

Estimates of the Unauthorized Immigrant Population Residing in the United States: January 2010

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This report provides estimates of the size of the unauthorized immigrant population residing in the United States as of January 2010 by period of entry, region and country of origin, state of residence, age, and gender. The estimates were obtained using the “residual” methodology employed for estimates of the unauthorized population in 2009 (see Hoefler, Rytina, and Baker, 2010). The unauthorized resident population is the remainder or “residual” after estimates of the legally resident foreign-born population—legal permanent residents (LPRs), naturalized citizens, asylees, refugees, and nonimmigrants—are subtracted from estimates of the total foreign-born population. Data to estimate the legally resident population were obtained primarily from the Department of Homeland Security (DHS) while the American Community Survey (ACS) of the U.S. Census Bureau was the source for estimates of the total foreign-born population.

In summary, the number of unauthorized immigrants living in the United States in January 2010 was 10.8 million—the same as in January 2009—but down from 11.8 million in January 2007. Between 2000 and 2010, the unauthorized population grew by 27 percent. Of all unauthorized immigrants living in the United States in 2010, 39 percent entered in 2000 or later, and 62 percent were from Mexico.

DEFINITIONS

Legal Residents

The legally resident immigrant population as defined for these estimates includes all persons who were granted lawful permanent residence; granted asylee status; admitted as refugees; or admitted as nonimmigrants for a temporary stay in the United States and not required to leave by January 1, 2010. Nonimmigrant residents refer to certain aliens who were legally admitted temporarily to the United States for specified time periods such as students and temporary workers.

Unauthorized Residents

The unauthorized resident immigrant population is defined as all foreign-born non-citizens who are not legal residents. Most unauthorized residents either entered the United States without inspection or were admitted temporarily and stayed past the date they were

required to leave. Unauthorized immigrants applying for adjustment to lawful permanent resident status under the Immigration and Nationality Act (INA) are unauthorized until they have been granted LPR status, even though they may have been authorized to work. Persons who are beneficiaries of Temporary Protected Status (TPS)—an estimated several hundred thousand—are not technically unauthorized but were excluded from the legally resident immigrant population because data are unavailable in sufficient detail to estimate this population.

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, 2010, and 2) the legally resident population on the same date. The unauthorized population is equal to 1) minus 2). It was assumed that foreign-born residents who had entered the United States prior to 1980 were legally resident since most were eligible for legal permanent resident status.¹ Therefore, the starting point for the estimates was January 1, 1980. The steps involved in

¹ 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, persons who had resided continuously in the United States since prior to January 1, 1982 as unauthorized residents were eligible to adjust for LPR status under the Immigration Reform and Control Act (IRCA) of 1986.



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estimating the components of each population are shown in Appendix 1. Data on the foreign-born population that entered during 1980–2009 by country of birth, state of residence, year of entry, age, and gender were obtained from the 2009 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 million households in 2009 compared to 100,000 for the March 2010 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, gender, 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 of 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, gender, and class of admission were obtained from I-94 arrival-departure records in the TECS system of the U.S. Customs and Border Protection. Estimates of the unauthorized population were generated for the ten leading countries of birth and states of residence, age, and gender. The Cuban-born population living in the United States was excluded from the estimates since, according to immigration law, most Cubans are admitted or paroled into the United States and are eligible a year later to apply to adjust to LPR status.

Caution is recommended in interpreting changes in the size of the unauthorized population presented in this report. 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 (see Limitations below). Changes in the ACS, including revisions in the wording of the question on Hispanic origin in the 2008 ACS and measurement of net international migration (see U.S. Census Bureau, 2009) may have affected estimates of the unauthorized population beginning in 2009.

Limitations

Assumptions about undercount of the foreign-born population in the ACS and rates of emigration. The estimates are sensitive to the assumptions that are made about these components (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 not actual population counts.

Sampling error in the ACS. The 2009 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 1980–2009 period are subject to sampling variability. The estimated margin of error for the estimate of the foreign-born population in the 2009 ACS at the 90 percent confidence level is plus or minus approximately 149,000.

Accuracy of state of residence for the legally resident population. State of residence for legally resident 1980–2009 entrants is assumed to be the state of residence on the date the most recent status (e.g., refugee, LPR, or naturalized citizen) 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, 2010.

RESULTS

Overall Trend

The unauthorized immigrant population living in the United States stood at 10.8 million in January 2010, unchanged from a year earlier but 8 percent below the peak of 11.8 million in January 2007 (see Figure 1). Between 2000 and 2007, the unauthorized population increased by 3.3 million, equivalent to an average annual increase of 500,000 per year. The number of unauthorized residents then decreased to 11.6 million in 2008 and 10.8 million in 2009. The 1.0 million decline between 2007 and 2009, in the midst of the economic recession in the United States, was not likely due to sampling error. Changes in the ACS, e.g., revisions in the question on Hispanic origin in 2008 and measurement of net international migration, may have had an impact on the 2009 estimate and thus the magnitude of change between 2007 and 2009.

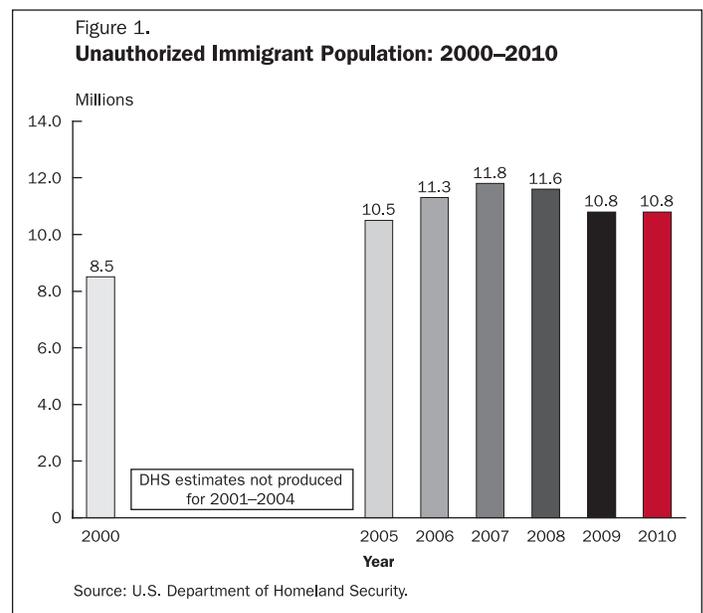


Table 1.**Period of Entry of the Unauthorized Immigrant Population: January 2010**

Period of entry	Estimated population January 2010	
	Number	Percent
All years	10,790,000	100
2005–2009	990,000	9
2000–2004	3,190,000	30
1995–1999	2,920,000	27
1990–1994	1,670,000	15
1985–1989	1,170,000	11
1980–1984	850,000	8

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

Trends in the unauthorized population reported by DHS are consistent with the most recent estimates by the Pew Hispanic Center. These estimates show 11.2 million unauthorized immigrants living in the United States in March 2010 and 11.1 million in March 2009 (Passel and Cohn, 2011).

The sensitivity of the estimates to assumptions about undercount of the foreign-born population and emigration is illustrated with several examples. Doubling the unauthorized immigrant undercount rate from 10 percent to 20 percent increases the estimated unauthorized population from 10.8 million to 12.1 million. By lowering or raising emigration rates 20 percent and holding all other assumptions constant, the estimated unauthorized immigrant population would range from 10.0 million to 11.6 million. Doubling the unauthorized immigrant undercount rate and lowering or raising emigration rates by 20 percent would expand the range of the estimated unauthorized immigrant population from 11.3 to 13.0 million.

Period of Entry

Of the 10.8 million unauthorized immigrants in 2010, 4.2 million (39 percent) had entered the United States on January 1, 2000 or later (see Table 1). An estimated 1.0 million (9 percent) came to the United States between 2005 and 2009 while 3.2 million (30 percent) came during 2000 to 2004. Forty-three percent came to live in the United States during the 1990s, and 19 percent entered during the 1980s.

Components of the Unauthorized Immigrant Population in 2010

The size of each component of the unauthorized immigrant population estimates for 2010 is displayed in Table 2. See Appendix 1 for a detailed explanation of each entry in Table 2. For the foreign-born population, the starting point was the estimated 29.8 million foreign-born residents in the 2009 ACS that entered the United States during 1980–2009. This population was increased by 2.2 million, or 7 percent, by adjustments for the shift in the reference date from mid-year 2009 to January 1, 2010 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 nearly 1.1 million and represents 50 percent of all adjustments to the foreign-born population.

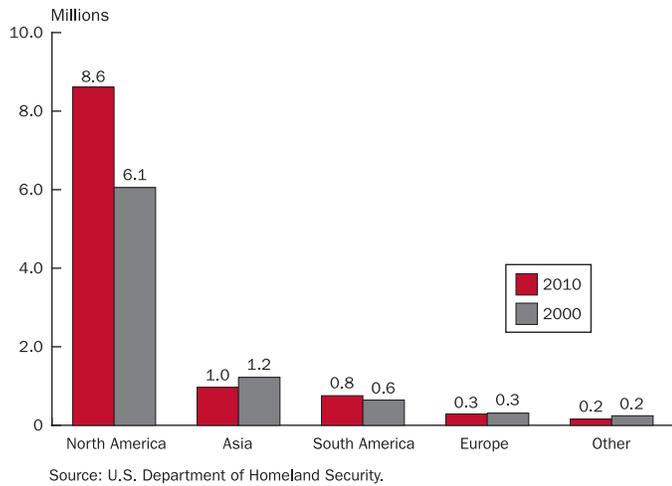
For the legally resident population, the starting point was the flow of 24.6 million LPRs, refugees, and asylees during 1980–2009. By January 2010, the 24.6 million had been reduced by 5.3 million to 19.4 million due to mortality and emigration. Emigration accounted for 3.6 million, or 68 percent, of the 5.3 million. The addition of the nonimmigrant population, estimated at 1.8 million, resulted in a total estimated legally resident immigrant population of 21.2 million on January 1, 2010. Subtracting the 21.2 million legally resident immigrants from the total 32.0 million

Table 2.**Components of the Unauthorized Immigrant Population: January 2010**

	2010
1) Foreign-born population	
a. Foreign-born population, entered 1980–2009, 2009 ACS	29,800,000
b. Adjustment for shift in reference date from July 1, 2009 to January 1, 2010	410,000
c. Undercount of nonimmigrants in ACS	180,000
d. Undercount of other legally resident immigrants (LPRs, recent refugee/asylee arrivals) in ACS	480,000
e. Undercount of unauthorized immigrant population in ACS	1,080,000
f. Estimated foreign-born population, January 1, 2010 (a.+b.+c.+d.+e.)	31,950,000
2) Legally resident population	
g. LPR, refugee, and asylee flow January 1, 1980–December 31, 2009	24,620,000
h. Mortality 1980–2009	1,670,000
i. Emigration 1980–2009	3,590,000
j. LPR, refugee, and asylee resident population, January 1, 2010 (g.–h.–i.)	19,360,000
k. Nonimmigrant population on January 1, 2010	1,800,000
l. Estimated legally resident population, January 1, 2010 (j.+k.)	21,160,000
3) Unauthorized immigrant population	
m. Estimated resident unauthorized immigrant population, January 1, 2010 (f.–l.)	10,790,000

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

Figure 2.
**Region of Birth of the Unauthorized Immigrant Population:
 January 2010 and 2000**



foreign-born population on January 1, 2010 that entered the United States during 1980–2009 yields the final estimated unauthorized population of 10.8 million.

Estimates by Region and Country of Birth

An estimated 8.6 million (80 percent) of the total 10.8 million unauthorized immigrants living in the United States in 2010 were from the North America region, including Canada, Mexico, the Caribbean, and Central America (see Figure 2). The next leading regions of origin were Asia (1.0 million) and South America (0.8 million). Between 2000 and 2010, the greatest increase in the unauthorized population occurred among natives of the North American region (2.5 million). The greatest decline occurred among natives of Asian countries (0.2 million).

Mexico continued to be the leading source country of unauthorized immigration to the United States (see Table 3). There were 6.6 million unauthorized immigrants from Mexico in 2010, representing 62 percent of the unauthorized population. The next leading source countries for unauthorized immigrants in 2010 were El Salvador (620,000), Guatemala (520,000), Honduras (330,000), and the

Table 3.
Country of Birth of the Unauthorized Immigrant Population: January 2000 and 2005-2010

Country of birth	Estimated population in January						
	2000	2005	2006*	2007	2008	2009	2010
All countries	8,460,000	10,490,000	11,310,000	11,780,000	11,600,000	10,750,000	10,790,000
Mexico	4,680,000	5,970,000	6,570,000	6,980,000	7,030,000	6,650,000	6,640,000
El Salvador	430,000	470,000	510,000	540,000	570,000	530,000	620,000
Guatemala	290,000	370,000	430,000	500,000	430,000	480,000	520,000
Honduras	160,000	180,000	280,000	280,000	300,000	320,000	330,000
Philippines	200,000	210,000	280,000	290,000	300,000	270,000	280,000
India	120,000	280,000	210,000	220,000	160,000	200,000	200,000
Ecuador	110,000	120,000	150,000	160,000	170,000	170,000	180,000
Brazil	100,000	170,000	210,000	190,000	180,000	150,000	180,000
Korea	180,000	210,000	230,000	230,000	240,000	200,000	170,000
China	190,000	230,000	170,000	290,000	220,000	120,000	130,000
Other countries	2,000,000	2,280,000	2,290,000	2,100,000	2,000,000	1,650,000	1,550,000

Detail may not sum to totals because of rounding.

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

Source: U.S. Department of Homeland Security.

Table 4.
State of Residence of the Unauthorized Immigrant Population: January 2000 and 2005-2010

State of residence	Estimated population in January						
	2000	2005	2006*	2007	2008	2009	2010
All states	8,460,000	10,490,000	11,310,000	11,780,000	11,600,000	10,750,000	10,790,000
California	2,510,000	2,770,000	2,790,000	2,840,000	2,850,000	2,600,000	2,570,000
Texas	1,090,000	1,360,000	1,620,000	1,710,000	1,680,000	1,680,000	1,770,000
Florida	800,000	850,000	960,000	960,000	840,000	720,000	760,000
Illinois	440,000	520,000	530,000	560,000	550,000	540,000	490,000
Arizona	330,000	480,000	490,000	530,000	560,000	460,000	470,000
Georgia	220,000	470,000	490,000	490,000	460,000	480,000	460,000
New York	540,000	560,000	510,000	640,000	640,000	550,000	460,000
North Carolina	260,000	360,000	360,000	380,000	380,000	370,000	390,000
New Jersey	350,000	380,000	420,000	470,000	400,000	360,000	370,000
Nevada	170,000	240,000	230,000	260,000	280,000	260,000	260,000
Other states	1,760,000	2,510,000	2,900,000	2,950,000	2,950,000	2,730,000	2,790,000

Detail may not sum to totals because of rounding.

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

Source: U.S. Department of Homeland Security.

Philippines (280,000). The ten leading countries of origin represented 86 percent of the unauthorized immigrant population in 2010.

The number of Mexican-born unauthorized immigrants increased by 2.3 million between 2000 and 2007 and decreased by 340,000 between 2007 and 2010. Changes in the unauthorized population were much smaller during either period for other leading source countries.

Estimates by State of Residence

California remained the leading state of residence of the unauthorized immigrant population in 2010, with 2.6 million (see Table 4). The next leading state was Texas with 1.8 million unauthorized residents, followed by Florida with (760,000). California's share of the national total was 24 percent in 2010 compared to 30 percent in 2000.

Between 2000 and 2007, the unauthorized population increased by 620,000 in Texas, 320,000 in California, and 270,000 in Georgia. From 2007 to 2010, California's unauthorized population decreased by 260,000; none of the other leading states of residence showed a sizable change.

Estimates by Age and Gender

In 2010, 63 percent of unauthorized immigrants were ages 25 to 44 years, and 57 percent were male (see Figure 3 and Table 5). Males accounted for 62 percent of the unauthorized population in the 18 to 34 age group in 2010 while females accounted for 53 percent of the 45 and older age groups.

NEXT STEPS

The estimates presented here will be updated periodically based on annual data of the foreign-born population collected in the American Community Survey and on the estimated lawfully resident foreign-born population derived from various administrative data sources.

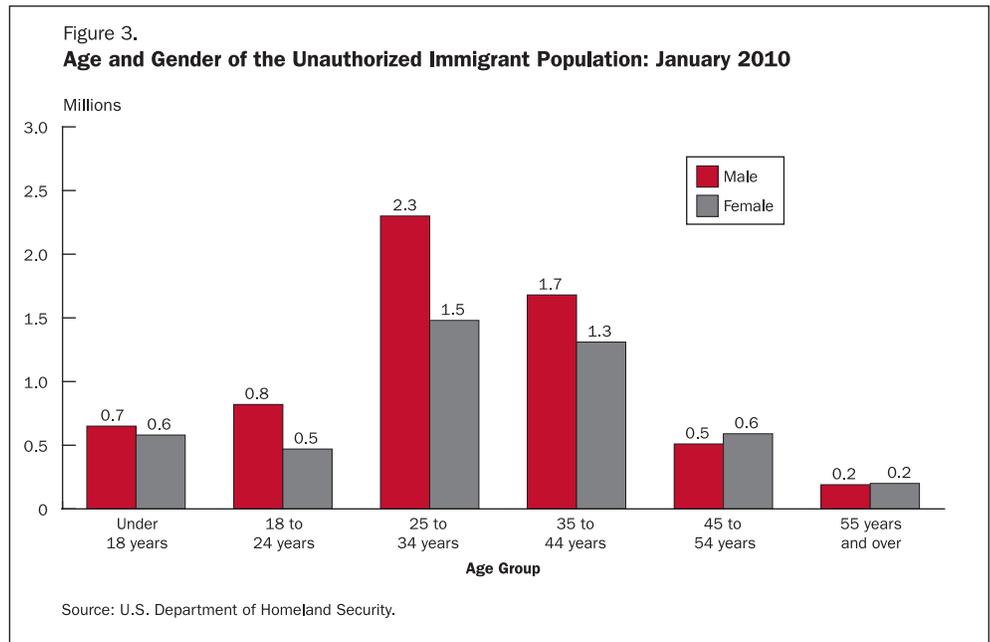


Table 5.
Age and Gender of the Unauthorized Immigrant Population: January 2010

Age	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
All ages	10,790,000	100	6,150,000	100	4,640,000	100
Under 18 years	1,230,000	11	650,000	11	580,000	13
18 to 24 years	1,290,000	12	820,000	13	470,000	10
25 to 34 years	3,780,000	35	2,300,000	37	1,480,000	32
35 to 44 years	2,990,000	28	1,680,000	27	1,310,000	28
45 to 54 years	1,100,000	10	510,000	8	590,000	13
55 years and over	390,000	4	190,000	3	200,000	4

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

APPENDIX 1

Components for Estimating the Unauthorized Resident Population

The material below describes how each component was estimated. Note that the labels for each component correspond with the entries in Table 2.

1) Foreign-born population

a. Foreign-born population, entered 1980–2009

The estimated total foreign-born population that entered between 1980–2009 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 gender were obtained from the 2009 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, 2010

The reference date for the 2009 ACS, the most recently available ACS data, was shifted from mid-year 2009 to January 1, 2010 by multiplying the population of 2009 entrants by 1.68, which is the average of three ratios: the ratio of the estimated population in the 2009 ACS that entered the United States during 2008 compared to the population in the 2008 ACS that entered in 2008 and the comparable ratios for the 2007 entrants in the 2007 and 2008 ACS surveys and the 2006 entrants in the 2006 and 2007 ACS surveys. Previous DHS estimates used an average of five ratios; however, the average of three ratios better reflects recent population growth in the second half of the year.

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. A rate of 10 percent was used to estimate the nonimmigrant undercount. This rate was used in previous DHS unauthorized population estimates for 2000 and 2005–2009 (Department of Homeland Security, 2003; Hoefler et al., 2010).

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 2005–2009 (Department of Homeland Security, 2003; Hoefler et al., 2010).

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 2005–2009 (Department of Homeland Security, 2003; Hoefler et al., 2010).

f. Estimated foreign-born population, January 1, 2010

The sum of 1a. through 1e. (above) is the estimated foreign-born population on January 1, 2010 that entered the United States during the 1980–2009 period.

2) Legally resident population

g. Legal permanent resident (LPR), refugee, and asylee flow, entered 1980–2009

The 1980–2009 flow was calculated separately for LPRs, refugees, and asylees. LPRs consist of two groups: new arrivals and those who have adjusted status. New arrivals include all persons with immigrant visas issued by the State Department 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 2009 prior to adjustment. Year of entry was imputed when last entry date was missing (affecting approximately 40 percent of adjustment of status records during 1998–2005) using category of admission, year of LPR adjustment, and known last entry date.

Refugees and asylees included in the legally resident flow had not adjusted to LPR status as of January 1, 2010. The refugee and asylee flow was estimated based on the average time spent in the status before adjustment to LPR status—2.5 years for refugees and 5.2 years for asylees adjusting in 2009. The refugee and asylee portion of the legally resident flow therefore included refugees who arrived in the United States during the 2.5 years prior to 2010 and persons granted asylum during the 5.2 years preceding 2010.

h. Mortality of legally resident flow 1980–2009

Data are not collected on the mortality of legally resident immigrants. LPRs in the 1980–2009 flow, who entered the U.S. on average during the mid 1990s, were survived to 2010 by gender and age (taking into account subsequent naturalization) using mortality rates by age and sex from 1989–1991 life tables (National Center for Health Statistics, 1997).

i. Emigration of legally resident flow 1980–2009

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 by year of entry (year of naturalization if the immigrant subsequently became a U.S. citizen) were calculated from estimates of emigration of the foreign-born population based on 1980 and 1990 Census data (Ahmed and Robinson, 1994). In addition, refugees and asylees, with little likelihood of returning to their country of origin, were assumed not to emigrate. The overall effective rate of emigration for legally resident immigrants in 2010 was about 21 percent after twenty years. The overall effective rate of emigration for legally resident immigrants through 2010 was about 1 percent per year, after accounting for mortality (see Appendix 1, section h).

j. LPR, refugee, and asylee population on January 1, 2010

Subtracting mortality (2h.) and emigration (2i.) from the LPR, refugee, and asylee flow during 1980-2009 (2g.) results in the estimated LPR, refugee, and asylee resident population on January 1, 2010.

k. Nonimmigrant population on January 1, 2010

The number of nonimmigrants living in the United States on January 1, 2010 was estimated by counting days of presence between July 1, 2009 and June 30, 2010 and dividing the result by 365. The estimate was restricted to classes 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 2010 nonimmigrant population was based on the distribution of year of entry for nonimmigrants used in previous DHS unauthorized immigrant population estimates (Department of Homeland Security, 2003; Hoefler et al., 2010).

l. Estimated legally resident immigrant population on January 1, 2010

Adding the population of LPRs, refugees, and asylees on January 1, 2010 (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, 2010.

3) Unauthorized immigrant population

m. Estimated unauthorized immigrant population on January 1, 2010

Subtracting the estimated legally resident immigrant population (2l.) from the total foreign-born population on January 1, 2010 (1f.) yields the estimate of the unauthorized immigrant population.

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