

Draft March 11, 2013

Net Immigration and Projecting the Social Security Burden

Karen A. Woodrow-Lafield

Research Professor and Faculty Associate

Maryland Population Research Center, University of Maryland

kwoodrow@umd.edu

This paper was prepared while the author was an appointed expert for the 2011 Technical Panel on Assumptions and Methods, Social Security Advisory Board, Washington, D.C. Special acknowledgements are given to staff in the Office of the Actuary, Social Security Administration, for their many presentations, and to Frederick Hollmann and Jennifer Ortman in the Population Division of the U.S. Census Bureau for providing useful feedback on immigration and census population projections. The contents of this paper are solely the responsibility of the author and do not necessarily represent the official views of the Technical Panel or the Social Security Advisory Board. For further information, contact the author at kwoodrow@umd.edu or karenwlafield@cs.com.

Net Immigration and Projecting the Social Security Burden

Abstract

Annual Trustees Reports evaluate the future financial status of the Old-Age and Survivors Insurance Trust Fund and the Disability Insurance Trust Fund, relying upon economic and demographic assumptions. The latter assumptions on mortality, fertility, immigration, and disability more strongly influence the future financial status in the long term. With retirements of Baby Boom cohorts, payout levels on retiree benefits are expected to surpass OASDI tax revenues with a more imminent crisis due to higher unemployment, increasing retirements, higher disability, and the slow economy. Net immigration has consistently implied contributions from additions of both current workers and their children as future workers. With attention to recent data and developments, this paper reviews immigration trends, considers implications of current immigration policies, and addresses the modeling of future immigration for the 21st century. Expert recommendations on immigration have deficit-decreasing impacts for the long-term financial status.

Net Immigration and Projecting the Social Security Burden

Introduction

The Social Security Act enacted in 1935 and legislative extensions succeeded in establishing the permanent old-age pension program for retirees and benefit programs for the disabled, dependents (widows and children), and other groups. In the Annual Reports of the Board of Trustees^{1,2} of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds,³ the population projections show net immigration as having a decreasing role in population growth over the projection period, averaging 2.7 net migrants per 1,000 population in 2011—2085, somewhat lower than historical net immigration in 1900—2010 of nearly 3.00 net migrants per 1,000 population.

The OASDI program finances have increased greatly in volume over the past four decades, partially because the 1983 Amendments to the Social Security Act increased tax revenues. The Social Security program has been financially solvent; despite payments that exceeded tax revenues in 2010 for the first time since the 1980s, assets were available to meet

¹ The purpose of the Trustees Reports are to inform participants as to the financial status, inform policymakers as to need for change, and evaluate programs in the context of funding mechanisms on the basis of projections with reasonable assumptions and illustration of incremental changes in assumptions or methods from one year to the next. The Social Security Act requires annual reports to Congress as to operations in the previous year, operations for the next five years, and the “actuarial status” of the programs. The Office of the Chief Actuary, SSA, has responsibility for population projections for evaluating the financial status of the social security and disability programs (OASDI).

² In 2011, members of the Board of Trustees were Michael J. Astrue, *Commissioner of Social Security*, Timothy F. Geithner, *Secretary of the Treasury, and Managing Trustee of the Trust Funds*, Hilda L. Solis, *Secretary of Labor, and Trustee*, and Kathleen Sebelius, *Secretary of Health and Human Services, and Trustee*, and Charles P. Blahous, III, and Robert D. Reischauer as the Public Trustees of Social Security and Medicare Trust Funds.

³ The social security program is unique as social insurance because it has nearly universal coverage without underwriting or antiselection, has portability, is unlikely to be terminated, and is an open system with PAYGO financing.

costs (Ghilarducci 2010), although journalistic misreporting was noted by an acting SSAB chair (Kennelly 2009). With a drastic shift since 1950 in the representation of the 65+ population relative to the working age population (20 to 64), the ratio of workers to beneficiaries has shifted from a value historically in the range of 3.0 to 3.5 to about 3 to 1 and shifts from 2 to 1 by 2035.

With the shifting balance in recipients and workers, the “solvency crisis” looms that has been depicted as from 2029 to 2042 in the last 17 Trustees Reports. In the 2008 Trustees Report, 2041 was the date of crisis, with 2025 for DI and 2042 for OASI. Unemployment increased, and many unemployed workers *may never return to the workforce*, especially those with disabilities, near early retirement age, or those for whom health insurance may be available through the Affordable Care Act. Based on the 2011 Trustees Report, the insolvency crisis for the combined OASDI Trust Fund hits in 2036, and the date is earlier for the separate DI Trust Fund—2018—and later for the separate OASI Trust Fund—2038. If corrective actions were not been taken by that date, the necessary choice would be between paying full benefits from federal government general revenue or paying partial benefits, reduced by about one-quarter. The shortfall is expected to persist past the 75-year projection period. Based on the 2012 Trustees Report, the insolvency crisis is in 2033, with 2016 for the DI Trust Fund and 2035 for the OASI Trust Fund.

Immigration increases numbers of young adults and eventually children in the population of the United States, and thus contributes to a younger and growing population. Since 1950, net immigration has increased annually at an average rate (about 4 percent) which is almost three times greater than the overall rate of population growth (1.4 percent), and immigration has long accounted for most of U.S. population growth (Gibson 1975; USCB 2009a; Pew Hispanic Center 2006). Thus, immigrants, primarily in younger ages, increase the numbers of covered workers

earlier than the numbers of retiree-beneficiaries and contribute to improving the long-range actuarial balance.

The 2011 Technical Panel on Assumptions and Methods⁴ was appointed by the Social Security Advisory Board which is an independent bipartisan Board created by the Congress and appointed by the President and the Congress to advise the President, the Congress, and on matters related to the Social Security and Supplemental Security Income programs. The role of the Technical Panel is to independently assess and ensure that the Trustees, the Chief Actuary, and the program's administrators have the best information available for evaluating the program's financial status. The Panel was charged with providing technical assistance to the Board by reviewing the assumptions specified by the Board of Trustees of the Old-Age and Survivors Insurance Trust Fund and the Disability Insurance Trust Fund and the methods used by the Social Security actuaries to project the future financial status of the funds.

Specifically, the Panel was asked to: review the assumptions regarding key demographic factors, including mortality, fertility, immigration and disability incidence and termination; review the assumptions regarding key economic factors including productivity, real wage growth, real net rates of return and variations in net rates of return (including equity returns), consumer price increases, labor force participation, and rates of employment and unemployment; review and assess the projection methodology including other methodologies currently in use; review in particular the trends in the earnings to total compensation ratio in light of the changing

⁴ The 2011 Technical Panel was chaired by Brigitte Madrian (Harvard) and included Andrew Samwick (Dartmouth), Mark Duggan, (Wharton School, University of Pennsylvania), Philip Morgan (Duke), Janet Barr (Milliman), Tim Marnell (TowersPerrin, retired), John Bongaarts (Population Council), Karen Woodrow-Lafield (University of Maryland), John Sabelhaus (Federal Reserve Board), and Melissa Favreault (Urban Institute).

structure and cost of employee benefits including pensions, health and disability insurance; and review and assess the status of the recommendations of [previous] Technical Panel(s).

This article reports on the evaluation of immigration assumptions, and evaluations of demographic assumptions in regard to fertility, mortality, and disability and the remaining evaluations appear in various documents and the *Report to the Social Security Advisory Board, 2011 Technical Panel on Assumptions and Methods* (Madrian et al. 2011).

Beginning with the historical background on laws, conceptualization of immigration components, and immigration trends, this article then reviews Trustees assumptions on immigration, past and present, with implications for the projections. Next the Trustees projections of net immigration are evaluated with attention to other projections by the U.S. Census Bureau, Pew Research Center, and the United Nations. The Panel's recommendations on immigration are presented with implications for population projections and the fiscal outlook. Understanding the quantity of net immigration involves investigation in multiple directions—demographic estimation of legal and unauthorized migration and populations, modeling in estimating emigration, demographic analysis of census coverage, immigration statistics, surveys of the foreign-born population, special status populations, and border enforcement. Based on post-2011 evidence, the recommendations remain sound.

At the beginning of the historical period of 1900-2010, there were no quantitative limitations on the entry of immigrants. Although the current immigration system and enforcement infrastructure are in place with some deterrent effect of restrictive policies, the historically low immigration levels of mid-20th century are unlikely to recur. The broader contexts of globalization of labor demand, market transitions, and evolving social networks have

facilitated migration and settlement of both legal and unauthorized migrants. From an international standpoint, the United States is anticipated to remain the major receiving country of net international migration. Although national policies may affect the magnitude and directionality of international migration, the economic and demographic asymmetries that have primarily generated international migration are likely to result in persistence of recent migration patterns among more or less developed nations (UN DESA 2009: xiii).

The increasing trend in immigration during the 1980s, 1990s, and 2000s suggested the post—1980 period would provide a critical basis for projecting immigration into the future. However, with recent reminders of immigration’s volatility with economic shifts, the moderate immigration during the period of 1960—1980 is a useful contrast with long-run history of immigration to the United States.

The dilemma facing demographers in projections is the choice between evidence supporting assumptions on international migration as leading to decreasing numbers of net immigrants which are discontinuous with historical experience and evidence supporting assumptions on international migration as leading to increasing numbers of net immigrants that are consistent with measures of immigration relative to population size. Given the preponderance of the historical record, the latter seems more accurate for projecting the OASDI trust fund and projecting system finances. Immigration assumptions in the intermediate scenario may be preferred as having more stability through basis in the long-term historical trend of net immigration and legal immigration, and assumptions in the low-cost and high-cost scenarios may also be drawn from the past experience.

Historical Background on U.S. Immigration

Legal immigration to the U.S. has been very high at times and very low at other periods with these changes associated with major modifications in immigration law. The historical peak of U.S. legal immigration flows was 1905–1915 during the classical era followed by lulls in immigration during the Great Depression and the two World Wars. Beginning in the early 1920s, immigration laws became more restrictive with numerical limitations and geographic restrictions. Thus, at the time social security was created, immigration had been severely restricted since 1924.

The Immigration and Nationality Act (INA) was created in 1952 as the organized structure of statutes governing immigration law. The current legal immigration regime can be traced to major legislative changes in 1965, 1976, 1980, 1986, and 1990 followed by more legislation in 1996 and 2001. The 1965 amendments to the INA repealed the discriminatory and strict national-origins quotas enacted in 1924, ended the ban on Asian immigration, established a preference system of family and occupational categories with limited visas with per country limits and an overall Eastern Hemisphere cap, and created exempt categories for immediate relatives of citizens, and later amendments limited immigration from both the Western and Eastern Hemispheres. Thus, legal immigration increased with greater numbers from the Eastern Hemisphere and under the numerically unlimited categories of immediate relatives of citizens.

Legal immigration levels accelerated over 1950-2000, especially in the 1990-2000 period. With substantial numbers of refugees from Eastern Europe and Southeast Asia for whom only unused nonpreference visas had been available, the Refugee Act of March 17, 1980, provided the first permanent and systematic procedure for the admission and effective resettlement of refugees of special humanitarian concern providing for permanent resident status after at least one year of U.S. residence (and of asylees one year after asylum is granted). As a

classic country of immigration, the United States is a liberal welfare state in which naturalization is more easily accomplished and conveys rights resembling those of native-born citizens (Janoski 2010). The principle of family reunification is maintained in immigration laws with numerically limited family preference categories and unlimited immigration of immediate relatives of U.S. citizens. For each principal immigrant, there are “immigration multiplier” effects as referring to the total number of accompanying family members and later sponsored family members, as well as any of their family members who subsequently immigrate (Jasso and Rosenzweig 1990; Yu 2007). The Immigration Act of 1990 (IA1990) expanded legal immigration, especially employment categories. Policy changes not only greatly increased the level of legal permanent immigration but also facilitated entry into the U.S. economy of larger nonimmigrant flows of foreigners as tourists, business persons, and as temporary workers, some of whom became long-term residents.

From passage of the 1965 amendments, visa demand was greater than could be met through immigration structures, and timely access to an immigration visa was not available for many family members seeking reunification. Many individuals seeking to work in the United States, either on a temporary or a more permanent basis, could not secure appropriate documents. International migration begins through wage differentials, market failures, labor market segmentation, and the expansion of global transportation, communication, and social networks, and is likely to persist through human capital formation, social capital formation, and other processes of cumulative causation (Massey 1999). Demographic surpluses in combination with limited opportunities within developing economies served as “pushes” and the labor demands of agricultural and service sectors with labor market segmentation worked as “pulls” to more developed economies.

A pathway to legal status has long existed for unauthorized residents. The registry provision of immigration law originated in a 1929 law and enables certain unauthorized aliens in the U.S. to acquire lawful permanent residence based upon having continuously resided in the United States since before a specified date, currently January 1, 1972, and meeting other specified requirements. In the 1970s, the foreign-born population of the United States became greater than could be explained by legal immigration flows. Border apprehension statistics showed increases crossings and suggested sojourning patterns. Demographic studies, surveys, and statistics indicated that about 50—60 percent of unauthorized residents had apparently crossed without documents, primarily from Mexico and other Central American countries, with some border-crossers among those originating in non-neighboring countries and others arriving as legal temporary visitors and later becoming unlawful. In response to emergence of large-scale unauthorized or illegal immigration in the 1970s that continued with greater demographic and familial diversity in the 1980s, the Immigration Reform and Control Act of 1986 (IRCA) provided for legalization of undocumented workers and long-term residents. These provisions particularly impacted Mexican migration and future immigration through family reunification (Woodrow 1995; Durand, Massey, and Parrado 1999; Clark, Hatton, and Williamson 2007).

The Personal Responsibility and Work Opportunity Reconciliation Act of August 22, 1996 (PRWORA) and the Illegal Immigration Reform and Immigrant Responsibility Act of September 30, 1996 (IIRIRA) restricted immigration by making enforceable the affidavit of support for individuals sponsoring family members for visas and setting income requirements, as well as laws relating to deportation and reentry. In the case of the post-1986 United States, the nation-state controls of IRCA measures including criminalization of employer hiring of illegal immigrants, barring from public benefits, and intensified border and worksite enforcement,

would be ineffective in controlling unauthorized migration in terms of attempting to enter, successful border crossing, making return trips, or leaving the United States (Massey 1999).

Despite IRCA measures to prevent employers from hiring illegal immigrants and for intensification of border and interior enforcement policies, unauthorized migration continued and escalated in the late 1990s (Massey, Durand, and Malone 2002). Relative to 2000 Census-based unauthorized estimates of between 7.0 million and 9.0 million residents (Passel 2002; Bean et al. 2001; INS 2003; Costanza et al. 2002; DHS 2006), extant unauthorized estimates showed an increase to about 11—12 million during 2006—2010 (DHS 2011 2012; Passel and Cohn 2011 2012).

Over 1987—2010, the annual number of legal admissions averaged more than 1 million per year, as with the prior peak in 1905–1915. These numbers of lawful permanent residents showed considerable variability due in part to changes in U.S. policies as well as migrant decisionmaking and various bureaucratic factors, e.g., changes in application fees, application volumes, processing times, and security procedures. In contrast with 1905–1915, the majority of immigrants during 1987–2010 were already long-term residents having arrived as temporary travelers for tourism, business, diplomacy, and education (Massey and Bartley 2005). Several U.S. policies eased adjustment from unauthorized status into lawful permanent resident or legal immigrant status. These policies led to high legal admissions in the 1990s and 2000s, e.g., from IRCA legalization provisions (1989—1991), Legal Immigration Family Equity Act (LIFE) of 2000 (2001—2002), the Chinese Student Protection Act, the Nicaraguan Adjustment and Central American Relief Act (NACARA) of November 19, 1997, and resolution of class-action lawsuits over IRCA amnesty application (before and during 2005—2010) that extended the reach of the IRCA amnesty. Immigration policies may affect future immigration levels and composition, as

the Panel noted in the Executive Summary. Proposed immigration reforms such as in the 109th and 110th Congresses that include a legal status pathway would involve substantially greater numbers than IRCA or any similar legislation. Administrative regulatory and policy changes may affect numbers of immigrants, such as the 2011 announcement of more humanitarian policies to reduce deportation and a 2012 announcement to create provisional waivers and ease adjustment of status.

Conceptualizing Components of Immigration for the Social Security Area Population

For making population estimates and projections, net international migration is sometimes treated as a whole as for official USCB population programs and sometimes treated in terms of three components or subcategories of immigrants as for population projections by the Office of the Actuary, Social Security Administration. In relation to the OASDI trust funds, immigrant categories have differences as to history, data sources, and characteristics. The formal assumptions are formulated for somewhat different groups, as discussed later. The three groups forming the basis for the assumptions are: (1) legal immigrants; (2) other immigrants, consisting of unauthorized immigrants (i.e., illegal and undocumented migrants) and certain legal nonimmigrants (i.e., temporary legal residents); and (3) emigrants from among native-born persons, other immigrants, or legal immigrants. All are defined in regard to the Social Security area, so that emigrants are individuals who are no longer within the Social Security area population which differs from practices in census population programs. Certain legal nonimmigrants are long-term residents with work eligibility and are in OASDI covered employment, and some other immigrants work without authorization and yet may have payroll taxes withheld.

Because the U.S. does not have a population register or system for measuring international migration, surveys and administrative data are primary sources. For some perspective, the U.S. population in 2010 (309.3 million for the civilian noninstitutional population) included about one foreign-born person in every ten persons (13.0 percent or 40.0 million) in addition to native-born persons (87.0 percent or 269.4 million) (USCB 2011a). (See also Gryn and Larsen 2010.) Among native-born persons, about one of every eight persons (12.8 percent or 34.1 million) was of the second generation with the remainder as third or higher generation (i.e., having two native-born parents) (87.2 percent or 232.6 million) (USCB 2011b). Individuals of either first or second generation accounted for 24 percent of the population. Whereas the foreign-born population is higher by 29 percent in 2010 relative to 1970, the combined first and second generation population is higher by 37 percent than four decades ago. Most foreign-born persons were noncitizens (56.3 percent or 21.5 million, or 7.3 percent of the total) rather than naturalized citizens (43.7 percent or 17.5 million, or 5.6 percent of the total) (USCB 2011c). Considering post-1980 arrived immigrants, there were nearly as many noncitizens as naturalized citizens among about 22.1 million legally resident foreign-born persons in 2011 (DHS, Rytina 2010, 2011, 2012; DHS, Hoefer, Rytina, and Baker 2011, 2012).

In the annual Trustees Reports, the historical data for legal immigrants are based on the official government counts of admissions for lawful permanent residence, or LPRs, that are now compiled by the Department of Homeland Security's (DHS) Office of Immigration Statistics (OIS).⁵ Information on legal immigration is available each year and representative of admissions to lawful permanent residence status. These include both individuals arriving from other

⁵ These data were previously available from the Immigration and Naturalization Service (INS) in the Department of Justice and various other agencies before INS.

countries and individuals already living in the United States and adjusting from nonimmigrant (i.e., foreign student, guest worker, or visitor for business or for pleasure, refugee, asylee, or parolee) or other status, even as illegal. The historical data for net legal immigrants incorporate reductions for the movements out of the country of legal immigrants and native-born citizens based on indirect evidence supporting ratios of one emigrant for every three to five immigrants (Warren and Passel 1987; Warren and Kraly 1985; Woodrow 1991a, 1996; Ahmed and Robinson 1994; Hollmann et al. 2000; Mulder et al. 2002). [Census population programs involve regular updating of emigration rates derived from comparison of foreign-born populations over time for projecting levels of emigration (Passel and Cohn 2008; USCB 2010a; Grieco 2008).]

For net other immigration in the historical data series, measures for net change in legal temporary migrants and the net or gross flows of unauthorized immigrants are not straightforward. Estimates of net legal and unauthorized migration in the 1980s, 1990s and 2000s, are from demographic studies of national surveys. Official statistics on unauthorized migration are compiled by the DHS-OIS which estimated about 11.5 million unauthorized immigrants as residing in the U.S. as of January 1, 2011 (DHS, Hoefer, Rytina, and Baker 2012) after an estimate of 11.0 million as of January 1, 2010 (DHS, Hoefer, Rytina, and Baker 2011). Residual estimates of unauthorized migration have greater uncertainty and sensitivity to errors than estimates for legal immigration. Estimates for unauthorized immigrants are generally overestimated by inclusion of some legal temporary residents, such as an unknown population of long-term H-1B visa workers (GAO 2011), although DHS allowed for nearly two million nonimmigrant residents. Implicit within DHS and other estimates on unauthorized immigration is emigration of other immigrants and of legal immigrants.

In the 2011 Trustees Report, the historical data for net other immigration in 2005—2010 are largely based on year to year comparisons of DHS annual estimates for unauthorized immigrants. In principle, the best measures of net unauthorized migration annually are derived as the average annual change in the size of the unauthorized population at different times, although this approach relies on comparability in coverage (DHS, Hoefer, Rytina, and Baker 2010, 2011), but national survey estimates for 2007—2010 were not completely comparable and may have contributed to overestimation of change in unauthorized migration (USCB 2009b; Passel and Cohn 2008, 2010). As in Passel and Woodrow (1987), an approximation of reweighting the CPS concluded the greatest effect was inflating the 2007-2009 and 2008-2009 comparisons as to change in the unauthorized population (Passel and Cohn, 2010). The comparisons of unauthorized population estimates for March 2007—March 2009 are 12.0 million to 11.1 million versus 12.4 million (DHS 2008) to 11.1 million (DHS 2010); the resulting difference is ~ -0.9 million rather than ~ -1.3 million. Comparisons of unauthorized population estimates for March 2008 – March 2009 are 11.6 million to 11.1 million versus 11.9 million (DHS 2009) to 11.1 million (DHS 2010); the resulting difference is ~ -0.5 million rather than ~ -0.8 million. Passel and Cohn (2010) showed decreases of -7.5 percent and -4.3 percent for 2007-2009 and 2008-2009, respectively, whereas the DHS estimates implied decreases of -10.5 percent and -6.5 percent, respectively.

For the 1980s, census demographers developed estimates of unauthorized populations and average annual population change due to undocumented migration (Passel and Woodrow 1984, 1987; Woodrow and Passel 1990; Woodrow 1991b; Woodrow-Lafield 1992) for assumptions in population estimates, and similar assumptions were used for population estimates in the 1990s. For the 2000s, specific assumptions about net population change due to

undocumented migration are not made for population estimates which are derived with net international migration measures derived from national surveys.

Trends in Legal Immigration, Net Unauthorized Migration, and Net Immigration

Looking back to 1820, legal immigration has historically exceeded net migration because emigration or return migration was larger than unauthorized migration (Figure 1).⁶ By the 1980s, unauthorized migration surpassed legal emigration so that net international migration was larger than legal immigration. In contrast with major drops in immigration levels prior to 1950 due to the restrictive immigration legislation in 1917–1924, the Great Depression, and World War II, levels of legal immigration rose and large-scale unauthorized immigration emerged after 1970. Numbers of immigrants reached historic highs by the 1980s, and net international migration in every period from 1980–1985 to 2005–2010 exceeded the previous high in 1910–1915.

Figures 1 and 2 about here

Legal immigration, on average, increased in recent decades,⁷ varying by policies and clearance of backlogs.⁸ These admissions of immediate relatives averaged slightly more than 500,000 over 2001–2010, exceeding numerically limited immigration of about 375,000. The

⁶ These historical series of estimates of net immigration, legal immigrants, and net unauthorized immigrants are presented according to the 2007 Technical Panel's more consistent focus by 5-year period of arrival in the United States with updating for the 2005–2010 period. That earlier report drew upon historical projections for 1960–2005 (Passel 2004; Passel and Cohn 2008) and for 1900–1990 (Edmonston and Passel 1994). (See Appendix Tables A-1 and A-2.)

⁷ Average net legal immigration levels were 634,000 in the 1970s, 704,000 in the 1980s, 828,000 in the 1990s, and 1,020,000 in the 2000s. Over the period of 1980–2010, average annual number of legal immigrants was 851,000. In updating Figure 1, the numbers of legal immigrants for 2005–2010 are overstated because there was inadequate information for allocation to earlier periods of arrival and transfers from unauthorized to LPR status were only partially known (cancellations of removal and NACARA adjustments). Better statistics may become available, such as Hollmann (2005).

⁸ Historical data on legal immigrants typically reflect varying numbers of immigrants through unanticipated changes in immigration laws, processing delays, or administrative policies.

increases in net unauthorized migration were dramatic⁹ to average levels over 500,000 per year during 1980-2010, or nearly 600,000 per year during 1990-2010.¹⁰ With declines in the unauthorized population over 2007—2010 (DHS, Hoefer, Rytina, and Baker 2011), average annual change in the unauthorized population was about 250,000 (DHS, Hoefer, Rytina, and Baker 2010) or an average annual increase of about 3.0 percent over the decade (CBO 2011).¹¹ Subsequently, with cautions as to interpretation of changes in the size of the unauthorized population, the DHS report (Hoefer, Rytina, and Baker 2012) sought an indication of the short term trend in the size of the unauthorized immigrant population from 2010 to 2011, finding “little or no change.” However, Tables 3 and 4 showed implied average annual change of 280,000 for 2000-2011. Overall, average annual net immigration for 1980—2010 averaged 1.1 million, although there were substantially higher levels in 1995—2000 and substantially lower levels in 2005—2010.^{12 13}

Examining the quantity of immigration as net immigration in relation to population size at the beginning of each 5-year period (Figure 2), the net migration rate or the NMR was highly

⁹ The 2010 Trustees Report historical data showed that net other immigration averaged 375,000 per year over the period 1980—1989 and 550,000 per year over the period 1990—1999.

¹⁰ For the recent period of 2005—2010 for Figure 1, the updated number for net other immigration is set at 250,000 annually (DHS 2010) which is slightly higher than the historical data in the 2011 Trustees Report.

¹¹ Omitting the period of 1995—2000, net unauthorized immigration averaged 445,000 for the remainder of 1980-2010.

¹² For Figure 1, the updated annual average net immigration in 2005—2010 of 1.05 million is based on an estimate of 10.5 million for the change in the foreign-born population between 2000 and 2010; an alternative estimate is slightly lower, 10.0 million, as implied increase in the foreign-born population over 2000—2010 (USCB 2010a; Devine et al. 2012).

¹³ From Vintage 2009 census population estimates, annual estimates of net migration dropped from an average 1.0 million for 2000-2006 to about 870,000 for 2006—2009 (960,000 for 2000—2009) (USCB 2010c). There were alterations in components when the methodology for measuring net international migration was changed to the residence-one-year-ago method (Grieco 2008). This may account for differences in comparison with earlier estimates; from Vintage 2006 estimates there was a higher estimate (more than 1.2 million) for average net migration for 2000—2006. Following the change to the base population from Census 2010, from Vintage 2012 estimates, annual estimates of net migration were lower (823,000 based on the period April 1, 2010-July 1, 2012 (USCB 2012a). This was slightly higher than from Vintage 2011 estimates (715,000) (USCB 2012b). The components of change in 2000-2009 census population estimates have not been recalculated.

variable in the pre—1920 period before immigration laws became restrictive and more defined. This variability appears also when basing the ratio on official legal immigrants (Carter and Sutch 1998). During the 75-year period of 1840—1915, most of the annualized NMR values were between 3 and 8 net migrants per 1,000 persons. The average of 5.7 net migrants per 1,000 persons was lower than the average rate for legal immigration (8.7) because return migration was substantial.

The net migration rate for 1980—2010, most of the new regime era, averaged about 4.3 per 1,000, although this was well below historically high levels. The net migration rate of 2.1 per 1,000 for 1960—1980, a period bridging the long hiatus and the new regime era, was similar to the rates in 1915—1930 prior to two decades of extremely low immigration. For the full 190 year history from 1820 through 2010, the average NMR was 3.6. For 1900—2010, the NMR averaged 2.9, and for the 20th century, the average was 2.7, but for the past 75 year period 1935—2010, the NMR averaged about 2.5. For the 2000s, net international migration initially increased, dropped after 2001, rose again, and then declined, resulting in declining net migration rates this past decade (USCB 2010c), a low rate that persisted for 2010-2012 (USCB 2012c).

The net migration rate has greater stability in the post—1920 period under quantitative limitations on legal immigration. Recent inflows are modest when not considering immigration under provisions of IRCA. Various factors led to substantial immigration in the recent period of 1980—2010. Apart from the core legal immigration framework, several policies allowed status adjustments of formerly unauthorized residents and may have accelerated family migration. The leading country of origin among both legal immigrants and unauthorized immigrants has been Mexico. Three decades of intensification of border enforcement has led to alterations in behavior and settlement of Mexican migrants. Between 1980 and 2005, the likelihood of

unauthorized migrants returning to Mexico within a year of entry dropped by more than one-half to record low levels, accounting for the addition of two million Mexican settlers over 1980—2005 (Massey 2009, 2010). Admissions of immediate relatives of U.S. citizens born in Mexico have remained substantially higher than for the early 1990s, contrary to expectations (Hollmann et al. 2000). For these reasons, net immigration in 1980—2010 may have been unusually high. In certain respects, the period of 1840—1915 has been suggested as an example for understanding contemporary migration (Massey 1999, 2000), although those historic levels may be unlikely with contemporary immigration restrictions.

Trustees Assumptions on Immigration: Past and Current

The 2008—2012 Trustees Reports treat net legal immigration and net other immigration by considering five sets of annual flows: (1) legal immigration inflows; (2) legal emigration or outflows of legal immigrants; and (3) other immigration inflows, which includes unauthorized migrants and legal temporary workers (not “short-term” temporary admissions); (4) other emigration or outflows of other immigrants; and (5) transfers into legal immigration of other immigrants. As summarized in Table 1, the assumptions for defining the level of net international migration became more complicated in 1988 when the intermediate scenario included an allowance of 200,000 for net other immigrants. This occurred shortly after the Census Bureau incorporated an annual allowance of 200,000 for net change due to undocumented migration in population estimates (Passel 1986). From 1995—2007, the Trustees’ intermediate scenario included an ultimate annual net flow of 900,000 persons per year that was in principle based on 800,000 legal immigrants and 300,000 net other immigrants, minus 200,000 legal emigrants. The assumption of 800,000 legal immigrants per year was based on adding an allowance of 80,000 for refugee and asylee admissions and adding about 10 percent

in various other categories to the amount of 675,000 immigrants that was created as a flexible annual world-wide cap by the Immigration Act of 1990. In refining the latter, the modeling accounted for the presence, covered work behavior, and beneficiary entitlement of other immigrants.

Table 1 about here

For the 2008-2011 Trustees Reports, the ultimate assumptions on net immigration are 1,025,000 for the intermediate scenario. The changes with the 2008 TR increased the ultimate assumption of annual legal immigration from 800,000 to 1,000,000 for consistency with 2001-2006 average levels (about 1.03 million), higher than during 1992-2000 (780,000), and this proved consistent with average levels for 2000-2010 (1.05 million) and for 1990-2000 (980,000). Thus, the Trustees recognized that a strict interpretation of current law is insufficient for specifying annual legal immigration. The Trustees allow for slightly higher legal immigration initially (1,100,000 in 2010 and 1,050,000 in 2011) due to clearing visa processing backlogs. The Trustees Reports have always held the ultimate assumption that emigration of legal immigrants is 25 percent the amount of annual legal immigrants.¹⁴ The ultimate level of net legal immigration is set at 750,000.

The 2008 Trustees Report implemented new methods to treat separately the subcomponents of net other immigration so that net other immigration to be calculated as the difference between annual other immigration inflows and the sum of other immigrant emigration¹⁵ or outflows and other immigrant transfers to legal immigrant status. Essentially, one-half of annual legal immigration is assumed as newly arrived and one-half as adjusting to

¹⁴ Legal emigration is assumed at 20 percent and 30 percent in the low-cost and high-cost scenarios, respectively.

¹⁵ Values shown for annual emigration of other immigrants are averaged over 2011-2085.

legal from other status. The ultimate assumption on inflows of annual other immigrants entering the Social Security area is 1,500,000, of which one-third is assumed as transferring or adjusting to legal status. The Trustees also changed the method for emigration of other immigrants with an assumption of ten percent of recent new arrivals as departing and applying emigration rates to the earlier arrival other immigrant population. These rates are detailed by age and sex, as are all immigration components. These changes resulted in an increase to the long-range actuarial balance of about 0.30 percent of taxable payroll through increased numbers of workers contributing and decreases in retirees remaining.

In the 2011 Trustees Report, net other immigration was calculated at a positive amount in 2011 of 105,000. (The 2012 Trustees Report allowed for a higher amount of 150,000 in 2011 and 210,000 in 2012.) In contrast with 2008, annual other immigration inflows were set at 1.0 million for 2009—2010. Annual other immigration inflows were set at 1.1 million in 2011, 1.2 million in 2012, 1.3 million in 2013, 1.4 million in 2014, and 1.5 million in 2015—2075 (and this was also the pattern in the 2012 Trustees Report). This assumption is plausible with the recovering economy following reduced immigration after the recession. Over the projection period, annual net other immigration would be in decline due to the increasing number of other immigrants residing in the Social Security area, which results in an increase in the numbers who emigrate out of the area based on the rates of departure. Ranging between 300,000 and 500,000 during 2011—2050 and between 275,000 and 295,000 during 2051—2085, net other

immigration averages about 325,000 annually over 2011—2085 (or 322,000 over 2012-2090 in the 2012 Trustees Report).¹⁶

Combining the five immigration components, net immigration is increasing over 2011-2015 to 1,250,000, primarily due to allowing for post-recession increases to net other immigration (Figure 1). Subsequently, net immigration is declining gradually to 1,025,000 in 2084-2085, primarily due to declines in net other immigration. Over the projection period, net immigration averages 1,075,000.¹⁷ (The 2012 Trustees Report projections imply declines in net immigration to 1,030,000 in 2071-2089 and 1,025,000 in 2090, averaging 1,076,000.) Over time, the 2010-2012 Trustees Reports projections imply declines in the ratios of net immigration to the size of the population (e.g., from 3.4 per 1,000 in 2010—2020 to 2.2 per 1,000 in 2075—2085) (Figure 2).

Evaluating the Trustees Projections and Other Projections

Historical trend data is widely accepted as most definitive for developing immigration assumptions for projections, but informed or expert judgments are highly regarded. Considerable uncertainty surrounds the level of net international migration over 2000-2010. Following the recent economic downturn, the best evidence over 2007—2010 was that the level of net immigration, in absolute terms and relative to the U.S. population size, seemed lower for the 2000s than for the 1990s (USCB 2010a). Studies have shown that immigration levels were increasing over 1997-2001, peaked in 1999-2000, declined to lower levels over 2002-2003, were a bit higher over 2004-2006, and again declined in 2008-2010 (Passel and Suro 2005; Passel and

¹⁶The averages on net other immigration are 425,000 and 225,000 for the low-cost and high-cost scenarios, respectively.

¹⁷ The averages on net immigration are 1,385,000 and 785,000 for the low-cost and high-cost scenarios, respectively.

Cohn 2010). Census population estimates similarly indicated rise and decline, especially to a net international migration rate of 2.8 by 2009 and the same rate applies for 2010-2012 (USCB 2012a, 2012c). Following introduction of survey-based methods to measure net international migration in the 2000s, the Vintage 2008 census population estimates relied upon data on place of residence in the prior year (ROYA method), having previously used year-to-year change in the foreign-born population. The residence-one-year-ago method is more conservative than the year-of-entry method which yields higher estimates (Passel and Suro 2005; Passel 2010; USCB 2010).

Preliminary demographic analysis for Census 2010 (DA2010) gave estimates for net international migration in the 2000s that ranged from 9.5 million to 13.5 million (USCB 2010). The range of 7 million among the five resident population estimates was primarily attributable to uncertainties about international migration, especially estimated emigration, undercoverage of foreign-born persons, and methodologies. Because Census 2010 did not include nativity and immigration data, the methodology relied upon the American Community Survey. DA2010 set forth two alternatives as “change in stock” measures of net foreign-born migration during the decade. The first estimated growth of the foreign-born population at 10.5 million based on surviving the 2000 population with the cohort-component method and comparison with 2009 ACS data. The second reached a figure of 10.0 million as implied increase over the decade in the foreign-born population based on administrative data, Census 2000, and ACS data prior to 2010. These measures for the decade implied net immigration annually of 1,000,000 or 1,050,000, as incorporated in Figure 1 (see note 12). The final DA2010 range on net international migration in the previous decade was narrower at 8.6 million to 12.6 million

(Devine et al. 2012). The midpoint of this range resembles the “change in stock” measures employed in examining historical trends in Figure 1.

The Trustees Reports pattern of declining net migration rates in the actuarial projections differs from patterns displayed in either census population projections (Ortman and Guarneri 2009; USCB 2009a) or the UN long-range projections (UN DESA 2011). The USCB 2008 population projections based on stochastic forecasting of historical net international migration implied slight increases in the net migration rate over 2010—2050 (Ortman, Hollmann, and Bhaskar 2010). From 2009 census population projections, rates of net international migration for 2010 were 3.2 (975,000), 3.8 (1,157,000), 4.3 (1,338,000), and 5.0 (1,550,000), corresponding with the constant series, low series, 2008 national projections, and high series, respectively, with the low and high series based on ratios of Vintage 2008 estimates to the 2008 population projections (.8586) (Ortman, Hollmann, and Bhaskar 2010; USCB 2009). With the exception of the constant assumption, these NMRs increased over the projection period—2.4, 4.2, 4.7, and 5.2, respectively. The declining trend that results from the Trustees intermediate scenario most closely corresponds with results from the constant net international migration scenario in the USCB 2008 projections.

In the UN long-range projections to 2300 (UN DESA 2004a, b), persistence of the historical level of 1995-2000 was generally assumed over the next five decades, and, in the case of the United States, a slight decline was incorporated (from 6.3 million to 5.5 million in 2045-2050). From 2051 on, migration was set at zero for all countries, and this was recognized by some as conservative and by others as neither realistic nor conservative (UN DESA 2003). To aid in evaluating population growth, in addition to the zero assumption, alternatives were calculated with non-zero international migration assumptions based on two principles: that

countries be designated as “sending” or “receiving” for the entire projection period and that the projected numbers have to add to zero at the world level (UN DESA 2004a, b). Noting that it would be better to use net migration rates as the means of establishing hypotheses about future trends, one scenario was based on net migration rates for 2045-2050.

The UN 2008 Revision projections to 2100 (UN DESA 2011a, b) employed a single set of net migration assumptions associated with the level estimated for the most recent period 2005-2010 and the presumption that the net migration rate reaches zero at the end of the projection period. With these bases, the 2010 Revision projections implied U.S. net migration rates of 3.1, 2.9, 2.7, 2.6, 2.5, 2.4, 2.3, 2.3, 1.9, 1.6, 1.3, 1.1, 0.9, 0.7, 0.5, 0.4, 0.2, and 0 for five year periods from 2010-2015 to 2095-2100. The average is about 3.1 million per five year period, reflecting the forced decline to zero net immigration by 2100. The Trustees’ assumptions are thus higher than those of the United Nations which seem to be a matter of convenience.

This starting net immigration level in the 2010 Revision reflected an adjustment from higher levels that appeared plausible before the recession (UN DESA 2009; IOM 2010). The UN 2008 Revision projections relied upon net migration rates based on official data and estimates derived as the difference between overall population growth and natural increase through 2005. The 2008 Revision report (UN DESA 2009a: 3) stated the United States “is the largest recipient of international migrants and is projected to host 42.8 million migrants in 2010.” U.S. net migration rates were given as 3.3, 3.1, 3.0, 2.9, 2.8, 2.8, 2.7, and 2.6 for five-year periods from 2010-2015 to 2045-2050 (UN DESA 2009a). From the 2008 Revision, the annual average net migration 2010-2050 was 1.1 million, slightly higher compared with 945,000 based on the 2010 Revision (UN DESA 2011b).

The latest USCB projections (USCB 2012) are based on methods for quantifying future net international migration to the United States according to populations at risk of emigration to the United States and immigration rates. Rates of leaving sending countries are projected to remain constant over the long-term and the highest rates 1.15 per 1,000 in the population are for the Spanish Caribbean and Latin America regions. Rates for Europe-Central Asia-Middle East, Asia and Pacific Islands, and Non-Spanish Caribbean and Sub-Saharan Africa are lower, below 0.2 per 1,000 in the population. With increases due to increasing populations, the total number of foreign-born immigrants is projected at almost 2.0 million by 2060. Annual amounts are substantially lower than from the 2008 projections methodology, as shown in Table 8 of USCB (2012). Although the 2012 projections methodology is insensitive to several relevant factors and structures, the approach yields future scenarios that are more consistent with the historical record than are implied with the Trustees assumptions and methods as of 2011.

Technical Recommendations on Immigration

The view of the Technical Panels has been that the Trustees should present policy makers with the most likely picture of the future, possibly allowing for some changes in immigration law over the next 75 years and beyond. For most of the past two decades, immigration was greater than portrayed in the Trustees Reports, and other population projections have similarly allowed insufficiently for net immigration. (See the review by Ortman, Hollmann, and Bhaskar 2010.) Although “current law” is a useful convention for the development of the intermediate scenario as a baseline against which to measure the impacts of any changes in immigration policy, more complete assumptions as to the various immigration scenarios are beneficial in the projection of trust fund finances for the projection period. Clearly, in recent decades, changes to immigration

policies have expanded rather than reduced the volume of legal immigration. This is in part due to family reunification provisions.

There are contrasting viewpoints as to the volume of immigration to the United States in future decades. Factors cited in arguing for less immigration in the future include: slow or reduced demand for migrant workers due to stagnant or slow economy, especially slow recovery from the recent economic slowdown or recessionary period, deterrence of border enforcement and security measures, changes to immigration policy (e.g., ending diversity visas or visas for adult sons and daughters (of aliens or citizens) or siblings of citizens), diminishing visa demand with completion of family reunification among immigrants admitted under recent policies (e.g., IRCA, NACARA, and LIFE), reduced labor force surplus in sending countries, especially declining sizes of labor force entry cohorts in Mexico, smaller family sizes that are more easily supported in sending countries, social and economic development in Mexico and other sending countries, and competition for workers among developed countries with aging populations and developing countries with growing economies, especially China and India.

Factors associated with likely increases in future immigration include: continuing demand for both high-skilled and low-skilled labor as the U.S. population increases and with a growing economy in the recovery, as a matter of scale, perpetuation of immigration through family and social networks, globalization of labor and technology that facilitates labor exchange and international migration, continuing labor surpluses in developing countries, increasing inequality in developing countries and “push” on labor migrants, unanticipated effects for settlement and reduced return migration from policies for controlling immigration, and policies for adjusting status or regularizing status.

Ideally, attention to theories of international migration (Massey et al. 1998) and comprehensive modeling that incorporates various factors would be advantageous for guiding derivation of net migration assumptions in making population projections, but the feasibility is low due to data limitations (Cohen 2011; Massey 2007, 2010). From panel studies with demographic, geographic, economic, historical, and policy variables, however, a more nuanced empirical understanding has emerged of the ways in which past U.S. immigration has been structured and perpetuated through the social and economic conditions inherent in the contemporary global economy (Kim and Cohen 2010; Cohen et al. 2008; Clark, Hatton, and Williamson 2007; Hatton and Williamson 2002; Greenwood et al. 1999; Greenwood and McDowell 1999). Distance from the United States has a deterrent effect for U.S. immigration. The lower the U.S. population share aged 15-29, the greater is net immigration. Sharing the English language is positively associated with U.S. immigration. The drivers of world migration may more persistently be income and education, perhaps more so than the “friends and relatives” effect (Clark et al. 2007). Those most responsive to source country conditions may be new, numerically exempt immigrants in the immediate relatives category, which has become so significantly featured in annual legal immigration (Greenwood et al. 1999). Rising average skill levels of legal immigrants since the mid-1980s relative to that of the U.S. population as of 1995 are partially due to changes in immigration law and the overall rise in real purchasing power in countries outside the U.S. (Jasso, Rosenzweig, and Smith 1998). Restrictions to certain visa categories have spillover effects on skill composition in other categories as prospective immigrants opt for other visa categories. Higher infant mortality rate in the destination was associated with higher immigration inflows and a higher infant mortality rate in the origin with lower inflows. Rates of infant mortality are higher in most Mexican origin communities actively

sending migrants to the U.S., and improved infant health is linked to the process of migration from Mexico as measured with remittances and institutionalization of migration (Kanaiupuni and Donato 1999).

Previous Technical Panels recommended that the ultimate assumption on net immigration should be linked with population size in anticipation that future immigration trends will be extensions of past trends. This approach is desirable primarily for simplicity and transparency given the uncertainties surrounding various components of net international migration. The demographic and economic asymmetries that drive international migration are likely to persist for several decades. Given the codification of U.S. immigration law in the mid-20th century, the historical record of the past century has considerable plausibility for assuming future trends. The majority of the foreign-born population is lawfully resident.

With classic, liberal immigration policies supporting family reunification, employment, diversity, and humanitarian relief, the high levels of U.S. legal immigration are likely to continue. The contribution of other immigration to U.S. population growth remains substantial, if difficult to measure. In contrast with the immigration downturn inherent in the Trustees' assumptions, the 2011 Technical Panel supported maintaining the importance of immigration in future population projections. Current provisions of immigration law have resulted in the presence of many undocumented individuals who may be prolonging their stays as they are awaiting immigration visas through documented family members or resolution of their status through a class-action lawsuit, and their respective timetables vary on timing, precariousness, and circumstances. With the outcome of reducing the number of deportations, the DHS Immigration and Customs Enforcement (ICE) announced a policy of exercising prosecutorial discretion in deportation cases to more strategically use resources in meeting agency

enforcement priorities by focusing on criminal alien cases and taking an approach with more humanitarian considerations of length of unauthorized residence, arrival as a child, and being without a serious criminal record (Morton 2011). In mid-June 2012, DHS clarified the policy of deferred action for childhood arrivals (immigrants under 30 who came to the United States before the age of 16 and have no criminal record) and provisions for temporary status. The administrative availability of the provisional waiver for hardship relief beginning March 2013 is likely to greatly facilitate adjustment of status for unknown numbers of other immigrants who have been unable to pursue immigration visas because they feared imposition of the IIRIRA ban upon readmission after unauthorized residence and long-term separation from family members. The threat of an IIRIRA ban may have dampened visas for immediate relatives for the past fifteen years. Even if emerging policies for adjusting status are not on the same scale as IRCA, these administrative policies for creating provisional waivers for hardship relief and for extending prosecutorial discretion such as deferred action for childhood arrivals may have considerable impacts.

As of mid-2011, there were several indications of lesser immigration in the 2000s than in the 1990s, emphasizing the volatility of immigration with respect to the U.S. economy and sending countries' economies. Since 1990, there has been a sustained decline in the rate of net undocumented migration from Mexico to the United States so that Mexican net undocumented migration fell to around 200,000 per year in 2000, and then to zero by 2008 (Massey 2009, 2010). This was partly due to deportations, especially deportations of Mexicans that occurred on an historic, massive scale (DHS 2011). Although net undocumented migration from Mexico was at zero by 2008, numbers of apprehensions of Mexican migrants, mostly at the border, were still substantially higher than zero, having dropped from 1.1 million in 2005, to slightly below 1.1

million in 2006, to 854,000 in 2007, to 694,000 in 2008, to 528,000 in 2009, and to 428,000 in 2010 (DHS 2006, 2008, 2010, 2011). A lessening of Mexican undocumented migration may be partially due to the two countries' relative labor supplies. Higher U.S. labor supply may account for a subsiding of Mexican emigration after 2000 based on simulation of cohort-level migration from Mexico to the U.S. (Hanson and McIntosh 2009, 2010).

Definitive answers about net immigration in the 2000s were elusive as of mid-2011. The level of net international migration over 2000-2010 is unlikely to have been as high as the upper figure of 13.5 million based on the preliminary DA 2010 set of alternative estimates (USCB 2010a). It is most likely that annual average net immigration ranged between 860,000 and 1,260,000, according to the final DA2010 (Devine et al. 2012). Refining the decadal measure of net immigration was expected to be more reliable following Census 2010 and thereby such a measure would be a more accurate indicator for the period of 2011—2025. Considering census and national survey estimates, change in the foreign-born population between 2000 and 2010 was about 8.8 million, or an increase of 28.4 percent, serving as a baseline measure. With various post-Census 2010 evaluations of recent net immigration, the current assumptions that the Trustees hold as to net immigration are logical. The major difficulty in quantifying net immigration relates to coverage error which is not measured by census coverage evaluation programs.

Some demographers, including the 2003 and 2007 Technical Panels believed that net immigration would increase substantially in the future, and, and the 2004-2008 Trustees Reports and 2009-2011 Trustees Reports accordingly cited those Panels. The 2012 Trustees Report (p. 83) alluded to the 2011 Technical Panel as having the same belief, but the 2011 Technical Panel made a more nuanced statement that future immigration levels are likely to equal or exceed

projected levels. The 2011 Technical Panel's concerns were about the assumptions for net immigration beyond 2025. The Trustees have taken a conservative stance to assumptions about net other immigration, i.e., not adopting recommendations by the 2007 Technical Panel, and that actually proved a reasonable strategy. Although net unauthorized immigration was exceptionally high during the late 1990s, there is remarkable consistency between measured net unauthorized immigration in the 1980s and 1990s (Woodrow 1992) with the implied level over the 1980-2010 period as incorporated by the Trustees.

Assuming that current immigration laws do not change, the net legal immigration levels allowed by the Trustees over 2011—2025 are consistent with current evidence. However, it does not follow necessarily that the trend in future net migration will be flat or decreasing as assumed by the Trustees. To assess the effect of the recommendation for the long-term trend, the Technical Panel deemed acceptable the levels of net immigration over 2011-2025 and adopted the Trustees' estimate of 1.150 million net migrants in 2025 as a baseline corresponding with an NMR of 3.2 per 1000.

The crucial recommendation is that the ultimate immigration assumption for the intermediate scenario should be derived on the basis of long-run historical averages of the net migration rate (NMR)—2.95 for the period of 1900—2010 and 3.55 for the period of 1820-2010. The Technical Panel notes that the average of these two long-run historical averages for the NMR—3.2 migrants per 1,000—has consistency with the NMRs for two periods excluding high immigration—3.19 for the period of 1870—1990 and 3.27 for the period of 1965—1995. This earlier period precedes the impacts of IRCA, IA1990, and related post-IRCA policies and the later period precedes the exceptionally high immigration in the late 1990s (Passel and Suro 2006) when labor demand was high in the booming economy as well as altered return migration in the

aftermath of IIRIRA (Woodrow-Lafield 2013). The high immigration levels in 1990—2010 led to elevation in the NMR from 3.4 per 1,000 for 1820—1990 to 3.6 per 1,000 for 1820—2010. The Technical Panel suggests that the NMR of 3.2 per 1,000 that is evident for 2025—2030 in the current Trustees' estimates should be maintained throughout the remaining projection period. This assumption will lead to increases in the assumed numbers of net migrants during the later decades of the projection period. The ultimate assumption in the low-cost scenario should be an NMR of 4.2 per 1,000 as more consistent with the recent high NMR of 4.3 per 1,000 in the period of 1980—2010, the new regime of immigration, and the high-cost assumption should be 2.2 per 1,000, closer to the NMR of 2.1 per 1,000 in the period of 1960—1980 bridging the long hiatus and new regime in U.S. immigration.

The simplest application is pro rata for achieving the desired NMRs to the Trustees, that is, treating the immigration components of annual legal immigrants, annual legal emigrants, annual other immigrants, annual other emigrants, and annual transfers to legal status. The rationale about these “additional” net immigrants need not be specified. Certainly, many or all might be legal under current law which does not provide for a fixed number of immigrants, and certain policies and administrative procedures have prolonged the processes of adjustment and sponsorship. These might be individuals not assumed as having left the social security area population.

Table 2 about here

Figures 3 and 4 about here

The future net international migration that is implied by the Technical Panel's recommendations would be about 1.6 million annually by 2085 (Figure 3) in sustaining the NMR

of 3.2 (Figure 4). For each scenario, levels of net migration are higher than implied by the Trustees' assumptions (Figure 2)—2.14 million in the low-cost scenario and .95 million in the high-cost scenario. The Technical Panel notes these levels are not as high as resulting from the recommendations of the 2007 Technical Panel for which high immigration levels of 1990—2000 were salient. The differences between the Technical Panel's recommendations and the Trustees' assumptions would have significant effects on projections of the total population. The effects in projecting the OASDI Trust Fund and evaluating system finances are more complicated because some of these "additional" immigrants would be in the other immigrant category and less likely to be in covered OASDI employment due to immigrant status verification for current issuance of social security numbers.

Additional immigrants would be likely to improve the long-range actuarial balance by .07 percent of the taxable payroll times a factor of each 100,000 of additional immigrants. For context, as of the 2000-2001 Trustees Reports, each additional group of 100,000 immigrants relative to the 900,000 net immigrants for the intermediate assumption increased the long-range actuarial balance by about 0.05 percent of taxable payroll. The 1997 and 1998 Trustees Reports showed 0.06 percent. The Trustees Reports for 1999 and 2002-2012 consistently reported 0.07 percent.

Conclusion

With an approaching fiscal crisis for the OASDI programs due to the importance of demographic factors in influencing financial aspects, careful consideration of the immigration component is crucial. Making these recommendations for immigration assumptions in the intermediate scenario has the value of relying upon stability as based in the long-term historical trend, with assumptions in the low-cost and high-cost scenarios as also drawn from the past

experience. Future immigration will depend critically upon the growth in the U.S. economy, fertility of native-born citizens, the resultant demand for labor, and the availability of labor surpluses in developing countries. Although immigration from Mexico may eventually slow, the worldwide trend as to labor supplies in developed and developing countries are likely to result in labor migration to developed countries. The U.S. labor force population is likely to grow more than in other developed countries, and yet continued U.S. demand for international migrants is likely.

The Trustees made improvements in the 2008 Trustees Report to increase assumptions on immigration levels and revise the approach for deriving net migration assumptions and implementation to clarify the role of the other immigrant population. Further evaluation of current methods is important as to estimation of emigration of legal immigrants and of other immigrants. The transfers to legal status have gained prominence in both administrative statistics and survey research identifying the parameters of lawful or unlawful pre-LPR experience (Massey and Malone 2002; Jasso, Rosenzweig, Massey, and Smith 2008), including long visa processing times for adjustees (Jasso et al. 2010). These transfers complicate measuring the level and timing of overall immigrant inflows so that better empirical approaches are highly desirable.

References

Ahmed, Bashir and J. Gregory Robinson. 1994. Estimates of Emigration of the Foreign-Born Population: 1980-1990. Technical Working Paper No. 9, Population Division, U.S. Bureau of the Census, Washington, D.C.

Bean, Frank D., Rodolfo Corona, Rodolfo Tuirán, Karen A. Woodrow-Lafield, and Jennifer Van Hook. 2001. "Circular, Invisible, and Ambiguous Migrants: Components of Difference in Estimates of the Number of Unauthorized Mexican Migrants in the United States." *Demography* 38(3): 411-22.

Carter, Susan B. and Richard Sutch. 1998. Historical Background to Current Immigration Issues. Pp. 289-366 in *The Immigration Debate: Studies on the Economic, Demographic, and Fiscal Effects of Immigration*, James P. Smith and Barry Edmonston (eds.), National Research Council, National Academy Press, Washington, D.C.

Clark, Ximena, Timothy J. Hatton, and Jeffrey G. Williamson. 2007. Explaining U.S. Immigration, 1971-1998. *The Review of Economics and Statistics* 89(2): 359-373.

Cohen, Joel E. 2011. International Migration Flows: Statistical Models for Use in Population Projections. United Nations, Population Division, Ninth Coordination Meeting on International Migration, UN/POP/MIG-9CM/2011/09 New York, February 10-11.

Cohen, Joel E., Marta Roig, Daniel C. Reuman, and Cai GoGwilt. 2008. International migration beyond gravity: A statistical model for use in population projections. *Proceedings of the National Academy of Sciences* 105 (40): 15269-15274.

Congressional Budget Office. 2011. A Description of the Immigrant Population: An Update. The Congress of the United States. June.

Costanza, Joe, Cynthia Davis, Caribert Irazi, Daniel Goodkind, and Roberto Ramirez. 2001. Evaluating Components of International Migration: The Residual Foreign-born. Population Division Working Paper #61, U.S. Bureau of the Census. December.

Demeny, Paul. 2012. Prospects for International Migration in the 21st Century. Presented at the 2012 annual meeting of the Population Association of America, San Francisco, May 3-5.

Durand, Jorge, Douglas S. Massey, and Emilio A. Parrado. 1999. "The New Era of Mexican Migration to the United States," *The Journal of American History* 86, no. 2 (1999): 518-536.

Edmonston, Barry and Jeffrey S. Passel. 2004. "The Future Immigrant Population of the United States," in Edmonston and Passel (eds.), *Immigration and Ethnicity: The Integration of America's Newest Arrivals*. The Urban Institute Press: Washington, D.C.

Gibson, Campbell. 1975. The Contribution of Immigration to United States Population Growth: 1790-1970. *International Migration Review* 9 (2, Migration and Fertility, Summer): 157-177.

Greenwood, M. J. & J. M. McDowell. 1999. *Legal U.S. immigration: Influences on gender, age, and skill composition*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Greenwood, Michael J., John M. McDowell, Donald M. Waldman, and Steven. S. Zahniser. 1999. The influence of social programs in source countries on various classes of U.S. immigration, *Journal of the American Statistical Association* 94: 64-75.

Grieco, Elizabeth M. 2008. Estimating Net International Migration for the United States. Presentation, Joint ECE-EUROSTAT Work Session on Migration Statistics, Geneva, March 3-5.

Gryn, Thomas A. and Luke J. Larsen. 2010. Nativity Status and Citizenship in the United States: 2009. American Community Survey Briefs, ACSBR/09-16, U.S. Census Bureau, Washington, D.C. October.

Hanson, Gordon H. and Craig McIntosh. 2009. The Demography of Mexican Migration to the United States. *American Economic Review: Papers & Proceedings* 99: 22-27.

Hanson, Gordon H., and Craig McIntosh. 2010. The Great Mexican Emigration. *Review of Economics and Statistics*, November.

Hatton, Timothy J. and Jeffrey G. Williamson. 2002. What Fundamentals Drive World Migration? National Bureau of Economic Research, NBER Working Paper 9159, Cambridge, Massachusetts. September.

Hollmann, F. W., T. J. Mulder and J. E. Kallan. 2000. *Methodology and Assumptions for the Population Projections of the United States: 1999 to 2100*. Population Division Working Paper No. 38, U.S. Bureau of the Census, Issued January 13.

Hollmann, Frederick W. 2005. Toward a Legal Immigrant Data Series for Population Projections. Presented at the Fourteenth Federal Forecasters Conference, Washington, D.C., April 21.

International Organization for Migration. 2010. World Migration Report. November.

Janoski, T. 2010. *The Ironies of Citizenship: Naturalization and Integration in Industrialized Countries*. Cambridge: Cambridge University Press.

Jasso, Guillermina. 2011. Migration and Stratification. Revised draft, March.

Jasso, Guillermina and Mark R. Rosenzweig. 1990. *The New Chosen People: Immigrants in the United States*. New York: Russell Sage Foundation.

Jasso, Guillermina, Vivek Wadhwa, Gary Gereffi, Ben Rissing, and Richard Freeman. 2010. How Many Highly Skilled Foreign-Born are Waiting in Line for U.S. Legal Permanent Residence? *International Migration Review* 44(2): 477-498.

Jasso, Guillermina, Mark R. Rosenzweig, and James P. Smith. 1998. The Changing Skills of New Immigrants to the United States: Recent Trends and Their Determinants. National Bureau of Economic Research, NBER Working Paper 6764.

Jasso, Guillermina, Douglas S. Massey, Mark R. Rosenzweig, and James P. Smith. 2008. "From Illegal to Legal: Estimating Previous Illegal Experience Among New Legal Immigrants to the United States." *International Migration Review* 42(4): 803-843.

Kanaiupuni, Shawn Malia, and Katharine M. Donato. 1999. "Migradollars and Mortality: The Effects of Migration on Infant Survival in Mexico." *Demography* 36 (3, August): 339-353.

Kim, Keuntae and Joel E. Cohen. 2010. Determinants of International Migration Flows to and from Industrialized Countries: A Panel Data Approach Beyond Gravity. *International Migration Review* 44 (4, Winter): 899-932.

Madrian, Brigitte C., Janet Barr, John Bongaarts, Mark Duggan, Melissa Favreault, Tim Marnell, S. Philip Morgan, John Sabelhaus, Andrew Samwick, and Karen A. Woodrow-Lafield.

2011 *2011 Technical Panel on Assumptions and Methods: Report to the Social Security Advisory Board*. Washington, D.C.: Social Security Advisory Board. September.

Massey, Douglas S. 1999. "Why Does Immigration Occur? A Theoretical Synthesis." Pp. 34-52 in Charles Hirschman, Josh DeWind, and Philip Kasinitz, eds., *Handbook of International Migration: the American Experience*. New York: Russell Sage.

Massey, Douglas S. 2000. "To Study Migration Today, Look to a Parallel Era," *Chronicle of Higher Education Opinion*, August 18, pp. B4-B5.

Massey, Douglas S. 2007. "Toward a Comprehensive Model of International Migration." Pp. 126-148 in *Migration and Development: International Migration of Population—Russia and Contemporary World*. Moscow: MAX Press.

Massey, Douglas S. 2009. Testimony, "Securing the Borders and America's Points of Entry, What Remains to Be Done," The Senate Committee on the Judiciary, Subcommittee on Immigration, Refugees and Border Security, May 20.

Massey, Douglas S. 2010. "Immigration Statistics for the Twenty-First Century." *The Annals* 63: 124-140.

Massey, Douglas S. and Katherine Bartley. 2005 "The Changing Legal Status Distribution of Immigrants: A Caution." *International Migration Review* 34:469-84.

Massey, Douglas S. and Nolan Malone. 2002. Pathways to legal immigration, *Population Research and Policy Review* 21 (6):473-504.

Massey, D. S., J. Arango, G. Hugo, A. Kouaouci, A. Pellegrino, and J. E. Taylor. 1998. *Worlds in Motion: Understanding International Migration at the End of the Millennium*. Oxford: Clarendon Press.

Morton, John. 2011. Exercising Prosecutorial Discretion Consistent with the Civil Immigration Enforcement Priorities of the Agency for the Apprehension, Detention, and Removal of Aliens. Department of Homeland Security, U.S. Immigration and Customs Enforcement. June 17.

<http://www.ice.gov/doclib/secure-communities/pdf/prosecutorial-discretion-memo.pdf>

Mulder, Tamany J., Betsy Guzman, and Angela M. Brittingham. 2002. "Evaluating Components of International Migration: Foreign-Born Emigrants," Technical Working Paper No. 62, Population Division, U.S. Census Bureau, Washington, DC. June.

Ortman, J. M. and C. E. Guarneri 2009. United States Population Projections: 2000 to 2050.

Ortman, Jennifer M., Frederick W. Hollmann, and Renuka Bhaskar. 2010. Alternative Bases for Projecting International Migration, presented at the annual meeting of the American Society of Actuaries. October.

Passel, J.S. 1986. "Changes in Estimation Procedures in the Current Population Survey Beginning in January 1985," *Employment and Earnings* 32(2):7-11. February.

Passel, J. S. 2002. "New Estimates of the Undocumented Population in the United States," Migration Information Source, May 22, www.migrationinformation.org.

Passel, Jeffrey S. and D'Vera Cohn. 2008. *U.S. Population Projections: 2005 to 2050*. Pew Hispanic Center, Washington, D.C.

Passel, Jeffrey S. and D'Vera Cohn, 2010, *U.S. Unauthorized Immigration Flows Are Down Sharply Since Mid-Decade*, Pew Hispanic Center, Washington, D.C.

Passel, Jeffrey S. and D'Vera Cohn. 2011. *Unauthorized Immigrant Population: National and State Trends, 2010*. Pew Hispanic Center, Washington, D.C. February 1.

Passel, J.S. and R. Suro. 2005. *Rise, Peak, and Decline: Trends in U.S. Immigration 1992-2004*. Washington, D.C.: Pew Hispanic Center. September 27.

Passel, Jeffrey S. and Karen A. Woodrow. 1984. Geographic distribution of undocumented immigrants: Estimates of undocumented aliens counted in the 1980 Census by state. *International Migration Review*, 18(Fall), 642-671.

Passel, Jeffrey S., and Karen A. Woodrow. 1987. "Change in the Undocumented Alien Population in the United States, 1979-1983," *International Migration Review* 21:1304-1334.

Pew Hispanic Center. 2006. *From 200 Million to 300 Million: The Numbers Behind Population Growth*. Fact Sheet, October 10.

United Nations, Department of Economic and Social Affairs, Population Division. Long-Range Population Projections. 2003. Proceedings of the United Nations Technical Working Group on Long-Range Population Projections, New York. June 30.

United Nations, Department of Economic and Social Affairs, Population Division. Long-Range Population Projections. 2004a. Proceedings of the United Nations Expert Working Meeting on World Population in 2300, New York.

United Nations, Department of Economic and Social Affairs, Population Division. 2004b. World Population to 2300. ST/ESA/SER.A/236. New York.

United Nations, Department of Economic and Social Affairs, Population Division. 2009. *World Population Prospects: The 2008 Revision, Highlights*, Working Paper No. ESA/P/WP.210.

United Nations, Department of Economic and Social Affairs, Population Division. 2011a. *World Population Prospects: The 2010 Revision*, CD-ROM edition. File 18: Net migration rate by

major area, region and country, 1950-2100 (per 1,000 population) Medium-fertility variant, 2010-2100, POP/DB/WPP/Rev.2010/01/F18.

United Nations, Department of Economic and Social Affairs, Population Division. 2011b. *World Population Prospects: The 2010 Revision*, CD-ROM edition. File 18: Net migrants (both sexes combined) by major area, region and country, 1950-2100 (per 1,000 population) Medium-fertility variant, 2010-2100, POP/DB/WPP/Rev.2010/01/F19.

U.S. Census Bureau. 2009a. Table 1. Projections of the Population and Components of Change by Net International Migration Series for the United States: 2010 to 2050 (NP2009-T1), Population Division, December 16.

U.S. Census Bureau. 2009b. "Changes to the American Community Survey Between 2007 and 2008 and Their Potential Effect on the Estimates of Hispanic Origin Type, Nativity, Race, and Language." <http://www.census.gov/population/www/socdemo/hispanic/acs08researchnote.pdf>

U.S. Census Bureau. 2010a. The Development and Sensitivity Analysis of the 2010 Demographic Analysis Estimates. Population Division, November 29.

U.S. Census Bureau. 2010c. National Population Estimates, July 1, 2009, Table 6. Estimates of the Components of Resident Population Change by Race and Hispanic Origin for the United States: July 1, 2008 to July 1, 2009 (NC-EST2009-06), Population Division, Washington, D.C. June.

U.S. Census Bureau. 2011a. S0501. Selected Characteristics of the Native and Foreign-born Populations, 2010 American Community Survey, 1-Year Estimates. October 27.

U.S. Census Bureau. 2011b. Characteristics of the Foreign Born by Generation, Table 4.1 Population by Sex, Age, and Generation: 2010, Population Division, Immigration Statistics Staff. September.

U.S. Census Bureau. 2011c. B05001. Citizenship Status in the 2010 American Community Survey, 1-Year Estimates. October 27.

U.S. Census Bureau. 2012a. Table 5. Estimates of the Components of Resident Population Change by Race and Hispanic Origin for the United States: July 1, 2010 to July 1, 2011 (NC-EST2011-05). May.

U.S. Census Bureau. 2012b. Table 4. Cumulative Estimates of the Components of Resident Population Change for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2012 (NST-EST2012-04). December.

U.S. Census Bureau. 2012c. Table 6. Estimates of the Annual Rates of the Components of Resident Population Change for the United States, Regions, States, and Puerto Rico: July 1, 2011 to July 1, 2012 (NST-EST2012-06). December.

U.S. Census Bureau. 2012. Methodology and Assumptions for the 2012 National Projections. December.

U.S. Department of Homeland Security. 2012. Estimates of the unauthorized immigrant population residing in the United States: January 2011. Population Estimates, Office of Immigration Statistics, Policy Directorate, by Michael Hoefer, Nancy Rytina, and Bryan C. Baker. March.

U.S. Department of Homeland Security. 2011. Estimates of the unauthorized immigrant population residing in the United States: January 2010. Population Estimates, Office of

Immigration Statistics, Policy Directorate, by Michael Hoefer, Nancy Rytina, and Bryan C. Baker. February.

U.S. Department of Homeland Security. 2010. Estimates of the unauthorized immigrant population residing in the United States: January 2009. Population Estimates, Office of Immigration Statistics, Policy Directorate, by Michael Hoefer, Nancy Rytina, and Bryan C. Baker. February.

U.S. Department of Homeland Security. 2010. Estimates of the Legal Permanent Resident Population in 2009. Office of Immigration Statistics, Policy Directorate, by Nancy Rytina. November.

U.S. Department of Homeland Security. 2011. Estimates of the Legal Permanent Resident Population in 2010. Office of Immigration Statistics, Policy Directorate, by Nancy Rytina. October.

U.S. Department of Homeland Security. 2012. Immigration Enforcement Actions: 2011, by John Simanski and Leslie M. Sapp. Annual Report. Office of Immigration Statistics, Policy Directorate. September.

U.S. Department of Homeland Security. 2011. Apprehensions by the U.S. Border Patrol: 2005-2010, by Lesley Sapp. Office of Immigration Statistics, Policy Directorate, Fact Sheet. July.

U.S. Department of Homeland Security. 2011. Immigration Enforcement Actions: 2010. Annual Report. Office of Immigration Statistics, Policy Directorate. June.

U.S. Department of Homeland Security. 2010. Immigration Enforcement Actions: 2009. Annual Report. Office of Immigration Statistics, Policy Directorate. August.

U.S. Department of Homeland Security. 2008. Immigration Enforcement Actions: 2006. Annual Report. Office of Immigration Statistics, Policy Directorate. June.

U.S. Department of Homeland Security. 2006. Immigration Enforcement Actions: 2005, by Mary Dougherty, Denise Wilson, and Amy Wu. Annual Report. Office of Immigration Statistics, Policy Directorate. November.

U.S. Department of Homeland Security. 2012. Estimates of the Legal Permanent Resident Population in 2011. Office of Immigration Statistics, Policy Directorate, by Nancy Rytina. July.

U.S. Department of Homeland Security. 2012a. Secretary Napolitano Announces Deferred Action Process for Young People Who Are Low Enforcement Priorities, June 15.

U.S. Department of Homeland Security. 2012b. USCIS to Propose Changing the Process for Certain Waivers, U.S. Citizenship and Immigration Services. January 6.

U.S. Department of Homeland Security. 2006. Estimates of the unauthorized immigrant population residing in the United States: January 2005. Population Estimates, Office of Immigration Statistics, Policy Directorate, by Michael Hoefer, Nancy Rytina, and Christopher Campbell. August.

U.S. Government Accountability Office. 2011. *H-1B Visa Program: Reforms Are Needed to Minimize the Risks and Costs of Current Program*. GAO-11-23, Washington, D.C. January.

U.S. Immigration and Naturalization Service. 2003. *Estimates of the Unauthorized Immigrant Population Residing in the United States: 1990 to 2000*. January 31.

Warren, R. and E.P. Kraly. 1985. *The Elusive Exodus: Emigration from the United States*. Population Trends and Public Policy Occasional Paper No. 8. Washington, D.C.: Population Reference Bureau.

Warren, R. and J.S. Passel. 1987. "A Count of the Uncountable: Undocumented Aliens Counted in the 1980 Census." *Demography* 24(3):375-394.

Woodrow, K.A. 1991a. "Project D5: Preliminary Estimates of Emigration Component," *Research and Evaluation Memorandum No. 78*, U.S. Bureau of the Census.

Woodrow, Karen A. 1991b. "Project D2: Preliminary Estimates of Undocumented Residents in 1990," *Research and Evaluation Memorandum No. 75*, U.S. Bureau of the Census.

Woodrow, Karen A. and Jeffrey S. Passel. 1990. Post-IRCA undocumented immigration to the United States: Assessment based on the June 1988 CPS. In F.D. Bean, B. Edmonston, and J.S. Passel (eds.), *Undocumented migration to the United States: IRCA and the experience of the 1980s* (pp. 33-76), The Urban Institute Press.

Woodrow-Lafield, Karen A. 1992. "A Consideration of the Effect of Immigration Reform on the Number of Undocumented Residents in the United States," *Population Research and Policy Review* 11:117-144.

Woodrow-Lafield, Karen A. 1995. *Potential Sponsorship by IRCA-Legalized Immigrants*, U.S. Commission on Immigration Reform, Washington, D.C.
(<http://www.utexas.edu/lbj/uscir/respapers/ps-s94>)

Woodrow-Lafield, K.A. 1996. "Emigration From the United States: Multiplicity Survey Evidence," *Population Research and Policy Review* 15(171-199).

Woodrow-Lafield, Karen A. 2012. Review of *The Immigration Battle in American Courts*, by Anna O. Law, 2010, New York: Cambridge University Press. *Law and Politics Book Review* 22 (1, January): 18-26.

Yu, Bin. 2007. *Chain Migration Explained: The Power of the Immigration Multiplier*. LBF Scholarly Publishing LLC.

Table 1: Assumed Ultimate Levels of Net Migration for 3 Scenarios, by Entry Status (Legal vs. Other), Trustees Reports, 1981-2011

Ultimate assumption for net migration (1000s of persons per year; average across annual reports)										
Years of Reports	Total			Legal Immigration			Other Immigration			Ultimate
	Low-Cost	Inter-mediate	High-cost	Low-Cost	Inter-mediate	High-cost	Low-Cost	Inter-mediate	High-cost	
1981-1984	438	400	363	438	400	363	0	0	0	Year 1
1985-1987	667	467	267	667	467	267	0	0	0	Year 1
1988-1990	750	600	450	450	400	350	300	200	100	Year 1
1991-1994	1,050	800	650	700	600	550	350	200	100	Year 1-8
1995-1999	1,150	900	750	710	610	560	440	290	190	Year 2-8
2000-2002	1,210	900	655	760	600	455	450	300	200	Year 2-3
2003-2007	1,300	900	673	850	600	473	450	300	200	Year 21
2008-2011	1,305	1,025	770	960	750	560	350	275	210	Year 5
2011 Trustees Report:										
Annual Immigrants				1,200	1,000	800	1,800	1,500	1,200	
Annual Emigrants ³				-240	-250	-240	-775	-665	-575	
Annual transfers							-600	-500	-400	

Notes: 1) Trustees Reports have been grouped with those of neighboring years having similar sets of net migration assumptions; 2) The "ultimate" date is defined here as the first year of the projection period for which the ultimate assumption was used for all scenarios. Thus, for the projection beginning in 2007, the complete set of ultimate assumptions was used from 2027 onward, corresponding to Year 21 of the projection period. In some cases, the speed of convergence to ultimate values varied across Trustees Reports for neighboring years. 3) For years 2008-2011, net "other" immigration declines over the entire projection period because of constant assumed rates of emigration, and shown values for net other immigration and annual emigrants are average values over the projection period.

Table 2. Population and Net Immigration, Intermediate Assumption, 2011 Trustees Report and 2011 Technical Panel Recommendations, and Net Migration Rates, 2009-2085

Trustees Intermediate				2011 Technical Panel Intermediate recommendation			
	Population	Net immigration	per 1000		Population	Net immigration	per 1000
2009	311333	839	0.0027	2009	311333	839	0.0027
2010	313778	819	0.0026	2010	313778	819	0.0026
2011	316300	893	0.0028	2011	316300	893	0.0028
2012	318896	961	0.0030	2012	318896	961	0.0030
2013	321561	1062	0.0033	2013	321561	1062	0.0033
2014	324326	1158	0.0036	2014	324326	1158	0.0036
2015	327188	1250	0.0038	2015	327188	1250	0.0038
2016	330143	1238	0.0037	2016	330143	1238	0.0037
2017	333085	1227	0.0037	2017	333085	1227	0.0037
2018	336011	1217	0.0036	2018	336011	1217	0.0036
2019	338918	1206	0.0036	2019	338918	1206	0.0036
2020	341805	1197	0.0035	2020	341805	1197	0.0035
2021	344667	1187	0.0034	2021	344667	1187	0.0034
2022	347500	1178	0.0034	2022	347500	1178	0.0034
2023	350299	1169	0.0033	2023	350299	1169	0.0033
2024	353061	1161	0.0033	2024	353061	1161	0.0033
2025	355781	1152	0.0032	2025	355781	1138	0.0032
2026	358456	1144	0.0032	2026	358442	1147	0.0032
2027	361084	1136	0.0031	2027	361072	1157	0.0032
2028	363661	1129	0.0031	2028	363669	1165	0.0032
2029	366184	1122	0.0031	2029	366229	1175	0.0032
2030	368652	1115	0.0030	2030	368752	1183	0.0032
2031	371064	1109	0.0030	2031	371236	1191	0.0032
2032	373420	1103	0.0030	2032	373680	1200	0.0032
2033	375720	1097	0.0029	2033	376084	1206	0.0032
2034	377965	1092	0.0029	2034	378448	1213	0.0032
2035	380158	1088	0.0029	2035	380774	1220	0.0032
2036	382299	1084	0.0028	2036	383065	1226	0.0032
2037	384401	1080	0.0028	2037	385327	1233	0.0032
2038	386464	1076	0.0028	2038	387567	1239	0.0032
2039	388493	1073	0.0028	2039	389784	1245	0.0032
2040	390488	1070	0.0027	2040	391981	1253	0.0032
2041	392453	1067	0.0027	2041	394164	1260	0.0032
2042	394392	1064	0.0027	2042	396333	1266	0.0032
2043	396308	1062	0.0027	2043	398492	1273	0.0032
2044	398203	1059	0.0027	2044	400644	1279	0.0032
2045	400083	1057	0.0026	2045	402793	1286	0.0032

2046	401949	1055	0.0026	2046	404943	1293	0.0032
2047	403807	1053	0.0026	2047	407096	1300	0.0032
2048	405659	1051	0.0026	2048	409258	1307	0.0032
2049	407509	1050	0.0026	2049	411430	1314	0.0032
2050	409362	1048	0.0026	2050	413618	1322	0.0032
2051	411221	1047	0.0025	2051	415826	1329	0.0032
2052	413090	1046	0.0025	2052	418057	1337	0.0032
2053	414971	1045	0.0025	2053	420314	1344	0.0032
2054	416866	1044	0.0025	2054	422598	1352	0.0032
2055	418777	1042	0.0025	2055	424911	1361	0.0032
2056	420705	1041	0.0025	2056	427256	1371	0.0032
2057	422651	1041	0.0025	2057	429636	1378	0.0032
2058	424616	1040	0.0024	2058	432049	1388	0.0032
2059	426601	1039	0.0024	2059	434497	1399	0.0032
2060	428607	1038	0.0024	2060	436984	1406	0.0032
2061	430631	1037	0.0024	2061	439504	1416	0.0032
2062	432674	1036	0.0024	2062	442058	1423	0.0032
2063	434732	1036	0.0024	2063	444642	1430	0.0032
2064	436803	1035	0.0024	2064	447253	1437	0.0032
2065	438885	1034	0.0024	2065	449890	1445	0.0032
2066	440974	1034	0.0023	2066	452548	1452	0.0032
2067	443069	1033	0.0023	2067	455227	1460	0.0032
2068	445166	1032	0.0023	2068	457923	1467	0.0032
2069	447264	1032	0.0023	2069	460635	1474	0.0032
2070	449362	1031	0.0023	2070	463360	1482	0.0032
2071	451456	1031	0.0023	2071	466098	1489	0.0032
2072	453546	1031	0.0023	2072	468846	1497	0.0032
2073	455630	1030	0.0023	2073	471603	1506	0.0032
2074	457708	1030	0.0023	2074	474372	1516	0.0032
2075	459778	1030	0.0022	2075	477149	1525	0.0032
2076	461841	1029	0.0022	2076	479936	1535	0.0032
2077	463895	1029	0.0022	2077	482732	1544	0.0032
2078	465943	1029	0.0022	2078	485538	1553	0.0032
2079	467984	1028	0.0022	2079	488354	1565	0.0032
2080	470020	1028	0.0022	2080	491184	1574	0.0032
2081	472052	1028	0.0022	2081	494028	1583	0.0032
2082	474081	1028	0.0022	2082	496885	1595	0.0032
2083	476109	1028	0.0022	2083	499761	1606	0.0032
2084	478135	1027	0.0021	2084	502654	1617	0.0032
2085	480162	1027	0.0021	2085	505567	1628	0.0032

**Figure 1: Net Migration, Legal Immigration, and Unauthorized Migration to the U.S.
1820-2010, with Projections of Net Migration to 2085 according to 2011 Trustees
Report: Average Annual Migrants**

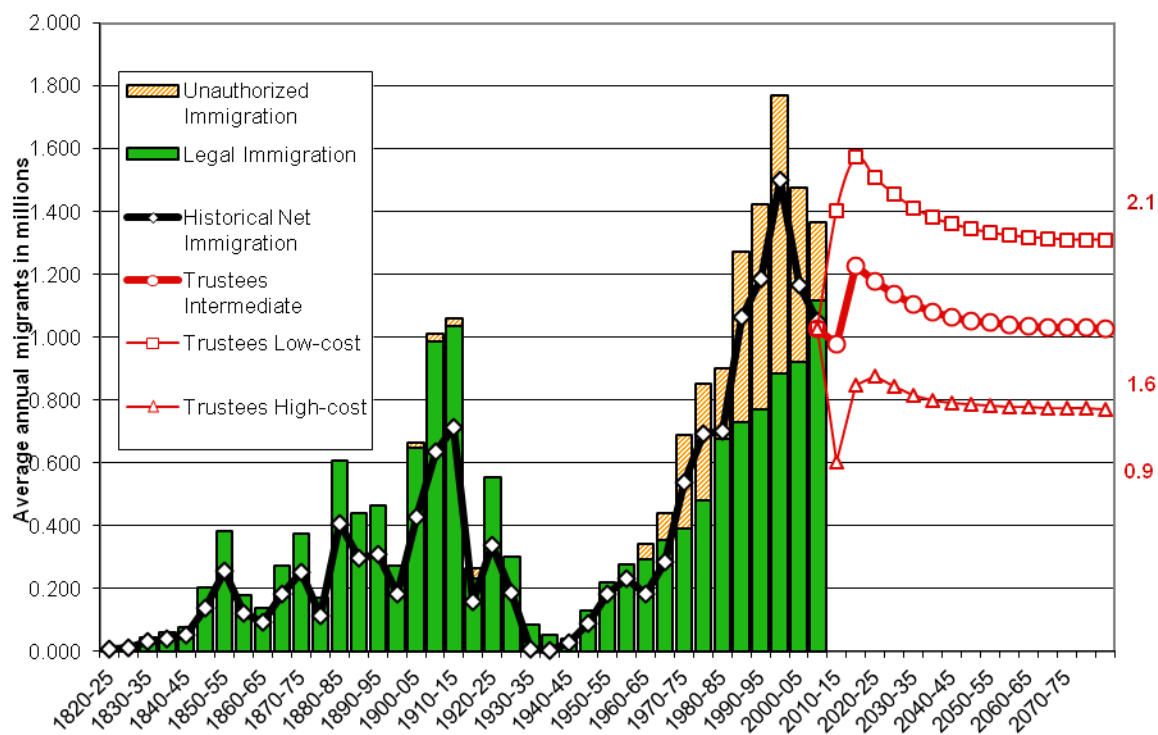


Figure 2: Net Migration, Legal Immigration, and Unauthorized Migration to the U.S.
1920-2010, with Projections of Net Migration to 2085 according to 2011 Trustees Report : Annual
Migrants per 1,000 initial Population

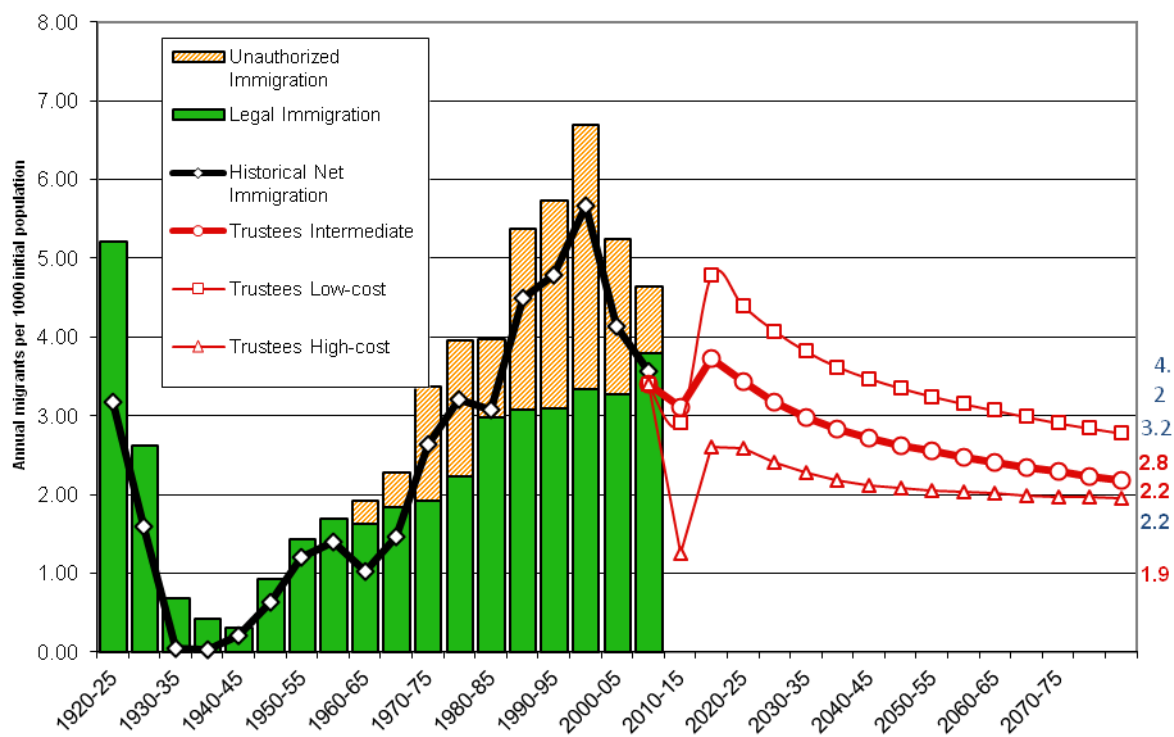
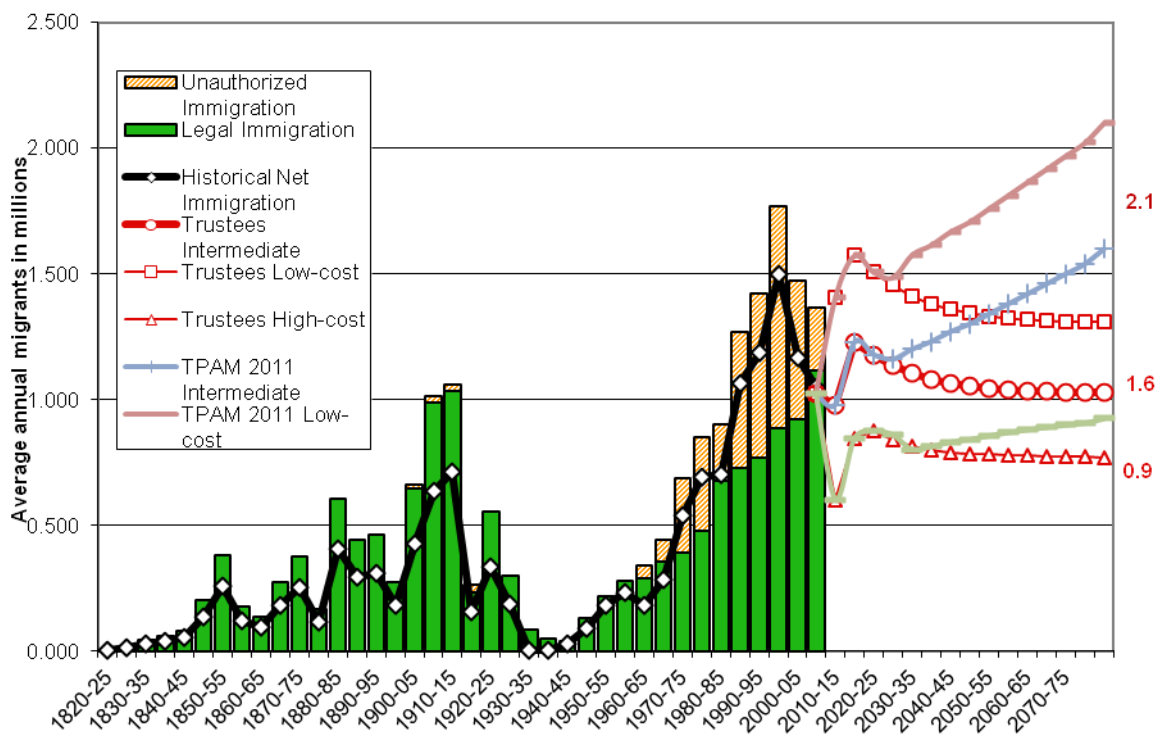


Figure 3: Net Migration, Legal Immigration, and Unauthorized Migration to the U.S. 1820-2010, with Projections of Net Migration to 2085 according to 2011 Trustees Report and 2011 Technical Panel Recommendations: Average Annual Migrants



**Figure 4: Net Migration, Legal Immigration, and Unauthorized Migration to the U.S.
1920-2010, with Projections of Net Migration to 2085 according to 2011 Trustees Report and 2011
Technical Panel Recommendations: Annual Migrants per 1,000 initial Populati**

