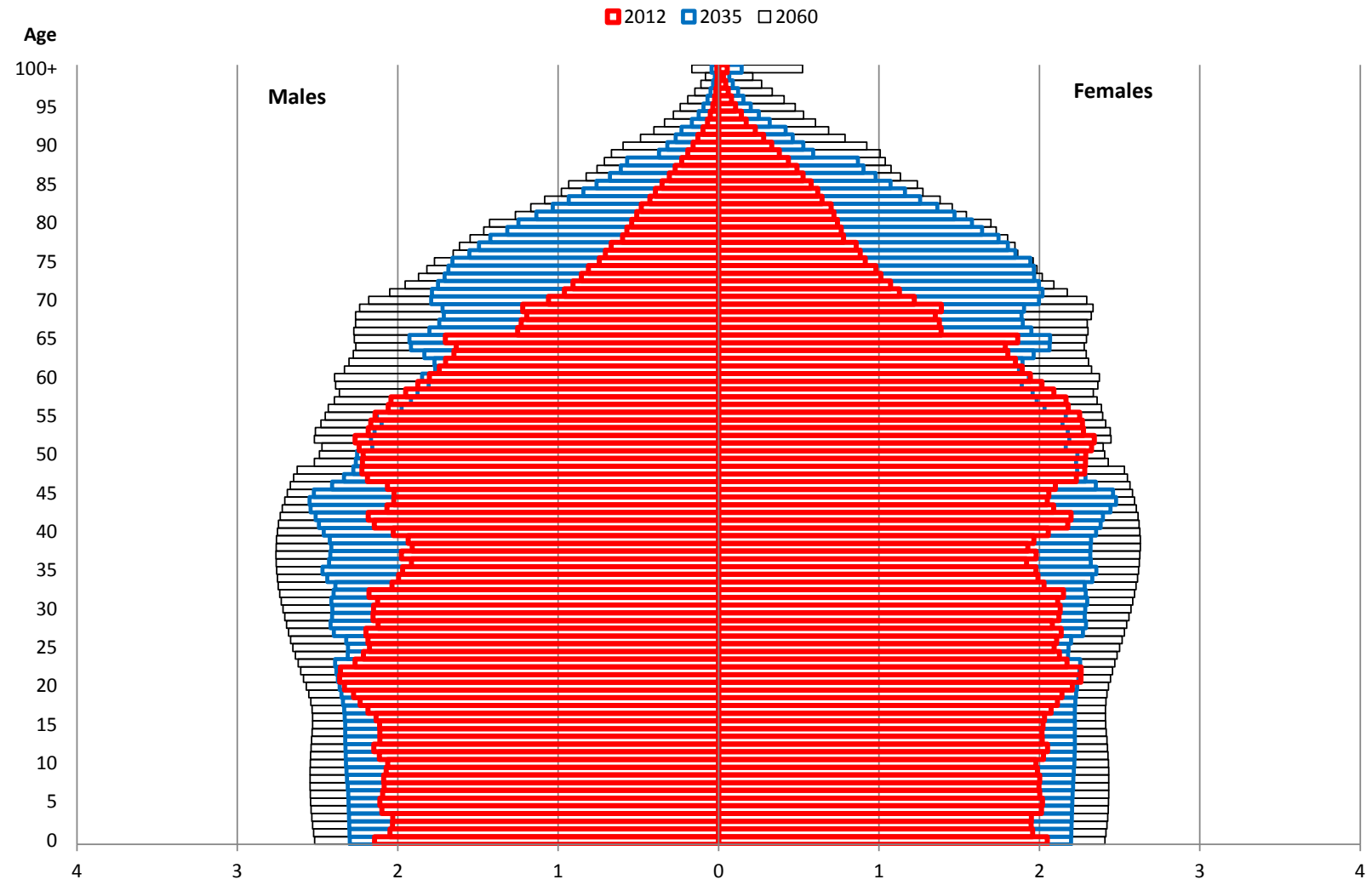
Figure 11. Middle Series Projections of Natural Increase and Net International Migration: 2012 to 2060
(In thousands)



Source: U.S. Census Bureau, Population Division.

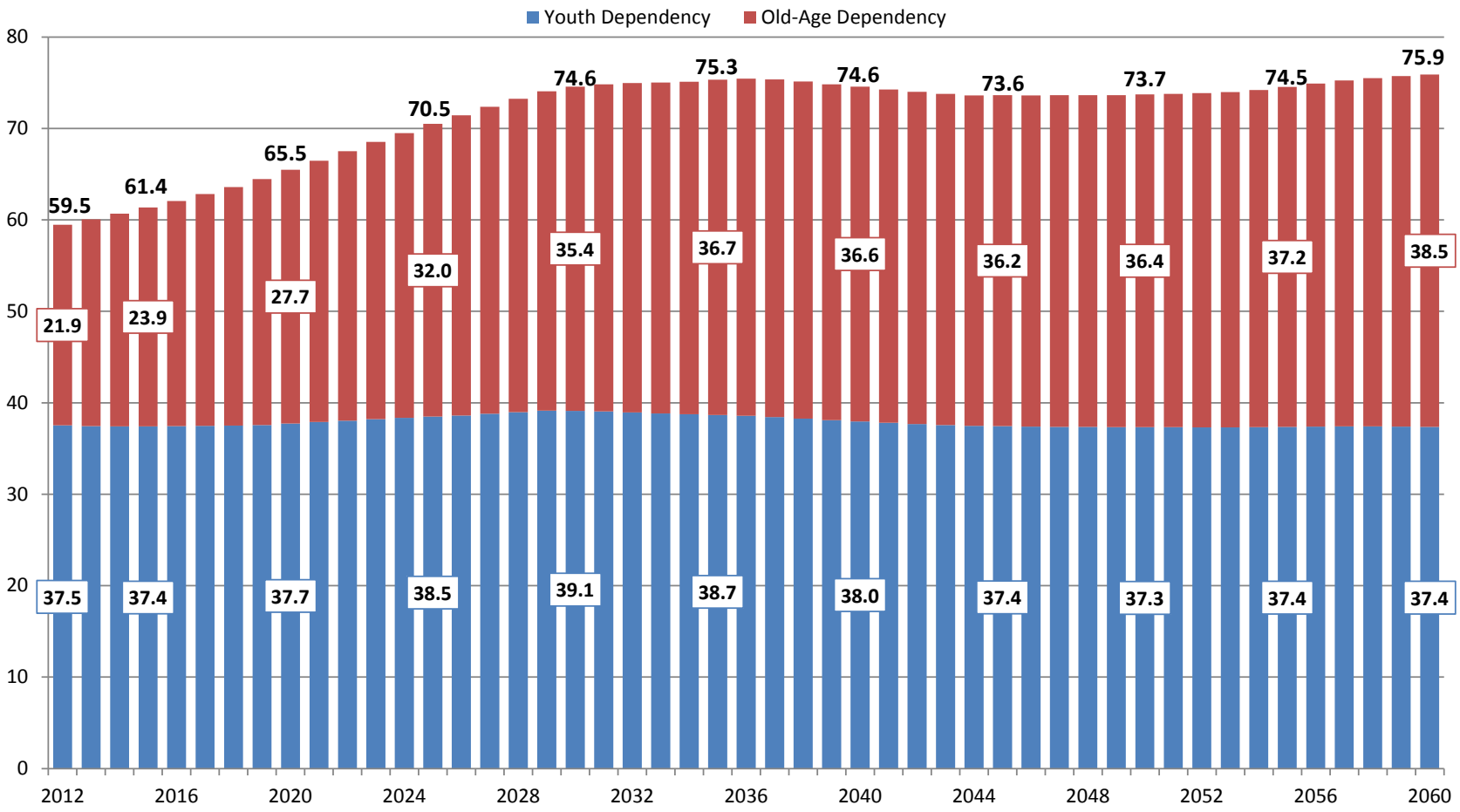
Table 9. Projections of the Percent Non-Hispanic White Alone for the United States: 2012 to 2060			
Year	2012 National Projections, Middle Series	2008 National Projections	Difference (2012 Series - 2008 Series)
2012	63.0	63.8	-0.8
2013	62.6	63.3	-0.8
2014	62.2	62.9	-0.7
2015	61.8	62.4	-0.7
2016	61.3	62.0	-0.6
2017	60.9	61.5	-0.6
2018	60.5	61.0	-0.5
2019	60.1	60.6	-0.5
2020	59.7	60.1	-0.4
2021	59.3	59.7	-0.4
2022	58.9	59.2	-0.3
2023	58.4	58.7	-0.3
2024	58.0	58.3	-0.3
2025	57.6	57.8	-0.2
2026	57.2	57.4	-0.2
2027	56.8	56.9	-0.1
2028	56.3	56.4	-0.1
2029	55.9	55.9	-0.1
2030	55.5	55.5	0.0
2031	55.0	55.0	0.0
2032	54.6	54.5	0.0
2033	54.1	54.1	0.1
2034	53.7	53.6	0.1
2035	53.3	53.1	0.1
2036	52.8	52.7	0.2
2037	52.4	52.2	0.2
2038	51.9	51.7	0.2
2039	51.5	51.3	0.2
2040	51.0	50.8	0.2
2041	50.6	50.3	0.2
2042	50.1	49.9	0.2
2043	49.7	49.4	0.3
2044	49.2	49.0	0.3
2045	48.8	48.5	0.3
2046	48.3	48.1	0.3
2047	47.9	47.6	0.3
2048	47.5	47.2	0.3
2049	47.0	46.8	0.3
2050	46.6	46.3	0.3
2051	46.2	(NA)	(X)
2052	45.8	(NA)	(X)
2053	45.3	(NA)	(X)
2054	44.9	(NA)	(X)
2055	44.5	(NA)	(X)
2056	44.1	(NA)	(X)
2057	43.7	(NA)	(X)
2058	43.3	(NA)	(X)
2059	43.0	(NA)	(X)
2060	42.6	(NA)	(X)
(NA)=Not available. (X)=Not applicable.			
Source: U.S. Census Bureau, Population Division.			

Figure 12. Middle Series Projections of the Population by Age and Sex: 2012 to 2060
(In millions)



Source: U.S. Census Bureau, Population Division.

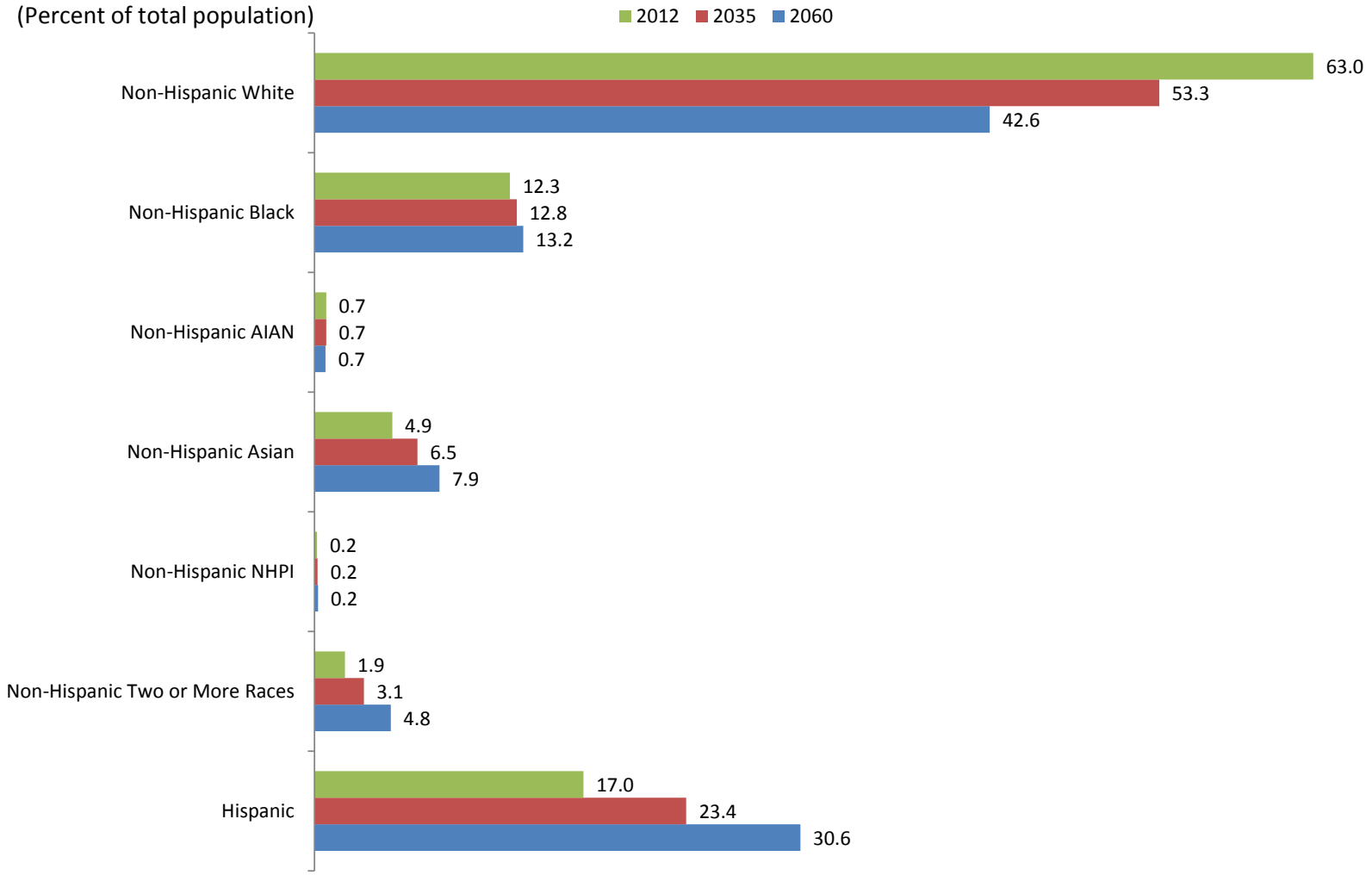
Figure 13. Middle Series Projections of Dependency Ratios: 2012 to 2060



Note:
Total dependency = ((Population under age 18 + Population aged 65 years and over) / (Population aged 18 to 64 years)) * 100.
Old-age dependency = (Population aged 65 years and over / Population aged 18 to 64 years) * 100.
Youth dependency = (Population under age 18 / Population aged 18 to 64 years) * 100.
Source: U.S. Census Bureau, Population Division.

Figure 14. Middle Series Projections of the Distribution of the Resident Population by Race and Hispanic Origin: 2012 to 2060

(Percent of total population)



AIAN=American Indian and Alaska Native; NHPI=Native Hawaiian and Other Pacific Islander

Source: U.S. Census Bureau, Population Division.

Table 10. Projections of the Population for the United States by Projection Series: 2012 to 2060
(Numbers in thousands)

Year		Alternative Net International Migration Series			Difference from the Middle Series		
	Middle Series	Low	High	Constant	Low	High	Constant
2012	314,004	313,982	314,027	314,004	-22	23	0
2013	316,439	316,370	316,507	316,415	-69	68	-24
2014	318,892	318,754	319,031	318,821	-138	139	-71
2015	321,363	321,130	321,595	321,219	-233	232	-144
2016	323,849	323,497	324,200	323,606	-352	351	-243
2017	326,348	325,851	326,844	325,979	-497	496	-369
2018	328,857	328,191	329,524	328,335	-666	667	-522
2019	331,375	330,511	332,238	330,671	-864	863	-704
2020	333,896	332,808	334,983	332,981	-1,088	1,087	-915
2021	336,416	335,077	337,754	335,260	-1,339	1,338	-1,156
2022	338,930	337,312	340,548	337,504	-1,618	1,618	-1,426
2023	341,436	339,511	343,361	339,707	-1,925	1,925	-1,729
2024	343,929	341,669	346,190	341,866	-2,260	2,261	-2,063
2025	346,407	343,782	349,032	343,977	-2,625	2,625	-2,430
2026	348,867	345,848	351,885	346,036	-3,019	3,018	-2,831
2027	351,304	347,863	354,745	348,041	-3,441	3,441	-3,263
2028	353,718	349,824	357,611	349,987	-3,894	3,893	-3,731
2029	356,107	351,731	360,482	351,875	-4,376	4,375	-4,232
2030	358,471	353,584	363,358	353,704	-4,887	4,887	-4,767
2031	360,792	355,390	366,194	355,473	-5,402	5,402	-5,319
2032	363,070	357,149	368,991	357,185	-5,921	5,921	-5,885
2033	365,307	358,864	371,749	358,841	-6,443	6,442	-6,466
2034	367,503	360,536	374,471	360,443	-6,967	6,968	-7,060
2035	369,662	362,166	377,158	361,992	-7,496	7,496	-7,670
2036	371,788	363,759	379,816	363,494	-8,029	8,028	-8,294
2037	373,883	365,318	382,447	364,950	-8,565	8,564	-8,933
2038	375,950	366,846	385,054	366,365	-9,104	9,104	-9,585
2039	377,993	368,346	387,640	367,741	-9,647	9,647	-10,252
2040	380,016	369,821	390,210	369,081	-10,195	10,194	-10,935
2041	382,021	371,274	392,766	370,390	-10,747	10,745	-11,631
2042	384,012	372,710	395,313	371,670	-11,302	11,301	-12,342
2043	385,992	374,129	397,853	372,925	-11,863	11,861	-13,067
2044	387,965	375,538	400,391	374,158	-12,427	12,426	-13,807
2045	389,934	376,939	402,929	375,374	-12,995	12,995	-14,560
2046	391,902	378,333	405,471	376,574	-13,569	13,569	-15,328
2047	393,869	379,722	408,016	377,759	-14,147	14,147	-16,110
2048	395,841	381,110	410,570	378,934	-14,731	14,729	-16,907
2049	397,818	382,500	413,136	380,101	-15,318	15,318	-17,717
2050	399,803	383,892	415,714	381,262	-15,911	15,911	-18,541
2051	401,796	385,287	418,305	382,416	-16,509	16,509	-19,380
2052	403,798	386,686	420,910	383,566	-17,112	17,112	-20,232
2053	405,811	388,091	423,531	384,712	-17,720	17,720	-21,099
2054	407,835	389,502	426,168	385,857	-18,333	18,333	-21,978
2055	409,873	390,922	428,823	387,001	-18,951	18,950	-22,872
2056	411,923	392,350	431,497	388,146	-19,573	19,574	-23,777
2057	413,989	393,788	434,189	389,293	-20,201	20,200	-24,696
2058	416,068	395,236	436,900	390,442	-20,832	20,832	-25,626
2059	418,161	396,694	439,629	391,593	-21,467	21,468	-26,568
2060	420,268	398,160	442,374	392,746	-22,108	22,106	-27,522

Note: Resident population as of July 1.

Source: U.S. Census Bureau, Population Division.

Table 11. Projections of Population Growth for the United States by Projection Series: 2012 to 2060
(Numbers in thousands)

Period	Numeric Change				Percent Change			
		Alternative Net International Migration Series				Alternative Net International Migration Series		
	Middle Series	Low	High	Constant	Middle series	Low	High	Constant
2012	2,413	2,390	2,435	2,413	0.77	0.77	0.78	0.77
2013	2,434	2,388	2,480	2,411	0.78	0.76	0.79	0.77
2014	2,454	2,384	2,523	2,406	0.78	0.75	0.80	0.76
2015	2,471	2,377	2,565	2,398	0.77	0.75	0.80	0.75
2016	2,486	2,367	2,605	2,387	0.77	0.74	0.81	0.74
2017	2,499	2,355	2,644	2,373	0.77	0.73	0.82	0.73
2018	2,510	2,339	2,680	2,356	0.77	0.72	0.82	0.72
2019	2,517	2,320	2,714	2,335	0.77	0.71	0.82	0.71
2020	2,521	2,297	2,745	2,310	0.76	0.69	0.83	0.70
2021	2,520	2,269	2,771	2,279	0.75	0.68	0.83	0.68
2022	2,515	2,236	2,794	2,243	0.75	0.67	0.83	0.67
2023	2,506	2,199	2,813	2,203	0.74	0.65	0.83	0.65
2024	2,493	2,158	2,829	2,159	0.73	0.64	0.82	0.64
2025	2,478	2,113	2,842	2,111	0.72	0.62	0.82	0.62
2026	2,459	2,066	2,853	2,060	0.71	0.60	0.82	0.60
2027	2,438	2,015	2,861	2,005	0.70	0.58	0.81	0.58
2028	2,414	1,961	2,866	1,947	0.69	0.56	0.81	0.56
2029	2,389	1,907	2,871	1,888	0.68	0.55	0.80	0.54
2030	2,364	1,853	2,876	1,829	0.66	0.53	0.80	0.52
2031	2,321	1,806	2,836	1,770	0.65	0.51	0.78	0.50
2032	2,278	1,760	2,796	1,712	0.63	0.50	0.76	0.48
2033	2,237	1,715	2,758	1,656	0.62	0.48	0.75	0.46
2034	2,197	1,672	2,722	1,602	0.60	0.47	0.73	0.45
2035	2,159	1,630	2,687	1,549	0.59	0.45	0.72	0.43
2036	2,126	1,593	2,658	1,502	0.58	0.44	0.70	0.41
2037	2,095	1,559	2,631	1,457	0.56	0.43	0.69	0.40
2038	2,067	1,528	2,607	1,415	0.55	0.42	0.68	0.39
2039	2,043	1,500	2,587	1,376	0.54	0.41	0.67	0.38
2040	2,022	1,475	2,570	1,340	0.53	0.40	0.66	0.36
2041	2,005	1,453	2,557	1,309	0.53	0.39	0.66	0.35
2042	1,991	1,435	2,547	1,280	0.52	0.39	0.65	0.35
2043	1,980	1,420	2,540	1,255	0.52	0.38	0.64	0.34
2044	1,973	1,409	2,538	1,234	0.51	0.38	0.64	0.33
2045	1,969	1,400	2,538	1,216	0.51	0.37	0.63	0.32
2046	1,968	1,395	2,542	1,200	0.50	0.37	0.63	0.32
2047	1,967	1,389	2,545	1,185	0.50	0.37	0.63	0.31
2048	1,971	1,388	2,554	1,175	0.50	0.37	0.63	0.31
2049	1,977	1,390	2,565	1,167	0.50	0.36	0.62	0.31
2050	1,985	1,392	2,578	1,161	0.50	0.36	0.62	0.31
2051	1,993	1,395	2,591	1,154	0.50	0.36	0.62	0.30
2052	2,002	1,399	2,605	1,149	0.50	0.36	0.62	0.30
2053	2,013	1,405	2,621	1,146	0.50	0.36	0.62	0.30
2054	2,024	1,411	2,637	1,145	0.50	0.36	0.62	0.30
2055	2,037	1,419	2,655	1,144	0.50	0.36	0.62	0.30
2056	2,051	1,428	2,674	1,145	0.50	0.37	0.62	0.30
2057	2,065	1,438	2,692	1,147	0.50	0.37	0.62	0.30
2058	2,079	1,448	2,711	1,149	0.50	0.37	0.62	0.30
2059	2,093	1,458	2,729	1,151	0.50	0.37	0.62	0.29
2060	2,106	1,467	2,746	1,153	0.50	0.37	0.62	0.29

Note: Period refers to the year beginning July 1 of the preceding year and ending June 30 of the indicated year.
Source: U.S. Census Bureau, Population Division.

Table 12. Projections of Births and Deaths for the United States by Projection Series: 2012 to 2060
(Numbers in thousands)

Period	Births				Deaths			
		Alternative Net International Migration Series				Alternative Net International Migration Series		
	Middle Series	Low	High	Constant	Middle series	Low	High	Constant
2012	4,210	4,209	4,210	4,210	2,522	2,522	2,522	2,522
2013	4,239	4,238	4,240	4,239	2,553	2,553	2,553	2,553
2014	4,266	4,263	4,269	4,264	2,583	2,583	2,584	2,583
2015	4,290	4,285	4,295	4,286	2,613	2,613	2,614	2,614
2016	4,312	4,305	4,320	4,306	2,643	2,643	2,644	2,644
2017	4,333	4,322	4,344	4,322	2,673	2,673	2,675	2,674
2018	4,351	4,336	4,366	4,336	2,704	2,703	2,706	2,705
2019	4,367	4,347	4,386	4,347	2,736	2,734	2,737	2,736
2020	4,380	4,356	4,404	4,354	2,768	2,766	2,771	2,769
2021	4,390	4,361	4,420	4,358	2,803	2,800	2,805	2,804
2022	4,398	4,362	4,434	4,358	2,839	2,835	2,842	2,840
2023	4,404	4,362	4,446	4,356	2,877	2,873	2,881	2,878
2024	4,409	4,360	4,458	4,353	2,917	2,912	2,922	2,919
2025	4,413	4,357	4,469	4,347	2,959	2,954	2,965	2,961
2026	4,416	4,352	4,480	4,341	3,004	2,998	3,011	3,007
2027	4,419	4,348	4,491	4,334	3,052	3,044	3,059	3,054
2028	4,422	4,342	4,502	4,327	3,102	3,093	3,110	3,105
2029	4,426	4,338	4,514	4,320	3,154	3,144	3,164	3,157
2030	4,433	4,336	4,530	4,316	3,208	3,197	3,219	3,212
2031	4,443	4,338	4,548	4,314	3,265	3,253	3,277	3,270
2032	4,456	4,342	4,569	4,316	3,324	3,310	3,337	3,328
2033	4,470	4,349	4,592	4,319	3,383	3,369	3,398	3,388
2034	4,487	4,358	4,616	4,325	3,443	3,427	3,459	3,448
2035	4,505	4,368	4,642	4,333	3,503	3,485	3,520	3,509
2036	4,525	4,381	4,668	4,342	3,559	3,540	3,577	3,565
2037	4,545	4,394	4,696	4,352	3,613	3,593	3,633	3,620
2038	4,567	4,409	4,724	4,364	3,666	3,645	3,688	3,674
2039	4,589	4,425	4,753	4,376	3,717	3,694	3,740	3,725
2040	4,612	4,442	4,783	4,389	3,765	3,740	3,789	3,774
2041	4,636	4,459	4,813	4,403	3,809	3,783	3,835	3,819
2042	4,660	4,476	4,844	4,417	3,851	3,823	3,878	3,861
2043	4,684	4,493	4,874	4,430	3,889	3,860	3,918	3,900
2044	4,707	4,510	4,904	4,443	3,922	3,891	3,953	3,934
2045	4,729	4,525	4,932	4,454	3,951	3,918	3,984	3,964
2046	4,750	4,539	4,960	4,465	3,976	3,942	4,010	3,989
2047	4,769	4,552	4,987	4,473	3,999	3,963	4,035	4,013
2048	4,788	4,563	5,013	4,481	4,016	3,978	4,054	4,031
2049	4,804	4,572	5,037	4,486	4,029	3,988	4,069	4,044
2050	4,820	4,580	5,059	4,490	4,038	3,996	4,080	4,054
2051	4,834	4,586	5,081	4,492	4,047	4,002	4,091	4,063
2052	4,846	4,591	5,101	4,493	4,052	4,005	4,099	4,068
2053	4,858	4,595	5,121	4,493	4,055	4,005	4,104	4,071
2054	4,869	4,598	5,140	4,491	4,055	4,003	4,107	4,072
2055	4,879	4,601	5,158	4,490	4,054	4,000	4,109	4,070
2056	4,889	4,603	5,176	4,488	4,051	3,994	4,108	4,067
2057	4,899	4,605	5,194	4,485	4,048	3,988	4,108	4,063
2058	4,909	4,607	5,212	4,483	4,044	3,981	4,107	4,059
2059	4,920	4,610	5,230	4,481	4,041	3,975	4,107	4,055
2060	4,930	4,612	5,248	4,480	4,039	3,970	4,108	4,051

Note: Period refers to the year beginning July 1 of the preceding year and ending June 30 of the indicated year.
Source: U.S. Census Bureau, Population Division.

Table 13. Projections of Natural Increase and Net International Migration for the United States by Projection Series: 2012 to 2060
(Numbers in thousands)

Period	Natural Increase				Net International Migration			
		Alternative Net International Migration Series				Alternative Net International Migration Series		
	Middle Series	Low	High	Constant	Middle series	Low	High	Constant
2012	1,688	1,687	1,688	1,688	725	702	747	725
2013	1,686	1,685	1,687	1,686	748	703	793	725
2014	1,683	1,680	1,685	1,681	771	704	838	725
2015	1,677	1,672	1,681	1,673	794	704	884	725
2016	1,669	1,662	1,676	1,662	817	705	929	725
2017	1,659	1,649	1,669	1,649	840	706	975	725
2018	1,647	1,633	1,660	1,631	863	706	1,020	725
2019	1,631	1,613	1,649	1,611	886	707	1,065	725
2020	1,612	1,590	1,634	1,585	909	707	1,111	725
2021	1,588	1,561	1,615	1,554	932	708	1,156	725
2022	1,559	1,527	1,592	1,518	955	709	1,202	725
2023	1,527	1,489	1,566	1,478	978	709	1,247	725
2024	1,492	1,448	1,536	1,434	1,001	710	1,293	725
2025	1,453	1,403	1,504	1,386	1,024	710	1,338	725
2026	1,412	1,355	1,469	1,335	1,047	711	1,384	725
2027	1,367	1,303	1,431	1,280	1,070	712	1,429	725
2028	1,320	1,249	1,391	1,222	1,093	712	1,475	725
2029	1,272	1,194	1,351	1,163	1,116	713	1,520	725
2030	1,225	1,139	1,311	1,104	1,139	713	1,565	725
2031	1,178	1,084	1,271	1,045	1,143	721	1,565	725
2032	1,132	1,032	1,232	987	1,146	728	1,564	725
2033	1,087	980	1,194	931	1,149	735	1,564	725
2034	1,044	931	1,157	877	1,153	741	1,565	725
2035	1,002	883	1,122	824	1,156	747	1,565	725
2036	966	841	1,091	777	1,160	753	1,567	725
2037	932	801	1,062	732	1,163	758	1,568	725
2038	900	764	1,036	690	1,167	763	1,570	725
2039	873	731	1,014	651	1,171	769	1,573	725
2040	848	702	994	616	1,174	773	1,576	725
2041	827	676	978	584	1,178	778	1,579	725
2042	809	653	965	555	1,182	782	1,581	725
2043	795	634	956	530	1,185	786	1,584	725
2044	785	619	951	509	1,188	790	1,587	725
2045	778	607	949	491	1,191	794	1,589	725
2046	774	598	950	475	1,194	797	1,592	725
2047	770	589	952	460	1,197	800	1,594	725
2048	772	585	958	450	1,199	803	1,596	725
2049	776	584	968	442	1,202	806	1,598	725
2050	781	584	979	436	1,204	808	1,599	725
2051	787	584	990	429	1,206	811	1,601	725
2052	794	586	1,002	424	1,208	813	1,603	725
2053	804	590	1,017	422	1,209	815	1,604	725
2054	814	595	1,033	420	1,211	817	1,605	725
2055	825	601	1,050	419	1,212	818	1,605	725
2056	838	609	1,068	420	1,213	820	1,606	725
2057	852	617	1,086	422	1,214	821	1,606	725
2058	865	626	1,105	424	1,214	822	1,606	725
2059	879	635	1,123	427	1,215	823	1,606	725
2060	891	643	1,140	428	1,215	824	1,606	725

Note: Period refers to the year beginning July 1 of the preceding year and ending June 30 of the indicated year.
Source: U.S. Census Bureau, Population Division.

Table 14. Projections of the Population for the United States by Projection Series and Age: 2012 to 2060												
Projection series and age	Number (in thousands)						Percent					
	2012	2020	2030	2040	2050	2060	2012	2020	2030	2040	2050	2060
Middle Series	**314,004**	**333,896**	**358,471**	**380,016**	**399,803**	**420,268**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Under 18 years	73,931	76,159	80,348	82,621	85,918	89,288	23.5	22.8	22.4	21.7	21.5	21.2
18 to 44 years	114,092	118,529	124,483	129,277	135,576	141,543	36.3	35.5	34.7	34.0	33.9	33.7
45 to 64 years	82,827	83,238	80,865	88,398	94,570	97,404	26.4	24.9	22.6	23.3	23.7	23.2
65 years and over	43,155	55,969	72,774	79,719	83,739	92,033	13.7	16.8	20.3	21.0	20.9	21.9
Low Series	**313,982**	**332,808**	**353,584**	**369,821**	**383,892**	**398,160**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Under 18 years	73,926	75,908	79,098	79,908	81,842	83,893	23.5	22.8	22.4	21.6	21.3	21.1
18 to 44 years	114,077	117,861	121,749	124,206	128,472	132,301	36.3	35.4	34.4	33.6	33.5	33.2
45 to 64 years	82,824	83,111	80,172	86,502	90,892	92,049	26.4	25.0	22.7	23.4	23.7	23.1
65 years and over	43,154	55,928	72,565	79,206	82,685	89,918	13.7	16.8	20.5	21.4	21.5	22.6
High Series	**314,027**	**334,983**	**363,358**	**390,210**	**415,714**	**442,374**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Under 18 years	73,936	76,410	81,599	85,334	89,994	94,682	23.5	22.8	22.5	21.9	21.6	21.4
18 to 44 years	114,106	119,198	127,217	134,348	142,680	150,785	36.3	35.6	35.0	34.4	34.3	34.1
45 to 64 years	82,829	83,366	81,559	90,295	98,248	102,760	26.4	24.9	22.4	23.1	23.6	23.2
65 years and over	43,156	56,010	72,984	80,233	84,792	94,148	13.7	16.7	20.1	20.6	20.4	21.3
Constant Series	**314,004**	**332,981**	**353,704**	**369,081**	**381,262**	**392,746**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Under 18 years	73,931	75,894	78,859	79,168	80,422	81,707	23.5	22.8	22.3	21.5	21.1	20.8
18 to 44 years	114,092	117,864	121,336	122,865	125,998	128,639	36.3	35.4	34.3	33.3	33.0	32.8
45 to 64 years	82,827	83,221	80,592	87,016	90,803	90,923	26.4	25.0	22.8	23.6	23.8	23.2
65 years and over	43,155	56,002	72,916	80,032	84,040	91,477	13.7	16.8	20.6	21.7	22.0	23.3
Source: U.S. Census Bureau, Population Division.												

Table 15. Projected Dependency Ratios by Projection Series: 2012 to 2060						
Projection series and dependency ratio	**2012**	**2020**	**2030**	**2040**	**2050**	**2060**
Middle Series	59.5	65.5	74.6	74.6	73.7	75.9
Youth Dependency	37.5	37.7	39.1	38.0	37.3	37.4
Old-Age Dependency	21.9	27.7	35.4	36.6	36.4	38.5
Low Series	59.5	65.6	75.1	75.5	75.0	77.5
Youth Dependency	37.5	37.8	39.2	37.9	37.3	37.4
Old-Age Dependency	21.9	27.8	35.9	37.6	37.7	40.1
High Series	59.5	65.4	74.0	73.7	72.5	74.5
Youth Dependency	37.5	37.7	39.1	38.0	37.4	37.3
Old-Age Dependency	21.9	27.7	35.0	35.7	35.2	37.1
Constant Series	59.5	65.6	75.2	75.9	75.9	78.9
Youth Dependency	37.5	37.7	39.1	37.7	37.1	37.2
Old-Age Dependency	21.9	27.9	36.1	38.1	38.8	41.7

Note:
Total dependency = ((Population under age 18 + Population aged 65 years and over) / (Population aged 18 to 64 years)) * 100.
Old-age dependency = (Population aged 65 years and over / Population aged 18 to 64 years) * 100.
Youth dependency = (Population under age 18 / Population aged 18 to 64 years) * 100.

Source: U.S. Census Bureau, Population Division.

Table 16. Projected Percent Distribution of the Resident Population by Projection Series, Race, and Hispanic Origin: 2012 to 2060								
Projection series and year		**Non-Hispanic**						
	Total	**White**	**Black**	**AIAN**	**Asian**	**NHPI**	**Two or More Races**	**Hispanic**
Middle Series								
2012	100.0	63.0	12.3	0.7	4.9	0.2	1.9	17.0
2035	100.0	53.3	12.8	0.7	6.5	0.2	3.1	23.4
2060	100.0	42.6	13.2	0.7	7.9	0.2	4.8	30.6
Low Series								
2012	100.0	63.0	12.3	0.7	4.9	0.2	1.9	17.0
2035	100.0	54.0	12.8	0.8	6.1	0.2	3.2	23.0
2060	100.0	44.1	13.1	0.7	7.0	0.2	5.0	29.9
High Series								
2012	100.0	63.0	12.3	0.7	4.9	0.2	1.9	17.0
2035	100.0	52.5	12.7	0.7	6.9	0.2	3.1	23.9
2060	100.0	41.2	13.2	0.7	8.7	0.2	4.7	31.3
Constant Series								
2012	100.0	63.0	12.3	0.7	4.9	0.2	1.9	17.0
2035	100.0	54.1	12.7	0.8	6.3	0.2	3.2	22.8
2060	100.0	44.7	12.7	0.7	7.5	0.2	5.0	29.2

Note: AIAN=American Indian and Alaska Native; NHPI=Native Hawaiian and Other Pacific Islander

Source: U.S. Census Bureau, Population Division.

Table 17. Projections of the Percent Non-Hispanic White Alone for the United States by Projection Series: 2012 to 2060							
Year		Alternative Net International Migration Series			Percentage-Point Difference from the Middle Series		
	Middle Series	Low	High	Constant	Low	High	Constant
2012	63.0	63.0	63.0	63.0	0.0	0.0	0.0
2013	62.6	62.6	62.6	62.6	0.0	0.0	0.0
2014	62.2	62.2	62.1	62.2	0.0	0.0	0.0
2015	61.8	61.8	61.7	61.8	0.0	0.0	0.0
2016	61.3	61.4	61.3	61.4	0.0	0.0	0.0
2017	60.9	61.0	60.9	61.0	0.1	-0.1	0.1
2018	60.5	60.6	60.4	60.6	0.1	-0.1	0.1
2019	60.1	60.2	60.0	60.2	0.1	-0.1	0.1
2020	59.7	59.8	59.6	59.8	0.1	-0.1	0.1
2021	59.3	59.4	59.1	59.4	0.2	-0.2	0.1
2022	58.9	59.1	58.7	59.0	0.2	-0.2	0.2
2023	58.4	58.7	58.2	58.7	0.2	-0.2	0.2
2024	58.0	58.3	57.8	58.3	0.3	-0.3	0.3
2025	57.6	57.9	57.3	57.9	0.3	-0.3	0.3
2026	57.2	57.5	56.8	57.5	0.3	-0.3	0.3
2027	56.8	57.1	56.4	57.1	0.4	-0.4	0.4
2028	56.3	56.8	55.9	56.8	0.4	-0.4	0.4
2029	55.9	56.4	55.4	56.4	0.5	-0.5	0.5
2030	55.5	56.0	55.0	56.0	0.5	-0.5	0.5
2031	55.0	55.6	54.5	55.6	0.6	-0.6	0.6
2032	54.6	55.2	54.0	55.2	0.6	-0.6	0.6
2033	54.1	54.8	53.5	54.8	0.7	-0.6	0.7
2034	53.7	54.4	53.0	54.5	0.7	-0.7	0.8
2035	53.3	54.0	52.5	54.1	0.7	-0.7	0.8
2036	52.8	53.6	52.1	53.7	0.8	-0.8	0.9
2037	52.4	53.2	51.6	53.3	0.8	-0.8	0.9
2038	51.9	52.8	51.1	52.9	0.9	-0.8	1.0
2039	51.5	52.4	50.6	52.5	0.9	-0.9	1.0
2040	51.0	52.0	50.1	52.1	0.9	-0.9	1.1
2041	50.6	51.5	49.6	51.7	1.0	-0.9	1.1
2042	50.1	51.1	49.2	51.3	1.0	-1.0	1.2
2043	49.7	50.7	48.7	50.9	1.0	-1.0	1.2
2044	49.2	50.3	48.2	50.5	1.1	-1.0	1.3
2045	48.8	49.9	47.7	50.1	1.1	-1.0	1.3
2046	48.3	49.5	47.3	49.7	1.1	-1.1	1.4
2047	47.9	49.1	46.8	49.4	1.2	-1.1	1.4
2048	47.5	48.7	46.4	49.0	1.2	-1.1	1.5
2049	47.0	48.3	45.9	48.6	1.2	-1.1	1.6
2050	46.6	47.9	45.4	48.2	1.3	-1.2	1.6
2051	46.2	47.5	45.0	47.8	1.3	-1.2	1.6
2052	45.8	47.1	44.6	47.5	1.3	-1.2	1.7
2053	45.3	46.7	44.1	47.1	1.3	-1.2	1.7
2054	44.9	46.3	43.7	46.7	1.4	-1.2	1.8
2055	44.5	45.9	43.3	46.4	1.4	-1.3	1.8
2056	44.1	45.5	42.9	46.0	1.4	-1.3	1.9
2057	43.7	45.2	42.4	45.7	1.4	-1.3	1.9
2058	43.3	44.8	42.0	45.3	1.4	-1.3	2.0
2059	43.0	44.4	41.6	45.0	1.5	-1.3	2.0
2060	42.6	44.1	41.2	44.7	1.5	-1.3	2.1
Source: U.S. Census Bureau, Population Division.							