Projections of the U.S. Population, 2010-2040, by Immigrant Generation and Foreign-Born Duration in the U.S.

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Executive Summary

The important role of immigration as a driver of population growth makes it a critical factor in projections of the U.S. population. This study builds on the results of the censuses of 2010 and 2000, vital statistics data and other information, and a decade of methodological development to generate new projections to the year 2040. These projections show the effects of past and future immigration on the population size as well as the numbers of foreign-born residents and their children, the "immigrant generations" that are of continuing public and policy concern.

The new projections result in a total population of 391.1 million in 2040, which is 13.0 million (3.2%) below the projection issued in 2008 and still currently recommended by the U.S. Census Bureau. Fertility and mortality rates in the new projections are similar to the Census Bureau's; however, the expectations about immigration differ.

Slower rates of annual immigration post-2000, indeed much reduced in the Great Recession years, have led to lower expectations for future immigration (legal and illegal combined). Even after recovery from the recession, which we presume will occur, the expert opinion we have surveyed does not anticipate that net immigration will return to levels higher than experienced at its peak around 2000 (1.26 million per year) in the near future. Net immigration was estimated at 0.92 million in 2009, and is projected to rise to 1.18 million in 2015 and to 1.25 million in 2025. These average annual flows are far below those projected in 2008 by the Census Bureau for 2025 (1.57 million), apparently because those expectations were shaped by the upswing in immigration during the 1990s and did not take into account the extended post-2000 downturn.

Total foreign-born population continues to grow from these immigrant flows, standing at 13.2% of the total U.S. population in our estimate for 2010. The 2010 census was the first in over a century not to record place of birth and the first in many decades not to record length of US residence, leaving uncertainties about these basic characteristics of the population. The Census Bureau recently updated its survey-based estimate of the foreign born share from 12.5% (for 2009) to 12.9% (for 2010) of the total population, but additional foreign born may remain uncounted, hence our higher estimate of the current foreign born based on a detailed demographic accounting.

POPULATION DYNAMICS RESEARCH GROUP

The rising share of foreign born and their children is shown in Figure 4, which covers the period from 1970 to 2040. The foreign born share is projected to rise to 16.7% in 2040 and the second generation share to 13.7%. In the decades before 2000 the latter did not grow as fast because the aged children of an earlier era's immigration were declining from mortality, and also because today's immigrants have roughly half as many children as those in the early 20th century, so the new second generation is expanding less proportionally than in the last century. After 2000, however, the new second generation population began to grow rapidly. The total foreign stock (parents and children with recent immigrant roots) is currently 22.5% of the total U.S. population and is projected in 2040 to rise to 30.5%, a level not seen since 1930.

Among the foreign born, there is a rapidly increasing length of U.S. residence, which lays the basis for stronger social, economic, and civic ties and better integration in the American fabric. Between 2000 and 2010, the large wave of 1980s immigrants reached 20 years of residence, and in coming decades more immigrants will reach this threshold of settlement. The share of all foreign born who are long settled declined to a low point in 2000 (30.4%) but has since started rising; it is estimated at 38.5% in 2010 and projected to reach a majority (52.6%) by 2030.

This report provides details about immigrant generations and duration in the Asian and Hispanic population, and shows the generational shares of the population in census years starting in 1970 with projections to 2040. The complete methodology is also described.

Introduction

There is an ongoing need for projections of the U.S. population that break out the immigrant population, the foreign-born and their children. The need is twofold. Immigration has emerged as the most contested demographic issue of our time. It is heavily influenced though not determined by public policy, and there are sharp differences of opinion about immigration policies and their impacts in both the short and long term. Second, there are differences between the immigrant population and their native-born peers, and some of these differences have economic, social, or political impacts. It is important to note, also, that these differences are not stable over time but in flux because of the variable pace of immigrant integration and advancement.

Population projections with immigrant detail have been rarely produced in the U.S., due to the added complexity involved and the lack of need for such detail in the decades when standard methods of population forecasting were developed (low points for immigration to the U.S.). Our immigrant generation and duration of residence method, an extension of the general cohort-component method, was designed by John Pitkin and has evolved over more than a decade through several model generations, as described below under Methods. The method has been implemented most fully for the California population, because the large fraction of the foreign born population in California's population (26.9%) has made information on nativity more urgent in the California case. Today, with the rapid rise of immigration that has raised the nation's foreign born to 13.2% of the national population, there is clear need for this information about the United States as a whole.

Our new projections of the population of the United States to 2040 report detail by age, sex, race, and Hispanic origin, in addition to nativity and immigrant generation, and by foreign-born duration of U.S. residence. These projections are benchmarked to 2010 census population counts and to current estimates of immigration available through mid-2011. To the best of our knowledge, they are the first national projections to incorporate the latest census results. These projections are being issued so closely on the heels of the 2010 census because they were developed simultaneous with the census. In fact, we have been using our projection model to simulate "what the census would show" in a series of predictive estimates that attempted to show census results before they were released and with the incorporation of nativity detail not included in the 2010 census as in previous censuses (Pitkin and Myers 2011a).

In this report we describe the projection method and summarize the projection results with a focus

on immigrant generations, the foreign-born first generation and the second-generation native-born children. In addition, for the foreign born we also report their duration since entry to the U.S., i.e., we track each wave of immigrants from different decades as the wave grows older, settles longer, emigrates, or dies. These sub-populations are important because assimilation is a dynamic process in time and there are substantial differences between newly arrived and long-settled immigrants, between immigrants who arrive in the U.S. as children, the "1.5 generation," and those who arrive as adults, and between immigrants and their U.S.-born children.

This report is the first release from the Pitkin-Myers 2011 Immigrant Generation Projections. Summary results are reported here, including much of the information that is most desired for public use. In coming months we plan a second release that will provide age detail for the variables reported here.

METHODS & ASSUMPTIONS

Projections by our immigrant generation and duration methods were issued for California in 2001 (Myers and Pitkin 2001) and 2005 (Myers, Pitkin and Park 2005), both of which were posted on our website and received substantial media attention in California. An earlier model development for the nation as a whole was reported in Pitkin and Simmons (1996). Thus it can be said that the current projections are the latest in a series that has been under development for more than 15 years.

Projections of the U.S. population by nativity and immigrant generation, using a cohort-component method, were first developed by Passel and Edmonston (1994). Pitkin and Simmons (1996) projected the population by nativity and, for the foreign-born population, duration since entry to the U.S. The U.S. Census Bureau in 2000 issued projections that split the population by nativity (native and foreign born). However subsequent projections by the Census Bureau have not divided the population in this way. The most recent projections of the U.S. population by nativity are by Passel and Cohn (2008). The series of projections Pitkin and Myers developed for California under the California Demographic Futures project, beginning in 2001, extended nativity by delineating the arrival year for each foreign-born subpopulation., This made it possible to infer age

at arrival and also to calculate growing duration of residence in the U.S. (Myers and Pitkin 2001; Myers, Pitkin, and Park, 2005).[1]

For our 2011 series projections, the base of the projections is 2000 Census population (100%) counts by age, sex, race, and Hispanic origin. These are overlaid with nativity and foreign-born year of entry based on 2000 Census (5% PUMS) and native-born generation based on 2000 Current Population Survey estimates. For purposes of these projections, the 2000 Census had two critical advantages. Data in the necessary detail were available at time of modeling, in early 2011, and they include the needed nativity and year of entry characteristics. Population data from the 2010 Census with age-sex-race characteristics have since become available, but these more current data are insufficient for our purposes because the 2010 census failed to collect information on nativity and year of entry. As a result, the 2000 Census retains an advantage over the 2010 census that may prove enduring.[2] As described next, we have updated this earlier, more detailed population to accord with the 2010 Census counts through a demographic simulation that adds births, subtracts deaths and accounts for migration.

COMPONENTS OF POPULATION CHANGE, 2000-2010

Births are from 2000-2009 U.S. Vital Statistics annual data, with detail by mother's race, origin, age, and nativity through 2008.

Deaths are from 2000-2009 U.S. Vital Statistics annual data, with detail by decedent's age, sex, race, and Hispanic origin. Deaths are apportioned among nativity, years of entry, and generations in proportion to population.[3]

Annual emigration is estimated based on modeled rates which vary by nativity. Foreign-born emigration rates are fixed, with variation by age, sex, origin, and years since arrival in the U.S. We use rates estimated by a residual method between the 1980 and 1990 Censuses by Ahmed and Robinson (1994).[4]

Annual immigration is first estimated from the 2001-2009 ACS estimates of the foreign-born population in each year who lived abroad one year ago. These annual estimates are then adjusted (up) so the modeled population, summed from all factors,

matches 2010 Census total population targets. Since the 2000-2009 birth and death data are believed to be nearly complete, the assumption is that differences between the modeled and census populations are due to errors in the estimates of immigration. It must be noted that this inference assumes that net coverage of the population in the 2010 Census was the same as in the 2000 Census.[5]

THE 2010 CENSUS BENCHMARK

The 2010 population estimate derived from the foregoing components matches the total Census population. The estimates for each age-race-Spanish origin group are then ratio-adjusted to match the corresponding 2010 Census (SF1) population. The resulting populations for birth cohorts age 10 and older are then used as the 2010 base for the projections going forward. For cohorts born after the 2000 Census the pre-adjustment populations, based on reported births plus immigration minus deaths, serve as the base population for the projections going forward.[6]
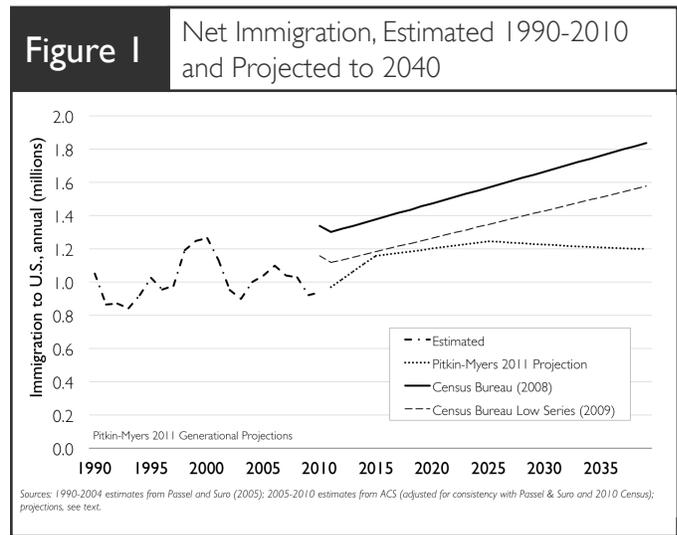
COMPONENTS ASSUMPTIONS, 2010-2040

Births are projected by applying age, race, origin, and nativity-specific birth rates to the projected population of women of childbearing age. The rates assumed in future years are derived from the U.S. Census Bureau (2000) projection middle series schedules. Differences between rates for native and foreign-born women of the same race and Hispanic origin are calibrated to U.S. Vital Statistics reported births for 2000-2008 and held constant in future years.

Deaths are projected by applying age, race, and origin-specific mortality rates to the projected population. The rates assumed in future years are derived from the U.S. Census Bureau (2000) projection middle series schedules. The same rates are applied to the native and foreign-born population.

Emigration is estimated based on per capita rates that vary by nativity, duration since entry, age, sex, race, and origin, as described above.

Immigration is projected from the findings of our Delphi-style survey of immigration experts regarding future immigration flows, resulting in net inflows of 1.18 million in 2015 and 1.25 million in 2025 (Pitkin and Myers 2011c). The total number of immigrants in each year through 2025 is interpolated between 2009

Figure 1 Net Immigration, Estimated 1990-2010 and Projected to 2040

Sources: 1990-2004 estimates from Passel and Suro (2005); 2005-2010 estimates from ACS (adjusted for consistency with Passel & Suro and 2010 Census); projections, see text.

immigration and the survey-based estimates for 2015 and 2025; thereafter it is held constant. The assumed levels of future net immigration are plotted in Figure 1, which also shows annual estimates for 1990-2010 and the comparable main and low series of the U.S. Census Bureau (2008 and 2009, respectively). Our assumption is below the Census low series by varying amounts and below the 2008 main and currently "recommended" series by more than .2 million in all years.

The shares of all immigrants from different countries of origin are based on the origins of 2000-2009 immigrants[7] and held constant.
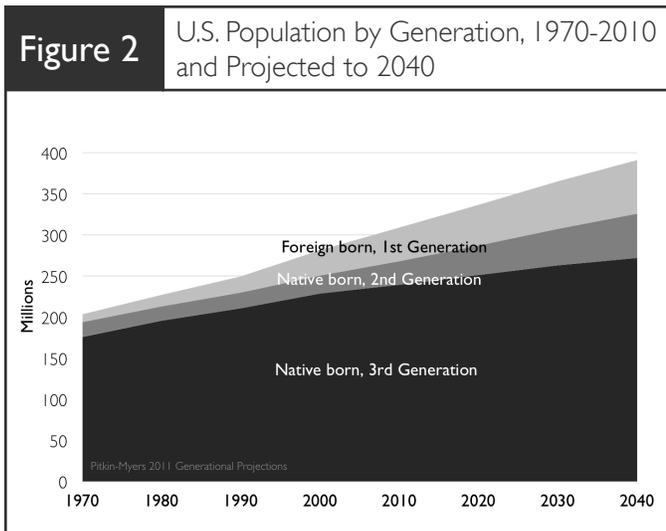
The projected annual components of change are shown in Appendix Table A-1.

PROJECTION RESULTS

The total population of 391.1 million projected for 2040 would imply a 30-year average annual increase of 2.74 million from 2010, the same as the increase measured over the 30 years from 1980 to 2010. See Figure 2. This average annual increase is .44 million less than the Census Bureau (2008) and .39 million below the Passel and Cohn (2008) projection for the same span. Almost all of the difference is accounted for by reduced levels of future immigration in our projection.

GENERATIONS AND NATIVITY

As of 2010, first-generation immigrants born in other countries comprised 13.2% of the U.S. population and the second-generation (U.S. born) children of foreign-born mothers another 9.2%. (See Figure 3.)

Figure 2 | U.S. Population by Generation, 1970-2010 and Projected to 2040

Millions

- Foreign born, 1st Generation
- Native born, 2nd Generation
- Native born, 3rd Generation

Pitkin-Myers 2011 Generational Projections

Figure 3 | U.S. Population Generational Distribution, 2010 and 2040 Projected

- Foreign born
- Arrived before age 10
- Native born, 2nd Generation
- Native born, 3rd Generation

Pitkin-Myers 2011 Generational Projections

It is noteworthy that the foreign-born share is substantially higher than the comparable annual estimate of 12.9% in the 2010 American Community Survey.[8] The 2010 ACS is the first to be controlled to 2010 Census population, which led to a substantial increase in the foreign-born share compared to the 2009 ACS estimate of 12.5%. The remaining difference of .3% must be explained by variations in coverage of the population, either undercoverage of the foreign-born population in the ACS or possibly an increase in coverage of the total population between the 2000 and 2010 Censuses. The latter would have had the effect of inflating our estimate of immigration between the censuses since the counts of the other components, births and deaths, are believed to be accurate. The Census Bureau's estimate of population coverage in the 2010 Census will not be released until next year. In the mean time we are left with the inference that a 2010 Census with complete nativity information would show a higher foreign-born population and share than is measured by the most current ACS estimate.
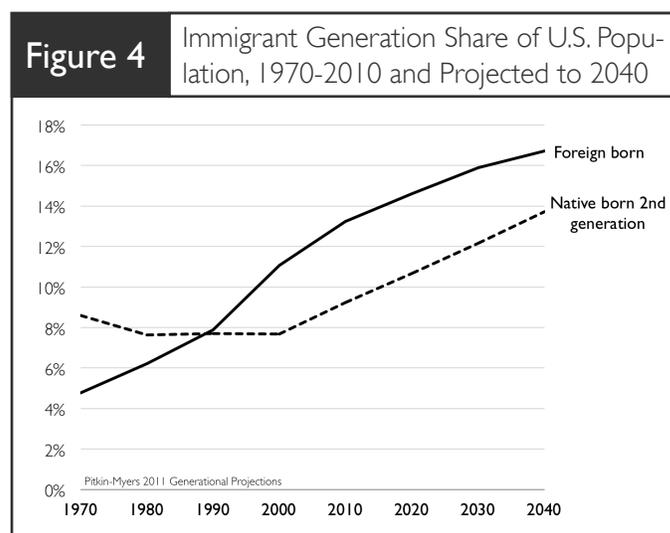
The foreign-born share of the population has been increasing since at least 1970, and has seen especially rapid growth since 1990. In the future it is projected to continue increasing although at a slightly slower rate, reaching 16.7% by 2040. (See Figure 4.) By comparison, Passel and Cohn (2008) project a foreign born share in 2040 of 17.4%, a result of higher immigration assumptions than recently indicated by our survey of immigration experts.

The native-born second generation children of immigrants show a different historical trend. There was
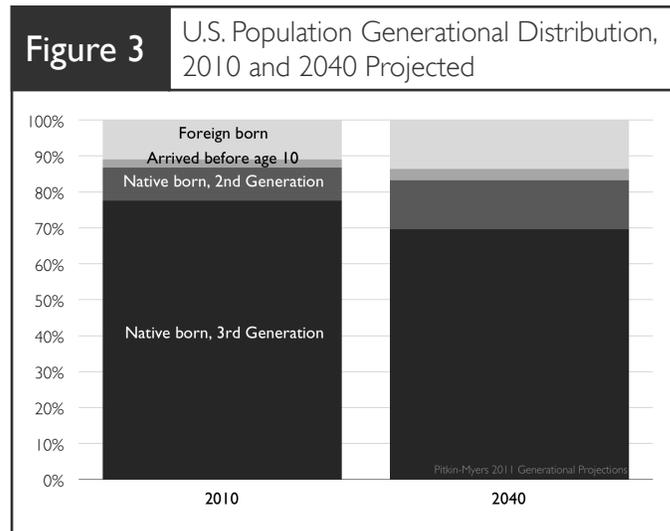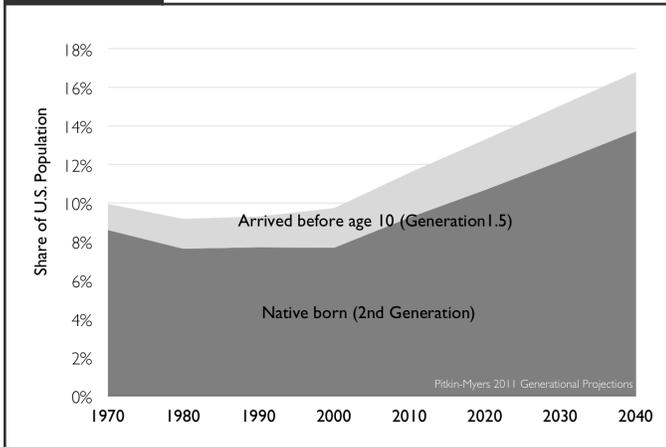
no increase in the second generation's share of total population until after 2000 as the increasing numbers of children of recent, post-1960s immigrants were off-set by declining numbers of much older children of immigrant parents who arrived before 1920, in the previous period of mass immigration. Since 2000, as the older generation shrank due to mortality and the new generation continued to grow due to births, the second-generation's overall share of the population began to rebound. In the future it is projected to increase in parallel with the first-generation's share, from 9.2% in 2010 to 13.7% by 2040. (See Figure 4.)

Using the broadest possible definition of the second generation, which adds the native-born children of native-born mothers and foreign-born fathers, increases the second generation share by an estimated additional 2.7% in 2010 and 4.1% in 2040.[9]

Figure 4 | Immigrant Generation Share of U.S. Population, 1970-2010 and Projected to 2040

- Foreign born
- Native born 2nd generation

Pitkin-Myers 2011 Generational Projections

| Figure 5 | Generations 2 and 1.5 Share of Population, 1970-2010 and Projected to 2040 |

Arrived before age 10 (Generation 1.5)

Native born (2nd Generation)

Pitkin-Myers 2011 Generational Projections

| Figure 6 | Foreign Born Pop. by Duration Since Entry to U.S., 1970-2010, and Projected to 2040 |

20+ years

10 to 20 years

<10 years

Pitkin-Myers 2011 Generational Projections

GENERATION 1.5: BORN ABROAD AND RAISED IN THE U.S.

The generation of the "children of immigrants" can be expanded further if those immigrants who arrived in the U.S. as children, before age 10, are combined with the native-born children of immigrant mothers. There is a logic for combining the two groups. By being raised in the U.S., the foreign-born children of immigrants become fluent in English and attain education at higher rates than those who arrive at older ages. It is possible for us to project this population segment because the projection model tracks year of entry to the U.S., and this in turn allows us to infer age at arrival.

According to this definition, in 1970 the children of immigrants outnumbered the first generation who arrived at age 10 or older by more than two to one. By 2000, latter population had almost tripled its share of the total population but was still marginally smaller than the combined population of generations 2 and 1.5. Since 2000, these children of immigrants have begun to grow rapidly: their share of the total population is projected to continue to rise through the projection period. While the increases in the number and share of immigrants who arrived at older ages are projected to continue at lower rates than before 2000, the combined generations 2 and 1.5 are projected to continue their rapid growth and together comprise one sixth of the total population by 2040. See Fig. 5.

Between 2010 and 2040, the foreign stock population, which is defined to include both first and second generations, is projected to grow by 72%, while the third (and higher) generation native born
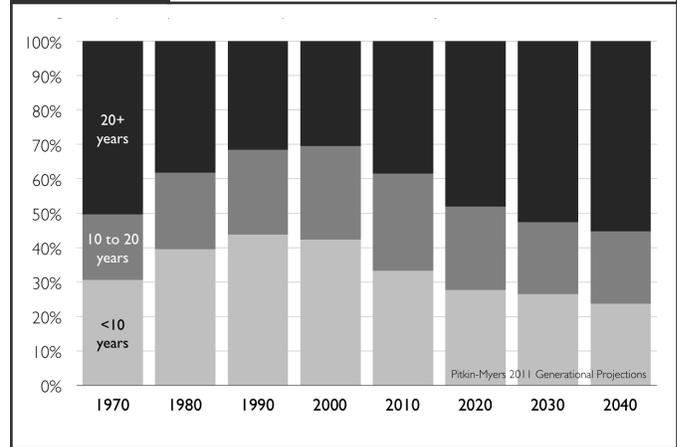
are projected to grow by just 14%. Together, the two immigrant generations will comprise over 30 % of the total population, up from 22.5% in 2010.

FOREIGN-BORN DURATION IN U.S.

As immigration rose from low levels starting in the late 1960s, the share of all immigrants who had recently arrived in the U.S. in the prior 10 years increased substantially, from 31% in 1970 to 44% in 1990. (See Figure 6.) The share remained high in 2000, but due to the recent decline in immigration and aging of earlier large waves of immigrants, it had fallen substantially by 2010 and is projected to decline further over the following three decades. Conversely, the share of the foreign-born with longest residence in the U.S., those who arrived 20 years ago or more, fell between 1970 and 2000, from half of the total to just 30%. It has since begun to rise and is projected to exceed half of the total foreign-born again before 2030.

This reciprocal relationship can be summarized by the ratio of recently arrived to long-duration foreign-born population. The ratio compares the number of immigrants who are near the beginning of the process of advancement and adaptation to the number with longer experience in the U.S. and who on average are more fully adapted and settled. In 1970 the "newcomer ratio" was .61 new immigrant per long-duration one. It more than doubled by 1990 to 1.39 and remained at that level in 2000. Since then it has declined to less than one newcomer per long-duration immigrant and is projected to fall to less than one newcomer for every two long-duration immigrants by 2030.

RACE AND ORIGIN

As the two largest flows of new immigrants are from Latin and Asian countries, the racial and ethnic composition of the population is changing in parallel with the increases in first and second-generation populations. In 1980, slightly more than one-fifth of the U.S. population belonged to a minority group, (defined as non-Hispanic Black, Hispanic, American Indian or Alaska Native, abbreviated as AIAN, and Asian and Pacific Islander, abbreviated as P.I.); almost four fifths were non-Hispanic and white, abbreviated White.[10] (See Figure 7.) In 2010, the combined minority share was over one third of the population, and by 2040 it will approach half. In this respect our projections are consistent with the Census Bureau (2008) and Passel and Cohn (2008), which show the combined minority share exceeding the non-Hispanic White population sometime between 2040 and 2050.

While the Hispanic and Asian populations are the two groups showing the greatest relative increases, the Black and AIAN shares have also increased and are projected to continue growing.

The racial composition of the foreign-born population has already shifted dramatically. (Figure 8.) As recently as 1980, half of the foreign-born population was comprised of non-Hispanic and White.

In 2010 that share had fallen to one in five, and the share of Hispanics had increased from less than one in three to nearly half of the total. In the same period, the share of Asians and Pacific Islanders, the next largest group of immigrants, grew from 15% to 25% of all foreign-born.

GENERATIONS AND DURATION: HISPANICS

The generational composition of the Hispanic population in 2010 is approximately evenly divided among the foreign-born first generation, and the second and third and higher generations. (See Figure 9.) By

Figure 7 Population by Race, 1980, 2010, and 2040 Projected

Pitkin-Myers 2011 Generational Projections
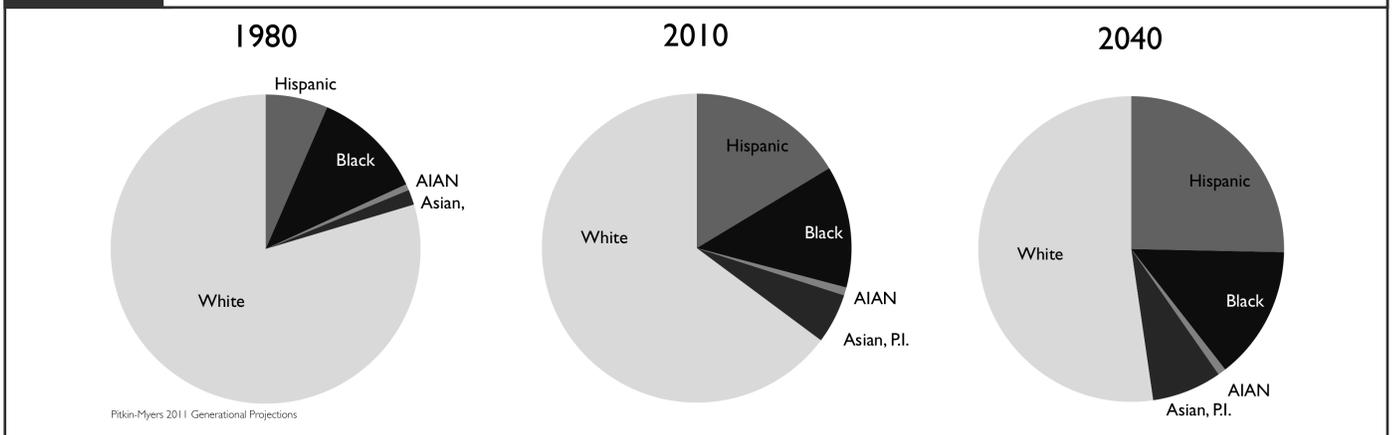
Figure 8 Foreign-Born Population by Race, 1980, 2010, and 2040 Projected

Pitkin-Myers 2011 Generational Projections
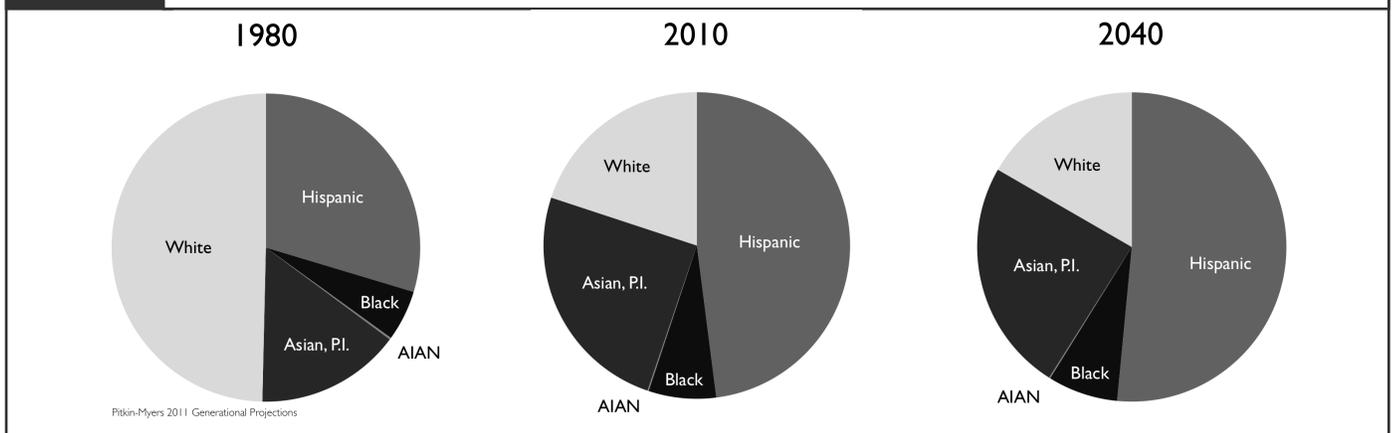
2040, the second generation children of immigrants share is projected to increase slightly relative to the first generation share. As recently as 1980, over half of the total Hispanic population was comprised of third generation native-born.

Hispanic newcomers who came in the rising wave of immigration outnumbered the Hispanic foreign-born who were long-term U.S. residents by over three to one in 1970 and 1980. (See Figure 10.) In 2010 the numbers of recent and longer settled immigrants were approximately equal. By 2030, the projections show a further shift in mix reversing the earlier pattern, with longer settled Hispanics outnumbering newcomers by two to one.
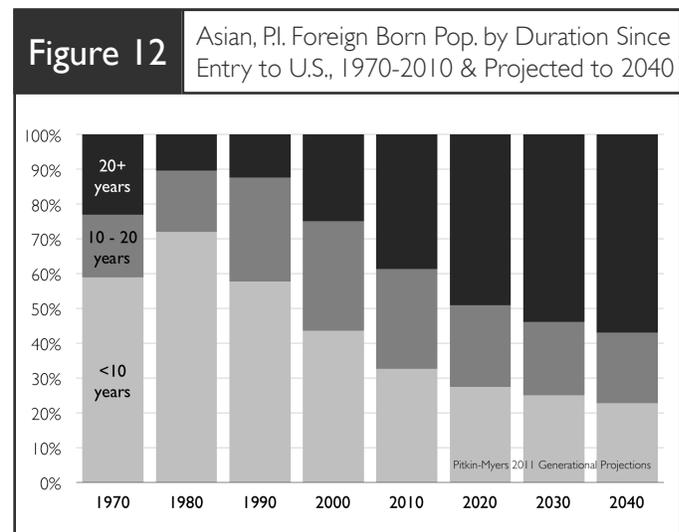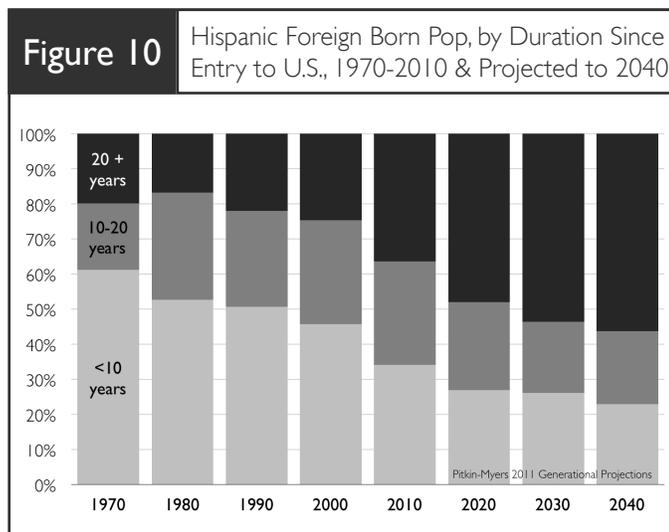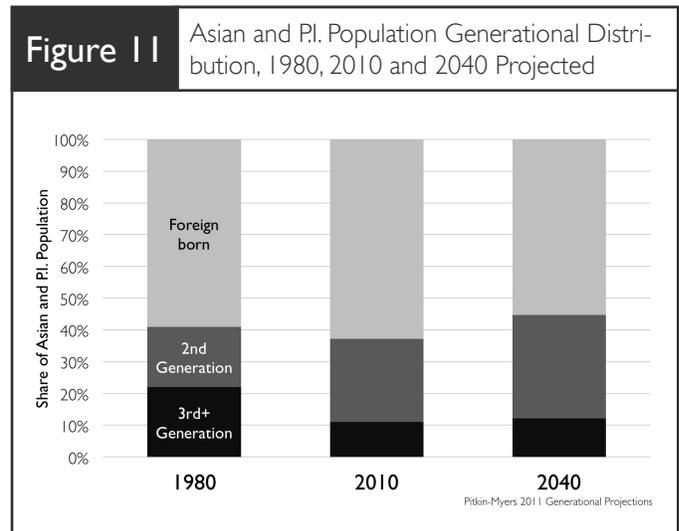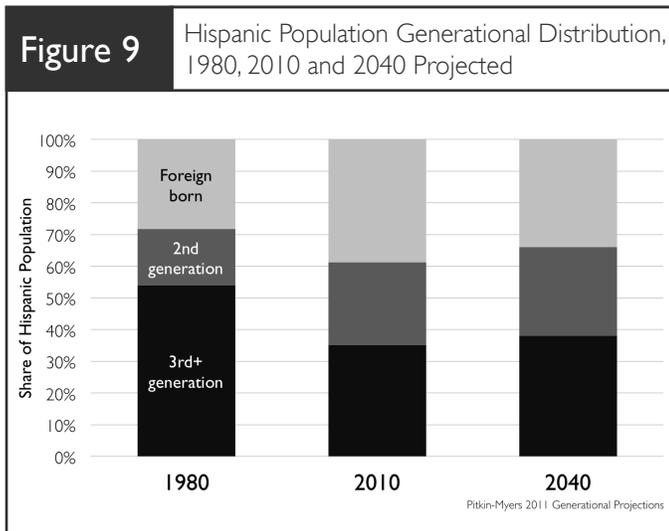
GENERATIONS AND DURATION: ASIANS AND PACIFIC ISLANDERS

Of the major race groups, the Asian population has the greatest share of foreign-born. In 2010, almost two of every three Asians residents were born outside the U.S. Among Asians, the share of second-generation children of immigrants grew from one in five in 1980 to one in four in 2010, and it is projected to rise further to one in three by 2030. (See Figure 11.) Because the immigration restrictions that were eased after 1965 had especially limited the migration from Asian countries, the later surge of immigrants from Asia caused a large increase in the population of newcomers, which outnumbered longer-settled Asian-born immigrants by 7 to 1 in 1980 (See Figure 12.). By 2000 the ratio had fallen but was still 1.8 newcomers for every Asian immigrant who had arrived more than 20 years ago. However, the last decade saw a relatively sharp shift, and by 2010, there were more settled Asian immigrants than newcomers.

Additional tables of detailed numbers on which the figures in this report are based are posted on the website for the Population Dynamics Research Group.

Figure 9 — Hispanic Population Generational Distribution, 1980, 2010 and 2040 Projected

Pitkin-Myers 2011 Generational Projections

Figure 11 — Asian and P.I. Population Generational Distribution, 1980, 2010 and 2040 Projected

Pitkin-Myers 2011 Generational Projections

Figure 10 — Hispanic Foreign Born Pop, by Duration Since Entry to U.S., 1970-2010 & Projected to 2040

Pitkin-Myers 2011 Generational Projections

Figure 12 — Asian, P.I. Foreign Born Pop. by Duration Since Entry to U.S., 1970-2010 & Projected to 2040

Pitkin-Myers 2011 Generational Projections

Conclusion

The role of immigration as a driver of population growth makes it a critical factor in projections of the U.S. population. This study builds on the results of the censuses of 2010 and 2000, vital statistics data and other information, and a decade of methodological development to generate new projections to the year 2040. These projections show the effects of past and future immigration on the population size as well as the numbers of foreign-born residents and their children, the "immigrant generations" that are of continuing public debate and policy concern.

In addition, the projections show the years when foreign-born residents arrived in the U.S., thus making it possible to identify waves of immigrants who arrived in different decades, their duration of residence in the U.S. over time, and the age at which they arrived. The latter, in turn, makes it possible to count the "1.5 generation" foreign-born who entered the U.S. early enough in their lives to attend U.S. schools and learn English in childhood, accelerating the process of adaptation.

Slower rates of annual immigration post-2000, indeed much reduced in the Great Recession years, have recently lowered expectations for future immigration (legal and illegal combined). Even after recovery from the recession, which we presume will occur, the expert opinion we have surveyed does not anticipate that net immigration will return to levels higher than experienced at the peak around 2000 (1.26 million per year) in the near future. Net immigration was estimated at 0.92 million in 2009, and is projected to rise to 1.18 million in 2015 and to 1.25 million in 2025.

These average annual flows are well below those projected by the Census Bureau (in 2008) for 2025 (1.57 million), apparently because those expectations were shaped by the upswing in immigration during the 1990s and did not fully take into account either the extended post-2000 fall-off or the more recent downturn in immigration. Although the Census Bureau subsequently (2009) released a projection with lower future immigration, even this level of immigration is higher than we use, and the higher 2008 series remains today the one "recommended" by the Census Bureau to data users.[11] Our assumptions about other components of population change, about fertility and mortality, are similar to those used in the Census Bureau projections.

Total foreign-born population has continued to grow from even the recently reduced immigrant flows, to 13.2% of the total U.S. population in our estimate for 2010. The 2010 census was the first in over a century not to record place of birth and the first in many decades not to record length of US residence for the foreign born, thus leaving uncertainties about these basic characteristics of the population. The Census Bureau recently updated its survey-based estimate of the foreign born share from 12.5% (for 2009) to 12.9% (for 2010) of the total population. However, the foreign-born population may not have been completely counted in the ACS sample on which the estimate is based. Our higher estimate of the current foreign born is based on a detailed demographic accounting of population changes between the 2000 and 2010 census. It might be biased by possible differences in population coverage between the two censuses but is independent of any vagaries in population coverage of the ACS sample.

The foreign born share is projected to rise to 16.7% in 2040 and the second generation share to 13.7%. In the decades before 2000 the latter did not grow as fast as the former because the aged children of an earlier era's immigration were declining from mortality, and also because today's immigrants are having roughly half as many children as those in the early 20th century, so the new second generation is expanding less proportionally than in the last century. After 2000, however, the new second generation population began to grow rapidly. The total foreign stock (parents and children with recent immigrant roots) is currently 22.5% of the total U.S. population and is projected in 2040 to rise to 30.5%, a level not seen since 1930.

Among the foreign born, there is rapidly increasing length of U.S. residence, which lays the basis for stronger social, economic, and civic ties and better integration in the national fabric. Between 2000 and 2010, the large wave of 1980s immigrants reached 20 years of residence, and in coming decades more immigrants will reach this threshold of settlement. The share of all foreign born who are long settled declined to a low point in 2000 (30.4%) but has since started rising; it is estimated at 38.5% in 2010 and projected to become a majority (52.6%) by 2030.

In this report we have shown the projection results to 2040 with comparable data going back to 1980 or 1970. This historical sweep reveals trends that are not linear but characterized by shifts in pace or direction that defy simple extrapolation into the future. Our demographic projection model expresses the logical future outcomes of many intricate relationships embedded in the population today. These demographic futures constitute a new factual basis to inform current debates about the ever-changing American people.

Appendix

Table A-1	Components of Change in U.S. Population, Projected 4/1/2010 to 1/1/2040 (thousands)				
Date	Population	Births	Deaths	Natural increase	Net immigration
4/1/10	308,745				
1/1/11	310,672	3,178	1,917	1,261	660
1/1/12	313,323	4,245	2,570	1,675	969
1/1/13	316,037	4,286	2,593	1,693	1,017
1/1/14	318,810	4,326	2,617	1,709	1,064
1/1/15	321,639	4,366	2,642	1,724	1,111
1/1/16	324,527	4,405	2,667	1,738	1,158
1/1/17	327,429	4,442	2,693	1,749	1,166
1/1/18	330,335	4,478	2,722	1,756	1,175
1/1/19	333,248	4,512	2,751	1,761	1,183
1/1/20	336,170	4,543	2,782	1,762	1,192
1/1/21	339,106	4,573	2,813	1,759	1,201
1/1/22	342,050	4,599	2,848	1,751	1,209
1/1/23	344,990	4,624	2,886	1,738	1,218
1/1/24	347,922	4,647	2,926	1,721	1,227
1/1/25	350,843	4,669	2,967	1,702	1,236
1/1/26	353,753	4,691	3,010	1,681	1,245
1/1/27	356,632	4,710	3,055	1,655	1,240
1/1/28	359,474	4,727	3,104	1,623	1,236
1/1/29	362,281	4,744	3,153	1,591	1,231
1/1/30	365,053	4,762	3,203	1,559	1,227
1/1/31	367,791	4,781	3,252	1,529	1,224
1/1/32	370,495	4,803	3,305	1,498	1,220
1/1/33	373,164	4,826	3,361	1,465	1,217
1/1/34	375,800	4,852	3,415	1,437	1,214
1/1/35	378,408	4,879	3,467	1,412	1,211
1/1/36	380,991	4,907	3,517	1,390	1,208
1/1/37	383,546	4,936	3,569	1,366	1,205
1/1/38	386,074	4,964	3,621	1,343	1,202
1/1/39	388,580	4,992	3,669	1,323	1,200
1/1/40	391,067	5,020	3,714	1,306	1,198

Note: Total annual components of change exceed reported increase in population by .5% on average due to incomplete reporting of projected population under age 10. Constant coverage ratio consistent with 2010 Census causes absolute coverage "error" to increase with population size.

John Pitkin and Dowell Myers. 2011. Projections of the U.S. Population, 2010-2040, by Immigrant Generation and Foreign-Born Duration in the U.S. Produced by the Population Dynamics Research Group, USC School of Policy, Planning, and Development. Text and supporting materials published at http://www.usc.edu/schools/sppd/futures/

Endnotes

1. See also Pitkin and Myers 2011a, in which we make projective estimates of the population of California on Census day 2010, including nativity, by a similar cohort component method.

2. The American Community Survey is intended to replace the sample census data that were collected in 2000. The 2010 ACS will be the first that is controlled to 2010 Census counts and in theory might provide the information required to create a base population that is independent of the 2000 Census. Sample sizes for small population groups will be an issue and concerns about the coverage of the foreign-born population (see below) will first need to be addressed.

3. I.e., mortality rates are assumed the same for all nativity groups of a given age, sex, race, and Hispanic origin.

4. These rates are lower than those estimated by Van Hook, et.al., (2006) from matched Current Population Survey data and above those currently used by the Census Bureau.

5. Evidence on the validity of this assumption will only become available with the Census Bureau's release of survey-based estimates of census population coverage. These results are expected to be released in early 2012.

6. The observed ratios between 2010 Census and births-based population estimates are applied to the population under age 10 reported in the projection years. This procedure preserves the differences between recorded births and Census populations under age 10 that were observed in 2010 and earlier Censuses (Pitkin and Park 2005). A similar "inflation-deflation" method was used in earlier Census Bureau projections to account for differences in coverage rates between age groups.

7. This is taken from ACS estimates of birthplace of foreign-born persons who lived abroad one year ago. Age and sex are assigned to immigrants from each origin in the same proportions as recent immigrants in the 2000 Census.

8. Passel and Cohn (2008) projected a foreign-born share of 12.9 %.

9. Conversely, if the second generation is defined more narrowly as the native-born children of two foreign-born parents, the numbers and shares of the population are reduced by similar amounts.

10. A simplified set of race categories is used to facilitate comparisons of race groups over time and calculation of vital rates. Census 2000 base populations and procedures for categorizing multi-race persons in subsequent years are from National Center for Health Statistics (2010). Cohorts born after 2000 are assigned to race categories with probabilities depending on mothers' race.

11. "The 2008 National Projections remain the recommended series for data users." From web page titled "2009 National Population Projections (Supplemental)" accessed 9/27/2011 at http://www.census.gov/population/www/projections/2009projections.html.

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More Information

For more information about the projections, please see the Data User Announcements at the top of the webpage. Users may also want to examine the publications listed as supporting documents. For special requests, the authors can be contacted: John Pitkin john_pitkin@earthlink.net and Dowell Myers dowell@usc.edu.

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Additional publications and supporting documents available on the website:
http://www.usc.edu/schools/sppd/futures/

Survey of Expert Opinion on Future Level of Immigration to the U.S. in 2015 and 2025: Summary of Results (Delphi Report)
by John Pitkin and Dowell Myers
May 2011

Projections of the Population of California by Nativity and Year of Entry to the U.S., in Addition to Age, Sex, Race and Hispanic Origin. Paper presented at the 2011 Annual Meeting of the Population Association of America, Washington, DC.
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A Predictive Estimate of the 2010 Census Count for California
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December 2010

2005 edition of the projections for California
California Demographic Futures: Projections to 2030, by Immigrant Generations, Nativity, and Time of Arrival in U.S.
by Dowell Myers, John Pitkin and Julie Park