

Estimates of the Unauthorized Immigrant Population Residing in the United States: January 2007

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This report provides estimates of the number of unauthorized immigrants residing in the United States as of January 2007 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 2005 and 2006 (see Hoefler, Rytina and Campbell, 2006; 2007). The unauthorized resident population is the remainder or “residual” after estimates of the legally resident foreign-born population – legal permanent residents (LPRs), 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, an estimated 11.8 million unauthorized immigrants were living in the United States in January 2007 compared to 8.5 million in 2000 (Hoefler, Rytina, and Campbell, 2006). Between 2000 and 2007, the unauthorized population increased 3.3 million; the annual average increase during this period was 470,000. Nearly 4.2 million (35 percent) of the total 11.8 million unauthorized residents in 2007 had entered in 2000 or later. An estimated 7.0 million (59 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, 2007. 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. Unauthorized residents refer to foreign-born persons who 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 residence under the Immigration and Nationality Act (INA) Section 245(i) are unauthorized until they have been granted LPR status, even though they may have been authorized to work. Similarly, unauthorized immigrants who have applied for asylum or Temporary Protected Status (TPS) are considered to be unauthorized residents. Persons who are beneficiaries of TPS are technically not 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, 2007, 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



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permanent resident status.¹ 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 1980-2006 by country of birth, state of residence, year of entry, age and gender were obtained from the 2006 American Community Survey (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 2006 compared to 100,000 for the March 2007 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, 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 through removal proceedings. Data on nonimmigrant admissions by country of citizenship, state of residence, age, and class of admission were obtained from I-94 arrival-departure records in the Treasury Enforcement Communications System (TECS) of U.S. Customs and Border Protection.

The estimates were generated by country of birth and state of residence for the unauthorized population living in the 50 States and the District of Columbia. The Cuban-born population living in the United States was excluded from the estimates since, according to immigration law, Cubans living in the United States more than a year are eligible to apply to adjust to LPR status.

Changes in the size of the unauthorized population presented in this report rely on the annual average change between 2000 and 2007. Annual estimates of the unauthorized immigrant population are subject to sampling error and a considerable amount of non-sampling error because of uncertainty in some of the assumptions required for estimation. Calculating annual change over a period of years smoothes the fluctuations that may occur in adjacent years.

Limitations

Assumptions about undercount of the foreign-born population in the ACS and rates of emigration. These are the primary sources of error in these estimates. 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 counts and length of visit by class of admission and not actual population counts. Length of visit, which is calculated by matching arrival and departure records, is subject to more error than admissions data.

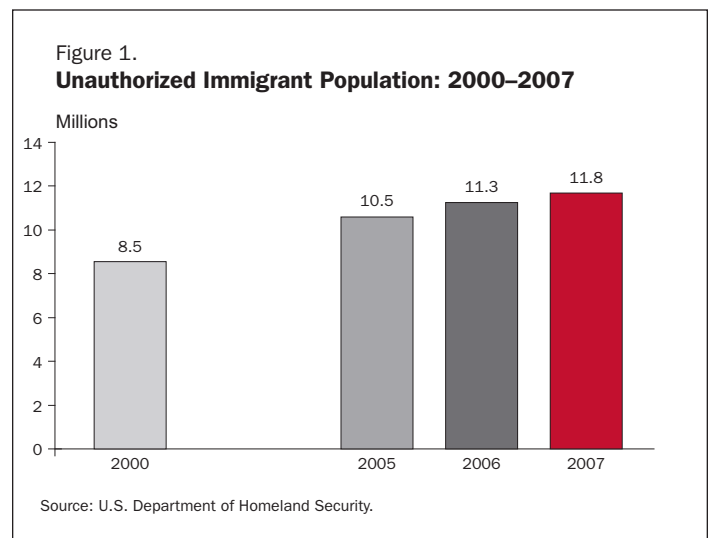
Sampling error in the ACS. The 2006 ACS data are based on a sample of the U.S. population. Thus the estimates of the total foreign-born population that moved to the United States in the 1980-2006 period are subject to sampling variability. The estimated margin of error for the estimate of the foreign-born population in the 2006 ACS at the 90 percent confidence level is plus or minus approximately 125,000.

Accuracy of state of residence for the legally resident population. State of residence for legally resident 1980-2006 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, 2007.

RESULTS

Overall Trend

DHS estimates that the unauthorized immigrant population in the United States increased from 8.5 million in January 2000 to 10.5 million in January 2005, 11.3 million in January 2006², and 11.8 million in January 2007 (see Figure 1). The annual average net increase in the unauthorized population during this 7-year period was 470,000.



¹ The Registry Provision of the Immigration and Nationality Act (INA) allows persons who have been in the United States since January 1, 1972 to apply for LPR status. Additionally, persons who had lived in the United States before 1982 as unauthorized residents were eligible to adjust to LPR status under the Immigration Reform and Control Act (IRCA) of 1986.

² Revised from 11.5 million due to errors in data used for the nonimmigrant population estimate.

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

Period of entry	Estimated population January 2007	
	Number	Percent
All years	11,780,000	100
2005-2006	890,000	8
2000-2004	3,270,000	28
1995-1999	3,470,000	29
1990-1994	1,880,000	16
1985-1989	1,300,000	11
1980-1984	960,000	8

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

Nearly 4.2 million (35 percent) unauthorized immigrants in 2007 had entered the United States since January 1, 2000 (see Table 1). An estimated 890,000 (8 percent) came to the United States in 2005 or 2006 while 3.3 million (28 percent) came during 2000 to 2004. Forty-five percent came to live in the United States during the 1990s, and 19 percent entered during the 1980s.

The estimated number of unauthorized immigrants as of January 2007 is consistent with other unauthorized population estimates. The Pew Hispanic Center estimated the unauthorized population at 11.1 million in March 2005 and projected it would be 11.5 to 12 million by March 2006 (Passel, 2006).

The sensitivity of the estimates to assumptions about undercount of the foreign-born population and emigration – two components with a major impact on the estimates – is illustrated with several examples. Doubling the unauthorized immigrant undercount rate from 10 percent to 20 percent increases the estimated unauthorized population from 11.8 million to 13.3 million. By lowering or raising emigration rates 20 percent and holding all other assumptions constant, the estimated unauthorized

immigrant population would range from 11.1 million to 12.4 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 to 12.5-14.0 million.

Components of the Unauthorized Immigrant Population in 2007

The size of each component of the unauthorized immigrant population estimates for 2007 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 28.3 million foreign-born residents in the 2006 ACS that entered the United States during 1980-2006. This population was increased by 2.4 million, or 8 percent, by adjustments for the shift in the reference date from mid-year 2006 to January 1, 2007 and the addition of undercounts for the populations of nonimmigrants, other legally resident immigrants, and unauthorized immigrants. The estimated undercount of the unauthorized immigrant population in the ACS was nearly 1.2 million and represents 49 percent of all adjustments to the foreign-born population.

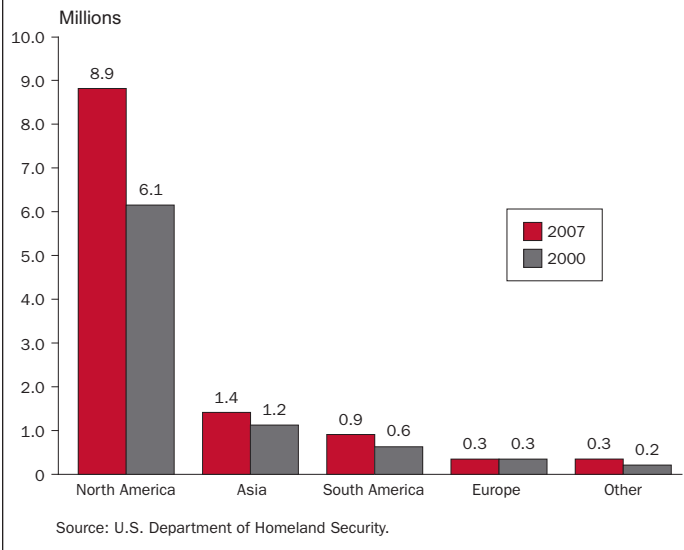
For the legally resident population, the starting point was the flow of 21.4 million LPRs, refugees and asylees during 1980-2006. By January 2007, the 21.4 million had been reduced by 4.3 million to 17.2 million due to mortality and emigration. Emigration accounted for 3.0 million, or 71 percent, of the 4.3 million. The addition of the nonimmigrant population, estimated at 1.7 million, resulted in a total estimated legally resident immigrant population of 18.9 million on January 1, 2007. Subtracting the 18.9 million legally resident immigrants from the total 30.7 million foreign-born population on January 1, 2007 that entered the United States during 1980-2006 yields the final estimated unauthorized population of 11.8 million.

Table 2.**Components of the Unauthorized Immigrant Population: January 2007**

	2007
1) Foreign-born population	
a. Foreign-born population, entered 1980-2006, 2006 ACS	28,260,000
b. Adjustment for shift in reference date from July 1, 2006 to January 1, 2007	620,000
c. Undercount of nonimmigrants in ACS	170,000
d. Undercount of other legally resident immigrants (LPRs, recent refugee/asylee arrivals) in ACS	430,000
e. Undercount of unauthorized immigrant population in ACS	1,180,000
f. Estimated foreign-born population, January 1, 2007 (a.+b.+c.+d.+e.)	30,650,000
2) Legally resident population	
g. LPR, refugee, and asylee flow January 1, 1980-December 31, 2006	21,440,000
h. Mortality 1980-2006	1,240,000
i. Emigration 1980-2006	3,040,000
j. LPR, refugee, and asylee resident population, January 1, 2007 (g.-h.-i.)	17,160,000
k. Nonimmigrant population on January 1, 2007	1,710,000
l. Estimated legally resident population, January 1, 2007 (j.+k.)	18,870,000
3) Unauthorized immigrant population	
m. Estimated resident unauthorized immigrant population, January 1, 2007 (f.-l.)	11,780,000

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 2007 and 2000**



Estimates by Region and Country of Birth

An estimated 8.9 million of the total 11.8 million unauthorized immigrants living in the United States in 2007 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 (1.4 million) and South America (850,000). The 2000 unauthorized immigrant population was similar in region of origin composition.

Mexico continued to be the leading source of unauthorized immigration to the United States (see Table 3). The estimated unauthorized immigrant population from Mexico increased from 4.7 million in 2000 to 7.0 million in January 2007. The annual average increase in Mexican unauthorized immigration to the United States was 330,000 during the 2000-2007 period. The next leading source countries for unauthorized immigrants in 2007 were El Salvador (540,000), Guatemala (500,000), the Philippines (290,000) and China (290,000).

The top ten countries of origin represented 82 percent of the unauthorized immigrant population in 2007. Although immigration from Mexico continues to dominate unauthorized population

growth, the greatest percentage increases during 2000-2007 were among immigrants from Brazil (89 percent), India (81 percent), Guatemala (74 percent), and Honduras (70 percent).

Table 3:

Country of Birth of the Unauthorized Immigrant Population: January 2007 and 2000

Country of birth	Estimated population in January		Percent of total		Percent change	Average annual change
	2007	2000	2007	2000	2000 to 2007	2000 to 2007
All countries	11,780,000	8,460,000	100	100	39	470,000
Mexico	6,980,000	4,680,000	59	55	49	330,000
El Salvador	540,000	430,000	5	5	26	20,000
Guatemala	500,000	290,000	4	3	74	30,000
Philippines	290,000	200,000	2	2	47	10,000
China	290,000	190,000	2	2	49	10,000
Honduras	280,000	160,000	2	2	70	20,000
Korea	230,000	180,000	2	2	31	10,000
India	220,000	120,000	2	1	81	10,000
Brazil	190,000	100,000	2	1	89	10,000
Ecuador	160,000	110,000	1	1	40	10,000
Other countries	2,100,000	2,000,000	18	24	5	10,000

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

Estimates by State of Residence

California remained the leading state of residence of the unauthorized resident population in 2007, with 2.8 million (see Table 4). The next leading state, Texas, had 1.7 million unauthorized residents, followed by Florida with nearly 1 million. California's share of the national total declined from 30 percent in 2000 to 24 percent in 2007. The greatest percentage increases occurred in Georgia (120 percent), Arizona (62 percent) Texas (57 percent), and Washington (53 percent).

Table 4.

State of Residence of the Unauthorized Immigrant Population: January 2007 and 2000

State of residence	Estimated population in January		Percent of total		Percent change	Average annual change
	2007	2000	2007	2000	2000 to 2007	2000 to 2007
All states	11,780,000	8,460,000	100	100	39	470,000
California	2,840,000	2,510,000	24	30	13	50,000
Texas	1,710,000	1,090,000	14	13	57	90,000
Florida	960,000	800,000	8	9	20	20,000
New York	640,000	540,000	5	6	19	10,000
Illinois	560,000	440,000	5	5	29	20,000
Arizona	530,000	330,000	5	4	62	30,000
Georgia	490,000	220,000	4	3	120	40,000
New Jersey	470,000	350,000	4	4	32	20,000
North Carolina	380,000	260,000	3	3	45	20,000
Washington	260,000	170,000	2	2	53	10,000
Other states	2,940,000	1,750,000	25	21	68	170,000

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

Growing geographic dispersion of the unauthorized immigrant population is reflected by an increase in the share of the population living in all other states. The percentage of unauthorized immigrants residing in states ranked 6th through 10th in 2007 – Arizona, Georgia, New Jersey, North Carolina, and Washington – increased from 16 percent in 2000 to 18 percent in 2007. In addition, the share of the unauthorized population residing in all other states increased from 21 percent to 25 percent during the period.

Table 5.

Age by Gender of the Unauthorized Immigrant Population: January 2007

Age	Total		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
All ages	11,780,000	100	6,670,000	100	5,100,000	100
Under 18 years	1,670,000	14	880,000	13	780,000	15
18 to 24 years	1,870,000	16	1,170,000	18	700,000	14
25 to 34 years	4,200,000	36	2,560,000	38	1,640,000	32
35 to 44 years	2,800,000	24	1,490,000	22	1,310,000	26
45 to 54 years	880,000	7	410,000	6	470,000	9
55 and over	350,000	3	150,000	2	210,000	4
Median	30		30		31	

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

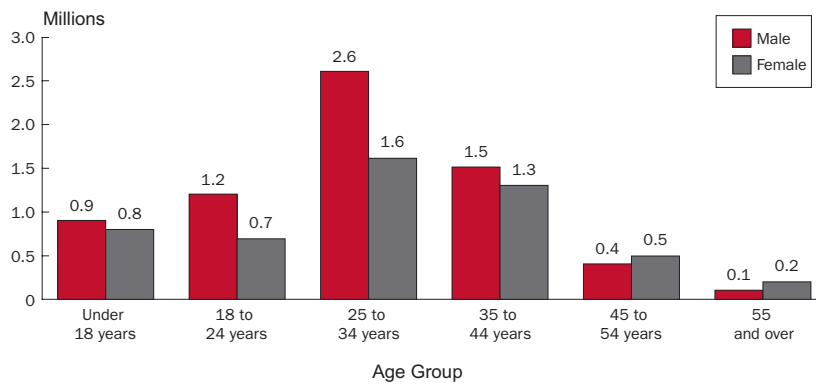
Estimates by Gender and Age

Males represented 57 percent of the unauthorized immigrant population in 2007 (see Figure 3 and Table 5). The median age of unauthorized residents was 30 years with males slightly younger than females (30 years versus 31 years). Males accounted for 62 percent of the unauthorized population in the 18 to 34 age group in 2007 while females accounted for 55 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.

Figure 3.
Age by Gender of the Unauthorized Immigrant Population: January 2007



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 1980-2006

The estimated total foreign-born population that entered between 1980-2006 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 2006 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, 2007

The reference date for population estimates from the ACS is mid-year. The reference date for the 2006 ACS, the most recently available ACS data, was shifted to January 1, 2007 by multiplying the population of 2006 entrants by 1.83 which is the average of five ratios: the ratio of the estimated population in the 2006 ACS that entered the United States during 2005 compared to the population in the 2005 ACS that entered in 2005 and the comparable ratios for the 2005, 2004, 2003, and 2002 entrants. The adjustment ratio was relatively stable across previous ACS surveys.

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 (Department of Homeland Security, 2003; 2006; 2007).

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

A rate of 2.5 percent was used. This was the same rate used in previous DHS estimates (Department of Homeland Security, 2003; 2006; 2007).

e. Undercount of unauthorized immigrants in the ACS

A rate of 10 percent was used. This was the same rate used in previous DHS estimates (Department of Homeland Security, 2003; 2006; 2007).

f. Estimated foreign-born population, January 1, 2007

The sum of 1a. through 1e. (above) is the estimated foreign-born population on January 1, 2007 that entered the United States during the 1980-2006 period.

2) Legally resident population

g. Legal permanent resident (LPR), refugee, and asylee flow, entered 1980-2006

The 1980-2006 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 2006 prior to adjustment. Year of entry was imputed when last entry date was missing (concentrated during 1998-2005 and affecting approximately 40 percent of adjustment of status records) using category of admission, year of LPR adjustment, and known last entry date.

Refugees and asylees included in the legally resident flow entered the United States during 1980-2006 but had not adjusted to LPR status as of January 1, 2007. This flow was estimated based on the average time spent in the status before adjustment to LPR status. Refugees and asylees who obtained LPR status during 2006 spent an average of 2.8 years and 6.1 years, respectively, before adjusting status. The refugee and asylee portion of the legally resident flow therefore included refugees who arrived in the United States during the 2.8 years prior to 2007 and persons granted asylum during the 6.1 years preceding 2007.

h. Mortality of legally resident flow 1980-2006

Data are not collected on the mortality of legally resident immigrants. LPRs were survived to 2007 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). For immigrants in the 1980-2006 flow who obtained LPR status, the median year of entry was 1992.

i. Emigration of legally resident flow 1980-2006

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. Previous DHS unauthorized population estimates for 2005 and 2006 assumed separate emigration rates by age and region of birth (Asia versus other) and a rate for refugees and asylees equal to one half that of other LPRs. The overall effective rate of emigration for legally resident immigrants in 2007 was about the same as the rate for the 2006 and 2005 estimates- 21 percent after twenty years. The primary compositional impact of the revision in method for 2007 was a decline of approximately 30 percent in the unauthorized population from Vietnam (resulting from an increase in the legally resident population).

j. LPR, refugee, and asylee population on January 1, 2007

Subtracting mortality (2h.) and emigration (2i.) from the LPR, refugee, and asylee flow during 1980-2006 (2g.) results in the estimated LPR, refugee, and asylee resident population on January 1, 2007.

k. Nonimmigrant population on January 1, 2007

The number of nonimmigrants living in the United States on January 1, 2007 was estimated by multiplying the number of nonimmigrant admissions between July 1, 2006 and June 30, 2007 by the average length of visit and dividing this figure 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 estimates do not include border crossers or visitors for business or pleasure. The year of entry for the 2007 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; 2006, 2007).

l. Estimated legally resident immigrant population on January 1, 2007

Adding the population of LPRs, refugees, and asylees on January 1, 2007 (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, 2007.

3) Unauthorized immigrant population

m. Estimated unauthorized immigrant population on January 1, 2007

Subtracting the estimated legally resident immigrant population (2l.) from the total foreign-born population on January 1, 2007 (1f.) yields the estimate of the unauthorized immigrant population.

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