Estimates of the Unauthorized Immigrant Population Residing in the United States: January 2014

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This report provides estimates of the size of the unauthorized immigrant population residing in the United States as of January 2014 by period of entry, region and country of origin, state of residence, age, and sex. The estimates were derived using the residual methodology employed for previous estimates of the unauthorized population (see Baker and Rytina, 2013). The unauthorized immigrant population is the remainder (or residual) after the legally resident foreign-born population—naturalized citizens, lawful permanent residents (LPRs), asylees, refugees, and nonimmigrants—is subtracted from the total foreign-born population. Data to estimate the legally resident foreign-born population were obtained primarily from the Department of Homeland Security (DHS), whereas the American Community Survey (ACS) of the U.S. Census Bureau was the source for estimates of the total foreign-born population.

In summary, DHS estimates that 12.1 million unauthorized immigrants were living in the United States in January 2014, compared to 11.6 million in 2010 and 11.8 million in 2007. The increase of 0.5 million from 2010 to 2014 (125,000 per year on average) reflects relative stability, especially when contrasted against the increases of 0.5 million per year in the years leading up to the previous peak of 11.8 million in 2007. Of the total unauthorized immigrant population, more than 75 percent had resided in the United States for more than 10 years and only five percent entered during the previous five years (2009 to 2013); in 2007 fewer than 50 percent had been in the United States for longer than 10 years and more than 20 percent had entered in the previous five years. Fifty-five percent of unauthorized immigrants in 2014 were from Mexico, compared to 59 percent in 2007.

DEFINITIONS

Legal Residents

The legally resident immigrant population as defined for these estimates includes all persons who were granted lawful permanent residence; granted asylum; admitted as

¹Note that the ACS editions used for the 2007 and 2014 unauthorized population estimates were based on different Decennial Censuses; see Figure 1 for an illustration of the impact of the change in Decennial Census bases.

refugees; and nonimmigrants admitted under classes of admission associated with residence (e.g., students and temporary workers, as opposed to tourists) and not required to leave by January 1, 2014.

Unauthorized Residents

The unauthorized resident immigrant population is defined as all foreign-born non-citizens who are not legal residents (see above). Most unauthorized residents either entered the United States without inspection or were admitted temporarily and remained past the date they were required to depart. Persons who are beneficiaries of Temporary Protected Status (TPS), Deferred Action for Childhood Arrivals (DACA) or other forms of prosecutorial discretion, or who are residing in the United States while awaiting removal proceedings in immigration court, are included among the unauthorized population estimates; data were not available in sufficient detail to estimate the sizes and characteristics of these populations or to distinguish them from other foreign-born populations in the ACS. Unauthorized immigrants applying for adjustment to LPR status under the Immigration and Nationality Act (INA) are considered to be part of the unauthorized resident population until they have been granted lawful permanent residence.



METHODOLOGY AND DATA

Two populations are estimated in order to derive the unauthorized population estimates: 1) the total foreign-born population living in the United States on January 1, 2014, and 2) the legally resident foreign-born population on the same date. The unauthorized population estimate is the residual when (2) is subtracted from (1). Foreign-born residents who entered the United States prior to 1980 are assumed to be legally resident since most would have become eligible to adjust to LPR status.² Therefore, the starting point for the estimates was January 1, 1980. The steps involved in estimating the components of each population are shown in **APPENDIX 1**. Data on the foreign-born population that entered during 1980-2013 by country of birth, state of residence, year of entry, age, and sex were obtained from the 2013 ACS. The ACS is a nationwide sample survey that collects information from U.S. households on social, demographic, and economic characteristics, including country of birth and year of entry of the foreign-born population. The ACS consists of non-overlapping samples from which information is collected monthly over the course of a year. The ACS was selected for the estimates because of its large sample size, about 3.6 million households in 2013 compared to 100,000 for the March 2014 Current Population Survey, the primary alternative source of national data on the foreign-born population.

Data on persons who obtained LPR status by country of birth, state of residence, age, sex, category of admission, and year of entry were obtained from DHS administrative records maintained in an application case tracking system of U.S. Citizenship and Immigration Services (USCIS). Data on refugees arriving in the United States by country of origin were obtained from the Department of State. Data on persons granted asylum by country of origin were obtained from USCIS for those granted asylum affirmatively and from the Executive Office for Immigration Review of the Department of Justice for those granted asylum defensively in removal proceedings. Data on nonimmigrant admissions by country of citizenship, state of residence, age, sex, and class of admission were obtained from I-94 arrival-departure records in the TECS database maintained by the U.S. Customs and Border Protection (see Baker, 2016 for a fuller discussion). Estimates of the unauthorized population were generated for the ten leading countries of birth and states of residence and were disaggregated by age and sex. The Cuban-born population living in the United States was excluded from the estimates since, under U.S. immigration law and policy, most Cubans who are admitted or paroled into the United States are eligible one year later to apply to adjust to LPR status.³

Limitations

Annual estimates of the unauthorized immigrant population are subject to sampling error in the ACS and considerable nonsampling error because of uncertainty in some of the assumptions required for estimation as indicated below.⁴ Caution is recommended in interpreting year-to-year changes in the size of the unauthorized population.

Assumptions about undercount of the foreign-born population in the ACS and rates of emigration. The foreign-born, unauthorized immigrants and nonimmigrants in particular, are less likely than native-born Americans to respond to or to be included in responses to government surveys. To control for undercount of these "hard to count" populations, analysts must make assumptions about the extent of the undercount and then adjust the ACS survey estimates accordingly. The estimates are sensitive to these undercount adjustments (see **RESULTS**).

Accuracy of year of entry reporting. Concerns exist among immigration analysts regarding the validity and reliability of Census survey data on the year of entry question, "When did this person come to live in the United States?" Errors also occur in converting DHS administrative dates for legally resident immigrants to year of entry dates.

Assumptions about the nonimmigrant population estimate. The estimates are based on admission dates and length of visit by class of admission and country of citizenship and not actual population counts.

Sampling error in the ACS. The 2013 ACS data are based on a sample of the U.S. population. Thus the estimates of the total foreign-born population that moved to the United States in the 1980–2013 period are subject to sampling variability. The estimated margin of error for the estimate of the total foreign-born population in the 2013 ACS at the 90 percent confidence level is plus or minus approximately 125,000.

Accuracy of state of residence for the non-naturalized legally resident population. State of residence for the non-naturalized legally resident 1980—2013 entrants is assumed to be the state of residence on the date the most recent status (e.g., refugee or LPR) was obtained; however, the accuracy of the estimates may be affected by state-to-state migration that occurred between the date of the status change and January 1, 2014.

Comparisons across years. Although DHS has been producing annual estimates since 2005, comparisons across multiple years can be problematic. In addition to sampling error and the uncertainty surrounding the estimates described above, the series of DHS estimates is not fully consistent. For example, estimates of the foreign-born population from the 2010-2014 ACS were based on the 2010 Decennial Census (adjusted for births, deaths, and migration), whereas estimates from earlier ACS editions were based on the 2000 Census. Comparisons across multiple years should be interpreted with caution.

Unauthorized flow: This report estimates the total size of the unauthorized population as of January 2014; it does not include an estimate of new unauthorized arrivals (i.e., unauthorized flow).

 $^{^2}$ Under Section 249 of the INA, the registry provision, qualified persons who have resided continuously in the United States since prior to January 1, 1972, may apply for LPR status. Additionally, qualified persons who had resided continuously in the United States since prior to January 1, 1982, as unauthorized residents were made eligible to adjust to LPR status under the Immigration Reform and Control Act (IRCA) of 1986, Pub. L. 99-603 (1986).

 $^{^3}$ Cuban Refugee Adjustment Act of 1966, Pub. L. No. 89-732, 80 Stat. 1161 (1966) (as amended); 8 U.S.C. § 1255 (1994 & Supp. II 1966).

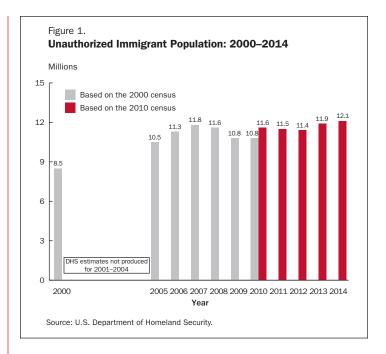
⁴The methodology used for this report requires a number of assumptions that affect the composite estimates. Partly in response to a recommendation in GAO, CGD-98-164, this report outlines several of these assumptions and attempts to articulate caveats, such as the difficulty in comparing estimates across years. The Office of Immigration Statistics' population estimate methodology has improved considerably since the GAO's report. One improvement has been to replace U.S. Census Current Population Survey data with American Community Survey data, lowering sampling error. Additionally, the current methodology no longer requires estimates of overstays and the assumptions behind them.

RESULTS

An estimated 12.1 million unauthorized immigrants were living in the United States on January 1, 2014, up from an estimated 11.9 million on January 1, 2013. Although this estimate is slightly larger than the 11.8 million estimated for the previous peak in 2007, the comparison across decades is problematic because of differences between the 2000 and 2010 decennial Censuses and related methodological issues. For example, as illustrated in Figure 1, DHS estimated 10.8 million unauthorized immigrants in 2010 using an ACS vintage based on the 2000 Census and 11.6 million for the same year using a later ACS vintage based on the 2010 Census. Because of the inconsistent series, it is not clear that the population size has increased since the previous peak in 2007. The data do suggest, however, that the population growth rate has been substantially lower in recent years (about 125,000 per year on average from 2010 to 2014) than in the years leading up to the previous peak in 2007 (about 500,000 per year on average from 2000 to 2007).

The DHS estimation method is similar to the methods used by the Pew Research Center and the Center for Migration Studies (Passel and Cohn, 2016; Warren, 2016). All three organizations apply variations of the residual method. The residual method starts with an estimate of the total foreign-born population and subtracts an estimate of the lawfully resident population to derive an estimate of the unauthorized population. Although the three estimates are based on similar high-level approaches, their methods are not identical. Some of the key areas in which the methods may differ include:

- Survey undercount. The residual model estimates the total foreign-born population based on U.S. Census data, but the Census is believed to under-count the foreign-born population—and particularly the unauthorized immigrant population—at higher rates than the native-born population. The exact degree of the undercount and how it may differ with time spent in the United States and for different sub-groups is unknown.
- Emigration modeling. The residual method uses estimates of the lawful permanent resident population which are based on previous immigration inflows, adjusted for mortality and return migration (i.e., lawful immigrants who depart the United States). Mortality rates can be estimated with precision based on standard demographic tables, but similar tables do not exist for emigration rates.
- Methods for estimating the nonimmigrant, refugee, and asylee populations. OIS estimates nonimmigrants, refugees, and asylees based on previous admissions data, controlling for estimated deaths and outflows. Pew and CMS identify these populations based on their expected characteristics in Census data. These methodological differences affect the estimated size of the legally present population and therefore have an influence on the estimated size of the unauthorized population.
- Techniques used to control for entry-year heaping in the ACS. Census data on the foreign-born population indicate an unexpectedly large number of immigrants who report entering the United States in 1980 relative to surrounding years ("heaping" on 1980). Unauthorized immigrants who entered prior to 1980 are assumed to have legalized through the Immigration Reform



and Control Act, so how analysts control for this heaping effect has an impact on the resulting population estimate.

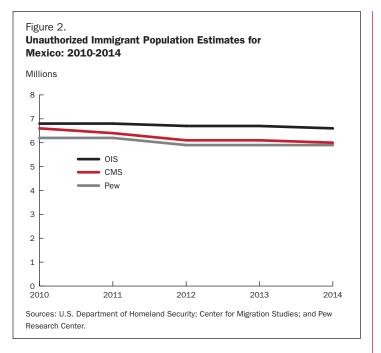
• Base populations used in the residual method. The residual method used by DHS starts with all foreign-born persons and subtracts off all lawfully resident foreign-born persons. One alternative would be to start with foreign-born noncitizens and subtract off all lawfully resident foreign-born noncitizens. These different choices of starting populations can lead to different estimates due to over-reporting of citizenship in the ACS.

These and other possible modeling differences result in differences among the three organizations' overall estimates. In particular, Pew estimates showed 11.1 million unauthorized immigrants residing in the United States as of March 2014 and 11.2 million in 2013. The Center for Migration Studies estimate 10.9 million in 2014 and 11.0 million in 2013.

Figures 2 and 3 offer additional insight into differences among the three organizations' estimates. Figure 2 depicts estimated numbers of unauthorized Mexican nationals, and Figure 3 depicts estimated non-Mexicans. As the figures illustrate, all three organizations estimate the unauthorized Mexican population within a range of about six to seven million persons, and all three show declines of 10 to 15 percent from 2010 to 2014. The CMS estimate was more similar to the DHS estimate in 2010 and more similar to the Pew estimate in 2014, and shows a sharper drop over this time period. With respect to non-Mexicans, the CMS and Pew estimates were flat throughout the period, with the exception of a brief spike in the Pew estimate in 2012, while the DHS estimate increased substantially from 2012 to 2014. The increase in DHS's estimate may partly reflect the surge in unauthorized migration from countries in the Northern Triangle of Central America. 6 Despite these differences, all three estimates generally fall within a range of about 5.0 to 5.5 million people.

⁵See Appendix for details on DHS's modeling assumptions

⁶The Northern Triangle of Central America is comprised of El Salvador, Guatemala, and Honduras



Period of Entry

Of the 12.1 million unauthorized immigrants in 2014, more than 75 percent had been in the United States for longer than 10 years, whereas only five percent had entered within the last five years (2009-2013) (see Table 1 and Figure 4). In the peak period in 2007, less than half of the population had been in the United States for longer than 10 years and more than 20 percent had entered within the most recent five-year period (2002-2006). This pattern suggests a declining rate of new unauthorized immigration, or that an increasing share of new unauthorized immigrants are being deported or otherwise returning home.

Components of the Unauthorized Immigrant Population in 2014

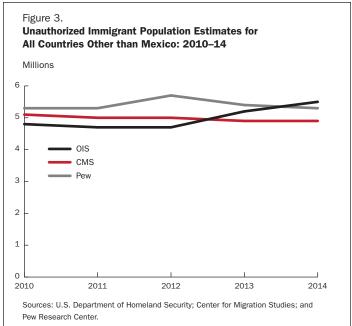
The size of each component of the unauthorized immigrant population estimates for 2014 is displayed in Table 2.7 For the foreign-

Table 1. **Period of Entry of the Unauthorized Immigrant Population:** January 2014 and January 2007*

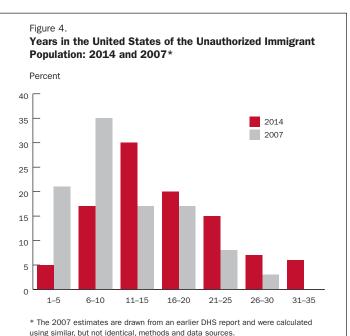
| | Estimated population size | | | | | | | |
|------------------------|---------------------------|---------|---------------|---------|--|--|--|--|
| | January 2 | 2014 | January 2007* | | | | | |
| Period of entry | Number | Percent | Number | Percent | | | | |
| All years (1980–2013) | 12,120,000 | 100 | 11,780,000 | 100 | | | | |
| Previous 5 years | 630,000 | 5 | 2,460,000 | 21 | | | | |
| 6-10 years ago | 2,040,000 | 17 | 4,070,000 | 35 | | | | |
| 11-20 years ago | 6,090,000 | 50 | 3,950,000 | 34 | | | | |
| More than 20 years ago | 3,360,000 | 28 | 1,300,000 | 11 | | | | |

Detail may not sum to totals because of rounding.

Source: U.S. Department of Homeland Security.



born population, the starting point was the estimated 33.5 million foreign-born residents in the 2013 ACS that entered the United States during 1980-2013. This population was increased by 2.4 million, or seven percent, by adjustments for the shift in the reference date from mid-year 2013 to January 1, 2014, and the addition of undercounts for the populations of nonimmigrants, legally resident immigrants, and unauthorized immigrants. The estimated undercount of the unauthorized immigrant population in the ACS was 1.2 million and represents slightly more than 50 percent of all adjustments to the foreign-born population.



using similar, but not identical, methods and data sources Source: U.S. Department of Homeland Security.

⁷ See APPENDIX 1 for a detailed explanation of each entry in Table 2.

The 2007 estimates were drawn from an earlier DHS report and were calculated using similar, but not identical, methods and data sources.

Table 2.

Component Estimates of the Unauthorized Immigrant Population: January 2014

| | 2014 |
|--|------------|
| 1) Foreign-born population | |
| a. Foreign-born population, entered 1980–2013, 2013 ACS | 33,480,000 |
| b. Adjustment for shift in reference date from July 1, 2013 to January 1, 2014 | 450,000 |
| c. Undercount of nonimmigrants in ACS | 170,000 |
| d. Undercount of other legally resident immigrants (LPRs, recent refugee/asylee arrivals) in ACS | 550,000 |
| e. Undercount of unauthorized immigrant population in ACS | 1,210,000 |
| f. Estimated foreign-born population, January 1, 2014 (a.+b.+c.+d.+e.) | 35,860,000 |
| 2) Legally resident population | |
| g. LPR, refugee, and asylee flow January 1, 1980-December 31, 2013. | 28,610,000 |
| h. Mortality 1980–2013 | 2,200,000 |
| i. Emigration 1980–2013 | 4,390,000 |
| j. LPR, refugee, and asylee resident population, January 1, 2014 (ghi.) | 22,020,000 |
| k. Nonimmigrant population on January 1, 2014 | 1,730,000 |
| I. Estimated legally resident population, January 1, 2014 (j.+k.) | 23,740,000 |
| 3) Unauthorized immigrant population | |
| m. Estimated resident unauthorized immigrant population, January 1, 2014 (fl.). | 12,120,000 |

Detail may not sum to totals because of rounding. Source: U.S. Department of Homeland Security.

For the legally resident population, the starting point was the flow of 28.6 million LPRs, refugees, and asylees during 1980–2013. By January 2014, the 28.6 million had been reduced by 6.6 million to 22.0 million due to mortality (2.2 million) and emigration (4.4 million). The addition of the nonimmigrant population, estimated at 1.7 million, resulted in a total estimated legally resident population of 23.7 million on January 1, 2014. Subtracting the 23.7 million legally resident immigrants and nonimmigrants from the total 35.9 million foreign-born population that entered the United States during 1980–2013 yields the final estimated unauthorized population of 12.1 million on January 1, 2014.

Estimates by Region and Country of Birth

An estimated 9.1 million (75 percent) of the total 12.1 million unauthorized immigrants living in the United States in 2014 were from North America, including Canada, Mexico, the Caribbean, and Central America (see Figure 5). The next leading regions of origin were Asia (1.7 million) and South America (0.8 million). The relative proportions by region or country of origin were largely unchanged from the population peak in 2007.

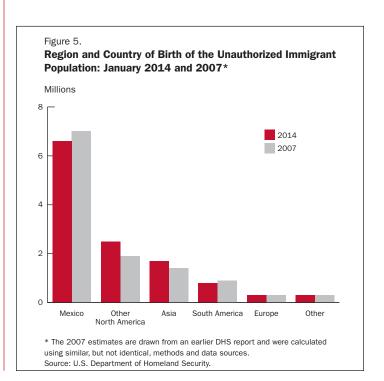
Mexico continued to be the leading source country of unauthorized immigration to the United States, though the population size and share of the total have both declined since the peak in 2007 (see Table 3). There were 6.6 million unauthorized immigrants from Mexico in 2014, representing 55 percent of the unauthorized population, compared to 7.0 million representing 59 percent in 2007. The next leading source countries were El Salvador (700,000), Guatemala (640,000), India (430,000), Honduras (400,000), and the Philippines (360,000). The 10 leading countries of origin accounted for 83 percent of the unauthorized immigrant population in 2014. Among the top 10 countries, the largest percentage increases since 2007 were for India (90 percent), the

Dominican Republic (79 percent), and Vietnam (64 percent). The unauthorized immigrant populations from Northern Triangle countries also increased: Honduras increased by 44 percent, El Salvador by 30 percent, and Guatemala by 27 percent.

Estimates by State of Residence

California remained the leading state of residence of the unauthorized immigrant population in 2014, with 2.9 million, nearly

⁸ Percentages and percent change were calculated prior to rounding.



25 percent of the total number (see Table 4). The next leading state was Texas with 1.9 million unauthorized residents, followed by Florida (760,000), New York (640,000), and Illinois (550,000). The 10 leading states represented 72 percent of the unauthorized population in 2014. The population in Arizona declined by 31 percent between 2007 and 2014, Florida declined by 21 percent, and Georgia declined by 13 percent. The population sizes increased by 12 percent in Texas and by 11 percent in Washington.

Estimates by Age and Sex

In 2014, 61 percent of unauthorized immigrants were ages 25 to 44 years, and 53 percent were male (see Figure 6 and Table 5). Males accounted for 57 percent of the unauthorized population in the 18 to 34 age group in 2014 while females accounted for 54 percent of the 45 and older age groups.

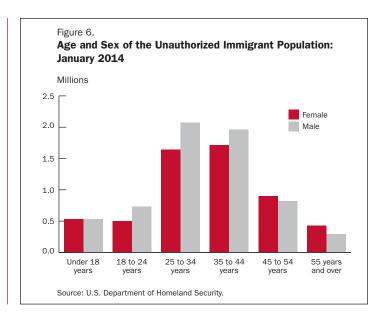


Table 3.

Country of Birth of the Unauthorized Immigrant Population: January 2014 and 2007*

| | Estimated population size in January | | | | | | |
|--------------------|--------------------------------------|---------|------------|---------|--|--|--|
| | 20 | 14 | 20 | 07 | | | |
| Country of birth | Number | Percent | Number | Percent | | | |
| All countries | 12,120,000 | 100 | 11,780,000 | 100 | | | |
| Mexico | 6,640,000 | 55 | 6,980,000 | 59 | | | |
| El Salvador | 700,000 | 6 | 540,000 | 5 | | | |
| Guatemala | 640,000 | 5 | 500,000 | 4 | | | |
| India | 430,000 | 4 | 220,000 | 2 | | | |
| Honduras | 400,000 | 3 | 280,000 | 2 | | | |
| Philippines | 360,000 | 3 | 290,000 | 2 | | | |
| China | 270,000 | 2 | 290,000 | 2 | | | |
| Korea | 250,000 | 2 | 230,000 | 2 | | | |
| Vietnam | 200,000 | 2 | 120,000 | 1 | | | |
| Dominican Republic | 180,000 | 1 | 100,000 | 1 | | | |
| Other countries | 2,050,000 | 17 | 2,220,000 | 19 | | | |

Detail may not sum to totals because of rounding.

Table 4.

State of Residence of the Unauthorized Immigrant Population: January 2014 and 2007*

| | Estimated population size in January | | | | | | |
|--------------------|--------------------------------------|---------|------------|---------|--|--|--|
| | 20 | 14 | 2007 | | | | |
| State of residence | Number | Percent | Number | Percent | | | |
| All states | 12,120,000 | 100 | 11,780,000 | 100 | | | |
| California | 2,900,000 | 24 | 2,840,000 | 24 | | | |
| Texas | 1,920,000 | 16 | 1,710,000 | 14 | | | |
| Florida | 760,000 | 6 | 960,000 | 8 | | | |
| New York | 640,000 | 5 | 640,000 | 5 | | | |
| Illinois | 550,000 | 5 | 560,000 | 5 | | | |
| New Jersey | 480,000 | 4 | 470,000 | 4 | | | |
| Georgia | 430,000 | 4 | 490,000 | 4 | | | |
| North Carolina | 400,000 | 3 | 380,000 | 3 | | | |
| Arizona | 370,000 | 3 | 530,000 | 5 | | | |
| Washington | 290,000 | 2 | 260,000 | 2 | | | |
| Other states | 3,370,000 | 28 | 2,940,000 | 25 | | | |

Detail may not sum to totals because of rounding.

^{*} The 2007 estimates were drawn from an earlier DHS report and were calculated using similar, but not identical, methods and data sources. Source: U.S. Department of Homeland Security.

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Table 5.

Age by Sex of the Unauthorized Immigrant Population: January 2014

| | Tot | tal | Ma | ale | Female | | |
|-------------------|------------|---------|-----------|---------|-----------|---------|--|
| Age | Number | Percent | Number | Percent | Number | Percent | |
| All ages | 12,120,000 | 100 | 6,410,000 | 100 | 5,710,000 | 100 | |
| Under 18 years | 1,060,000 | 9 | 530,000 | 8 | 530,000 | 9 | |
| 18 to 24 years | 1,240,000 | 10 | 730,000 | 11 | 500,000 | 9 | |
| 25 to 34 years | 3,710,000 | 31 | 2,070,000 | 32 | 1,640,000 | 29 | |
| 35 to 44 years | 3,670,000 | 30 | 1,960,000 | 31 | 1,710,000 | 30 | |
| 45 to 54 years | 1,720,000 | 14 | 820,000 | 13 | 900,000 | 16 | |
| 55 years and over | 720,000 | 6 | 290,000 | 5 | 430,000 | 7 | |

Detail may not sum to totals because of rounding. Source: U.S. Department of Homeland Security.

APPENDIX 1

Components for Estimating the Unauthorized Immigrant Population

The material below describes how the components for the total foreign-born and legally resident populations were estimated. The unauthorized population estimate is the residual when the legally resident population is subtracted from the total foreign-born population. Note that the labels for each component correspond with the entries in Table 2.

1) Foreign-born population

a. Foreign-born population, entered 1980-2013

The estimated total foreign-born population that entered in 1980 to 2013 was obtained from the ACS's FactFinder. FactFinder is the Census-maintained online data portal for obtaining ACS estimates from the full sample for a particular year. Data on the distribution of the foreign born by country of origin, state of residence, year of entry, age, and sex were obtained from the 2013 Public Use Microdata Sample (PUMS). The overall FactFinder estimate for the total foreign-born population entering in the post-1979 period was reduced to remove PUMS estimates of the post-1979 Cuban-born population. Further, a three-year moving average was applied to PUMS data for year of entry to reduce heaping effects.

b. Shift in reference date to January 1, 2014

The 2013 ACS estimates of the foreign-born population are benchmarked to the middle of 2013 and therefore do not fully count the part of the population that arrived in 2013. For example, the 2013 ACS estimated about 75 percent more foreign-born persons who entered the United States in 2012 than were estimated in the 2012 ACS. To fully estimate the population who entered in 2013, the 2013 ACS estimates of 2013 entrants were adjusted upward according to the historical average of increases observed in consecutive ACS vintages. Specifically, the 2013 ACS estimates of 2013 entrants were multiplied by 1.68, the average of: (1) the ratio of 2012 entrants in the 2013 vs. 2012 ACS

⁹The methods and assumptions underlying each component of the estimate are being reevaluated for 2015. Historic estimates may also be revised to provide a consistent time series.

vintages; (2) the ratio of 2011 entrants in the 2012 vs. 2011 ACS vintages; and (3) the ratio of 2010 entrants in the 2011 vs. 2010 ACS vintages. In effect, this shifts the reference date from mid-year 2013 to January 1, 2014.

c. Undercount of nonimmigrants in the ACS

Undercount refers to the number of persons who should have been counted in a survey or census, but were not. The undercount rate for nonimmigrants was assumed to be 10 percent. This rate was used in DHS unauthorized population estimates for 2000 and 2005–2012 (U.S. Department of Homeland Security, 2003; Baker and Rytina, 2013).

d. Undercount of LPRs, refugees, and asylees in the ACS

The undercount rate for LPRs, refugees, and asylees in the ACS was assumed to be 2.5 percent. This was the same rate used in DHS estimates for 2000 and 2005–2012 (U.S. Department of Homeland Security, 2003; Baker and Rytina, 2013).

e. Undercount of unauthorized immigrants in the ACS

The undercount rate for unauthorized immigrants in the ACS was assumed to be 10 percent. This was the same rate used in previous DHS estimates for 2000 and 2005–2012 (U.S. Department of Homeland Security, 2003; Baker and Rytina, 2013).

f. Estimated foreign-born population, January 1, 2014

The sum of 1a. through 1e. (above) is the estimated foreign-born population on January 1, 2014, that entered the United States during the 1980–2013 period.

2) Legally Resident Population

g. LPR, refugee, and asylee flow, entered 1980-2013

The 1980–2013 flow was calculated separately for LPRs, refugees, and asylees using DHS administrative data. LPRs consist of two groups: new arrivals and those who have adjusted status. New arrivals include all persons with immigrant visas issued by the Department of State who were admitted at a U.S. port of entry. For new arrival LPRs, the date of entry into the United States is the same as the date of approval for LPR status. For LPRs adjusting status, year of entry was assumed to be the year of last entry between 1980 and 2013 prior to adjustment.

Refugees and asylees, as defined in the legally resident flow, had not adjusted to LPR status as of January 1, 2014. The refugee and asylee flow was estimated based on the average time spent in the status before adjustment to LPR status—2.2 years for refugees and 4.2 years for asylees adjusting in 2013. The refugee and asylee portion of the legally resident flow therefore included refugees who arrived in the United States during the 2.2 years prior to 2014 and persons granted asylum during the 4.2 years preceding 2014.

h. Mortality of legally resident flow 1980-2013

Data are not collected on the mortality of legally resident immigrants. The population was survived forward in time (from the year in which LPR status was obtained to 2014) using mortality rates by age and sex from 1999–2001 U.S. Census life tables (Arias et al., 2008).

i. Emigration of legally resident flow 1980-2013

Emigration is a major component of immigrant population change. In the absence of data that directly measure emigration from the United States, researchers have developed indirect estimates based largely on Census data. For this report, annual emigration rates were calculated from estimates of emigration of the foreign-born population based on 1980 and 1990 Census data (Ahmed and Robinson, 1994). Refugees and asylees, with little likelihood of returning to their country of origin, were assumed not to emigrate. The effective rate of emigration for legally resident immigrants granted LPR status in 1993–1994 was about 20 percent during the twenty-year period through January 2014 (about 0.9 percent per year). For the entire LPR population that entered in 1980–2013, the average emigration rate was about 1.1 percent per year.

APPENDIX 2

Country of Birth and State of Residence of the Unauthorized Immigrant Population: January 2000 and 2005–2014

| Country of birth | | | | | | | | | | | | |
|------------------------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| and state of residence | 2000 | 2005 | 2006* | 2007 | 2008 | 2009 | 2010 | 2010** | 2011 | 2012 | 2013 | 2014 |
| Country of birth | | | | | | | | | | | | |
| Total | 8,460,000 | 10,490,000 | 11,310,000 | 11,780,000 | 11,600,000 | 10,750,000 | 10,790,000 | 11,590,000 | 11,510,000 | 11,430,000 | 11,900,000 | 12,120,000 |
| Mexico | 4,680,000 | 5,970,000 | 6,570,000 | 6,980,000 | 7,030,000 | 6,650,000 | 6,640,000 | 6,830,000 | 6,800,000 | 6,720,000 | 6,650,000 | 6,640,000 |
| El Salvador | 430,000 | 470,000 | 510,000 | 540,000 | 570,000 | 530,000 | 620,000 | 670,000 | 660,000 | 690,000 | 710,000 | 700,000 |
| Guatemala | 290,000 | 370,000 | 430,000 | 500,000 | 430,000 | 480,000 | 520,000 | 520,000 | 520,000 | 560,000 | 610,000 | 640,000 |
| India | 120,000 | 280,000 | 210,000 | 220,000 | 160,000 | 200,000 | 200,000 | 270,000 | 240,000 | 260,000 | 360,000 | 430,000 |
| Honduras | 160,000 | 180,000 | 280,000 | 280,000 | 300,000 | 320,000 | 330,000 | 380,000 | 380,000 | 360,000 | 400,000 | 400,000 |
| Philippines | 200,000 | 210,000 | 280,000 | 290,000 | 300,000 | 270,000 | 280,000 | 290,000 | 270,000 | 310,000 | 370,000 | 360,000 |
| China | 190,000 | 230,000 | 170,000 | 290,000 | 220,000 | 120,000 | 130,000 | 300,000 | 280,000 | 210,000 | 230,000 | 270,000 |
| Korea | 180,000 | 210,000 | 230,000 | 230,000 | 240,000 | 200,000 | 170,000 | 220,000 | 230,000 | 230,000 | 270,000 | 250,000 |
| Vietnam | 160,000 | 150,000 | 150,000 | 120,000 | 80,000 | 110,000 | 110,000 | 190,000 | 170,000 | 160,000 | 180,000 | 200,000 |
| Dominican Republic | *** | 120,000 | 80,000 | 100,000 | 80,000 | 70,000 | 70,000 | 130,000 | 110,000 | 80,000 | 140,000 | 180,000 |
| Other countries | 2,050,000 | 2,300,000 | 2,400,000 | 2,220,000 | 2,190,000 | 1,800,000 | 1,730,000 | 1,830,000 | 1,670,000 | 1,850,000 | 1,960,000 | 2,050,000 |
| State of residence | | | | | | | | | | | | |
| Total | 8,460,000 | 10,490,000 | 11,310,000 | 11,780,000 | 11,600,000 | 10,750,000 | 10,790,000 | 11,590,000 | 11,510,000 | 11,430,000 | 11,900,000 | 12,120,000 |
| California | 2,510,000 | 2,770,000 | 2,790,000 | 2,840,000 | 2,850,000 | 2,600,000 | 2,570,000 | 2,910,000 | 2,830,000 | 2,820,000 | 2,950,000 | 2,900,000 |
| Texas | 1,090,000 | 1,360,000 | 1,620,000 | 1,710,000 | 1,680,000 | 1,680,000 | 1,770,000 | 1,780,000 | 1,790,000 | 1,830,000 | 1,820,000 | 1,920,000 |
| Florida | 800,000 | 850,000 | 960,000 | 960,000 | 840,000 | 720,000 | 760,000 | 730,000 | 740,000 | 730,000 | 790,000 | 760,000 |
| New York | 540,000 | 560,000 | 510,000 | 640,000 | 640,000 | 550,000 | 460,000 | 690,000 | 630,000 | 580,000 | 690,000 | 640,000 |
| Illinois | 440,000 | 520,000 | 530,000 | 560,000 | 550,000 | 540,000 | 490,000 | 550,000 | 550,000 | 540,000 | 550,000 | 550,000 |
| New Jersey | 350,000 | 380,000 | 420,000 | 470,000 | 400,000 | 360,000 | 370,000 | 440,000 | 420,000 | 430,000 | 440,000 | 480,000 |
| Georgia | 220,000 | 470,000 | 490,000 | 490,000 | 460,000 | 480,000 | 460,000 | 430,000 | 440,000 | 400,000 | 410,000 | 430,000 |
| North Carolina | 260,000 | 360,000 | 360,000 | 380,000 | 380,000 | 370,000 | 390,000 | 390,000 | 400,000 | 360,000 | 410,000 | 400,000 |
| Arizona | 330,000 | 480,000 | 490,000 | 530,000 | 560,000 | 460,000 | 470,000 | 350,000 | 360,000 | 350,000 | 370,000 | 370,000 |
| Washington | 170,000 | 240,000 | 280,000 | 260,000 | 260,000 | 230,000 | 200,000 | 260,000 | 260,000 | 270,000 | 260,000 | 290,000 |
| Other states | 1,750,000 | 2,510,000 | 2,860,000 | 2,940,000 | 2,980,000 | 2,760,000 | 2,840,000 | 3,040,000 | 3,100,000 | 3,110,000 | 3,170,000 | 3,370,000 |

^{*}Revised as noted in the 1/1/2007 unauthorized estimates report published in September 2008.

Detail may not sum to totals because of rounding. Source: U.S. Department of Homeland Security.

^{**}Revised to be consistent with estimates derived from the 2010 Census.

^{***}Estimate not available for January 2000.

j. LPR, refugee, and asylee population on January 1, 2014

Subtracting mortality (2h.) and emigration (2i.) from the LPR, refugee, and asylee flow during 1980–2013 (2g.) results in the estimated LPR, refugee, and asylee resident population on January 1, 2014.

k. Nonimmigrant population on January 1, 2014

The number of nonimmigrants living in the United States on January 1, 2014, was estimated by estimating days of presence between July 1, 2013, and June 30, 2014, and dividing the result by 365 (see Baker, 2016). The estimate was restricted to class of admission such as students, temporary workers, and exchange visitors where the length of stay typically exceeds two months. The estimate does not include border crossers or visitors for business or pleasure. Year of entry for the 2014 nonimmigrant population was based on the distribution of year of entry for nonimmigrants used in previous DHS unauthorized immigrant population estimates (U.S. Department of Homeland Security, 2003; Baker and Rytina, 2013).

l. Estimated legally resident immigrant population on January 1, 2014

Adding the population of LPRs, refugees, and asylees on January 1, 2014 (2j.) to the nonimmigrant population on the same date (2k.) results in the total estimated legally resident immigrant population in the United States on January 1, 2014.

3) Unauthorized immigrant population

m. Estimated unauthorized immigrant population on January 1, 2014

Subtracting the estimated legally resident immigrant population (2l.) from the total foreign-born population on January 1, 2014 (1f.) yields the estimate of the unauthorized immigrant population.

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