

Estimates of the Unauthorized Immigrant Population Residing in the United States: January 2006

MICHAEL HOEFER, NANCY RYTINA, AND CHRISTOPHER CAMPBELL

This report provides estimates of the number of unauthorized immigrants residing in the United States as of January 2006 by period of entry, region and country of origin, and state of residence. The estimates were obtained using the same “residual” methodology employed for estimates of the unauthorized population in 2005 (see Hoefler, Rytina and Campbell, 2006).

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, there were an estimated 11.6 million unauthorized immigrants living in the United States as of January 2006. Nearly 4.2 million had entered in 2000 or later. An estimated 6.6 million of the 11.6 million unauthorized residents 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, 2006. 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.

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.

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, 2006, 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 estimating the components of each population are shown in Appendix 1.



Homeland
Security

Office of Immigration Statistics
POLICY DIRECTORATE

Data on the foreign-born population that entered during 1980-2005 by country of birth, state of residence and year of entry were obtained from the 2005 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, 3 million households in 2005 compared to 99,000 for the March 2006 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 judicial 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, few Cubans living in the United States more than a year are at risk of being unauthorized.

Changes in the size of the unauthorized population presented in this report are based on the annual average change between 2000 and 2006. Annual estimates of the unauthorized immigrant population are subject to sampling error and a considerable amount of nonsampling 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. For this reason, caution should be exercised in drawing conclusions about change in the unauthorized population based on comparisons of the 2005 estimates (Hofer, Rytina, and Campbell, 2006) and the 2006 estimates shown in this report.

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, both of which are subject to error, and not actual population counts. In addition, the estimates do not capture

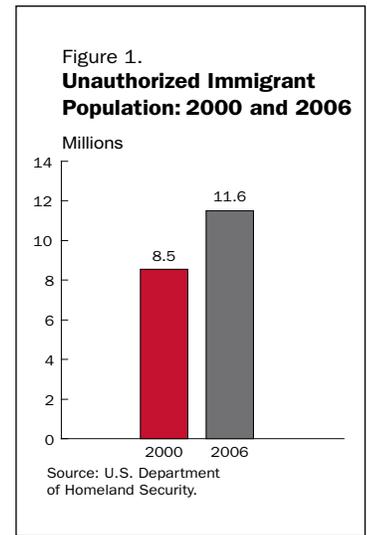


Table 1. Period of Entry of the Unauthorized Immigrant Population: January 2006

Period of entry	Estimated population January 2006	
	Number	Percent
All years	11,550,000	100
2004-2005	1,330,000	12
2002-2003	1,240,000	11
2000-2001	1,590,000	14
1995-1999	3,240,000	28
1990-1994	1,980,000	17
1985-1989	1,270,000	11
1980-1984	910,000	8

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

certain changes in status that may result in the double counting of nonimmigrants and persons adjusting to LPR status.

Sampling error in the ACS. The 2005 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 1980-2005 period are subject to sampling variability. The estimated margin of error for the estimate of the foreign-born population in the 2005 ACS at the 90 percent confidence level is plus or minus approximately 150,000.

Assumptions about internal migration. The estimates assume no net internal migration of the legally resident immigrant population since their state of residence refers to their residence when they obtained their LPR, refugee or asylee status. The reported state may or may not be their current state of residence.

RESULTS

Overall Trend

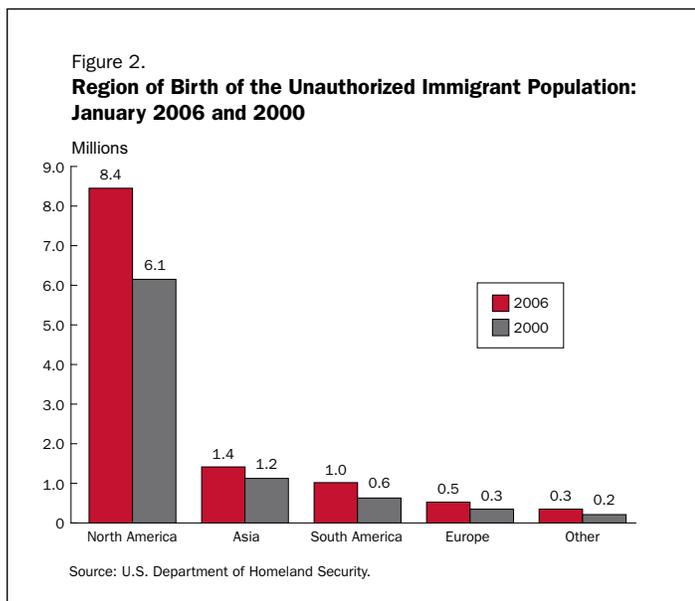
DHS estimates that the unauthorized immigrant population in the United States increased 37 percent from nearly 8.5 million on

Table 2.

Components of the Unauthorized Immigrant Population: January 2006

1) Foreign-born population	
a. Foreign-born population, entered 1980-2005, 2005 ACS . . .	26,440,000
b. Adjustment for shift in reference date from July 1, 2005 to January, 2006	700,000
c. Adjustment for exclusion of group quarters in ACS	330,000
d. Undercount of nonimmigrants in ACS	130,000
e. Undercount of other legally resident immigrants (LPRs, recent refugee/asylee arrivals) in ACS.	410,000
f. Undercount of unauthorized immigrant population in ACS . . .	1,160,000
g. Estimated foreign-born population, January 1, 2006 (a.+b.+c.+d.+e.+f.).	29,170,000
2) Legally resident population	
h. LPR, refugee, and asylee flow January 1, 1980-December 31, 2005	20,310,000
i. Mortality, 1980-2005	1,120,000
j. Emigration, 1980-2005	2,860,000
k. LPR, refugee, and asylee resident population, January 1, 2006 (h.-i.-j.).	16,330,000
l. Nonimmigrant population on January 1, 2006	1,290,000
m. Estimated legally resident population, January 1, 2006 (k.+l.)	17,620,000
3) Unauthorized immigrant population	
n. Estimated resident unauthorized immigrant population, January 1, 2006 (g.-m.)	11,550,000

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



January 1, 2000 to 11.6 million on January 1, 2006 (see Figure 1). The annual average net increase in the unauthorized population during this period was 515,000.

Nearly 4.2 million (36 percent) unauthorized immigrants in 2006 had entered the United States since January 1, 2000 (see Table 1). An estimated 1.3 million (12 percent) came to the United States in 2004 or 2005. 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 2006 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 – are illustrated with several examples. Doubling the unauthorized immigrant undercount rate from 10 percent to 20 percent increases the estimated unauthorized population from 11.6 million to 13.0 million. By lowering or raising emigration rates 20 percent and holding all other assumptions constant, the estimated unauthorized immigrant population would range from 11.0 million to 12.1 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 12.4 to 13.6 million.

Components of the Unauthorized Immigrant Population in 2006

The size of each component of the unauthorized immigrant population estimates for 2006 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 26.4 million foreign-born residents in the 2005 ACS that entered the United States during 1980-2005. This population was increased 2.7 million, or 10 percent, by adjustments for the shift in the reference date from mid-year 2005 to January 1, 2006, the addition of the population living in group quarters, 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 42 percent of all adjustments to the foreign-born population.

For the legally resident population, the starting point was the flow of 20.3 million LPRs, refugees and asylees during 1980-2005. By January 2006, the 20.3 million had been reduced by 4.0 million to 16.3 million due to mortality and emigration. Emigration accounted for 2.9 million, or 72 percent, of the 4.0 million. The addition of the nonimmigrant population, estimated at nearly 1.3 million, resulted in a total estimated legally resident immigrant population of 17.6 million on January 1, 2006. Subtracting the 17.6 million legally resident immigrants from the total 29.2 million foreign-born population on January 1, 2006 that entered the United States during 1980-2005 yields the final estimated unauthorized population of 11.6 million.

Estimates by Region and Country of Birth

An estimated 8.4 million of the total 11.6 million unauthorized immigrants living in the United States in 2006 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 (970,000). The 2000 unauthorized immigrant population was similar in region of origin composition.

Mexico continues 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 6.6 million in January 2006. The annual average increase in Mexican unauthorized immigration to the United States was 315,000 during the 2000-2006 period. The next leading source countries for unauthorized immigrants in 2006 were El Salvador (510,000), Guatemala (430,000), the Philippines (280,000) and Honduras (280,000).

The top ten countries of origin represented 79 percent of the unauthorized immigrant population in 2006. Although immigration from Mexico continues to dominate unauthorized population growth, the greatest percentage increases during 2000-2006 were among immigrants from India (125 percent), Brazil (110 percent), and Honduras (75 percent).

Estimates by State of Residence

California remained the leading state of residence of the unauthorized resident population in 2006, with 2.8 million. The next leading state, Texas, had 1.6 million unauthorized residents, followed by Florida with nearly 1 million (see Table 4). California's share of the national total declined from 30 percent in 2000 to 25 percent in 2006. The greatest annual average increases from 2000 to 2006 occurred in Texas (92,000), California (53,000), and Georgia (45,000). The greatest percentage increases occurred in Georgia (123 percent), Washington (65 percent), Arizona (52 percent), Texas (50 percent), and North Carolina (42 percent).

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 2006 – Arizona, Georgia, New Jersey, North Carolina, and Washington – increased from 16 percent in 2000 to 18 percent in 2006. In addition, the share of the unauthorized population residing in all other states increased from 21 percent to 26 percent during the period.

Table 3.

Country of Birth of the Unauthorized Immigrant Population: January 2006 and 2000

Country of birth	Estimated Population in January		Percent of total		Percent change	Average annual change
	2006	2000	2006	2000	2000 to 2006	2000 to 2006
All countries	11,550,000	8,460,000	100	100	37	515,000
Mexico	6,570,000	4,680,000	57	55	40	315,000
El Salvador	510,000	430,000	4	5	19	13,333
Guatemala	430,000	290,000	4	3	48	23,333
Philippines	280,000	200,000	2	2	40	13,333
Honduras	280,000	160,000	2	2	75	20,000
India	270,000	120,000	2	1	125	25,000
Korea	250,000	180,000	2	2	39	11,667
Brazil	210,000	100,000	2	1	110	18,333
China	190,000	190,000	2	2	-	-
Vietnam	160,000	160,000	1	2	-	-
Other countries	2,410,000	1,950,000	21	23	24	76,667

- Figure rounds to 0.0.
Note: Detail may not sum to totals because of rounding.
Source: U.S. Department of Homeland Security.

Table 4.

State of Residence of the Unauthorized Immigrant Population: January 2006 and 2000

State of residence	Estimated population in January		Percent of total		Percent change	Average annual change
	2006	2000	2006	2000	2000 to 2006	2000 to 2006
All states	11,550,000	8,460,000	100	100	37	515,000
California	2,830,000	2,510,000	25	30	13	53,333
Texas	1,640,000	1,090,000	14	13	50	91,667
Florida	980,000	800,000	8	9	23	30,000
Illinois	550,000	440,000	5	5	25	18,333
New York	540,000	540,000	5	6	-	-
Arizona	500,000	330,000	4	4	52	28,333
Georgia	490,000	220,000	4	3	123	45,000
New Jersey	430,000	350,000	4	4	23	13,333
North Carolina	370,000	260,000	3	3	42	18,333
Washington	280,000	170,000	2	2	65	18,333
Other states	2,950,000	1,750,000	26	21	69	200,000

- Figure rounds to 0.0.
Note: Detail may not sum to totals because of rounding.
Source: U.S. Department of Homeland Security.

NEXT STEPS

The estimates presented here will be updated periodically based on annual data on 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.

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 1980-2005

The estimated total foreign-born population that entered between 1980-2005 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 and year of entry were obtained from the 2005 Public Use Microdata Sample (PUMS). The overall FactFinder estimate for the total foreign-born population entering in the post-1980 period was reduced to remove PUMS estimates of the post-1980 Cuban-born population. Further, a three-year moving average was applied to PUMS data for year of entry to eliminate heaping effects.

b. Shift in reference date to January 1, 2006

The reference date for population estimates from the ACS is mid-year. The reference date for the 2005 ACS, the most recently available ACS data, was shifted to January 1, 2006 by multiplying the population of 2005 entrants by 1.97, the ratio of the estimated population in the 2005 ACS that entered the United States during 2004 compared to the population in the 2004 ACS that entered in 2004. The adjustment ratio has been relatively stable across previous ACS surveys.

c. Population living in group quarters

The 2005 ACS does not include persons living in group quarters, e.g. college dormitories, nursing homes, or prisons. An estimate of the group quarters population was calculated by multiplying the ACS 1980-2005 entrants by 1.2 percent, the percent of the foreign-born population from Census 2000 that entered after 1979 and lived in group quarters.

d. 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).

e. 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).

f. 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).

g. Estimated foreign-born population, January 1, 2006

The sum of 1a. through 1f. (above) is the estimated foreign-born population on January 1, 2006 that entered the United States during the 1980-2005 period.

2) Legally resident population

h. Legal permanent resident (LPR), refugee, and asylee flow, entered 1980-2005

The 1980-2005 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. LPR adjustments of status include all persons whose last entry into the United States was during the 1980-2005 period. The year of last entry prior to adjustment of status was assumed to represent the year of entry. Since 1997, a significant proportion (approximately 30-40 percent) of adjustment of status records have been missing the last entry date. For these records, year of entry was imputed 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 1980-2005 but had not adjusted to LPR status as of January 1, 2006. 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 2005 spent an average of 3.5 years and 8 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 3.5 years prior to 2006 and persons granted asylum during the 8 years preceding 2006. The state of residence of refugees and asylees was assumed to be the same as that of refugees and asylees from the same countries who became LPRs during 2000-2005.

i. Mortality of legally resident flow 1980-2005

There are no data collected on the mortality of legally resident immigrants. LPRs were survived to 2006 by gender and age (at the time LPR status was obtained) using mortality rates by age and sex from 1989-1991 life (National Center for Health Statistics, 1997). For immigrants in the 1980-2005 flow who obtained LPR status, the median year of entry was 1993. An annual crude death rate of 3.8 per 1,000 was used for refugees and asylees who had not adjusted status since information was not available on their age and sex.

j. Emigration of legally resident flow 1980-2005

Emigration is a substantial component of immigrant population change. Since no data are available that directly measure emigration from the United States, researchers have developed indirect estimates based largely on Census data. Annual emigration rates by race, age, and year of entry used in this report were based on estimates of emigration of the foreign-born population by race, ethnicity, and age using Census data from 1980 and 1990 (Ahmed and Robinson, 1994). Race of legally resident immigrants was approximated by country of birth (Asia versus other countries). Age was represented by three categories: under 20 years of age, 20 to 34 years, and 35 years and over. Refugees and asylees were assumed to emigrate at one-half the rate of other LPRs. The effective rate of emigration for all legally resident immigrants was 15 percent during the first 10 years following legal entry and 21 percent after twenty years.

k. LPR, refugee, and asylee population on January 1, 2006

Subtracting mortality (2i.) and emigration (2j.) from the LPR, refugee, and asylee flow during 1980-2005 (2h.) results in the estimated LPR, refugee, and asylee resident population on January 1, 2006.

l. Nonimmigrant population on January 1, 2006

The number of nonimmigrants living in the United States on January 1, 2006 was estimated by multiplying the number of nonimmigrant admissions between July 1, 2005 and June 30, 2006 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 2006 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).

m. Estimated legally resident immigrant population on January 1, 2006

Adding the population of LPRs, refugees, and asylees on January 1, 2006 (2k.) to the nonimmigrant population on the same date (2l.) results in the total estimated legally resident immigrant population in the United States on January 1, 2006.

3) Unauthorized immigrant population

n. Estimated unauthorized immigrant population on January 1, 2006

Subtracting the estimated legally resident immigrant population (2m.) from the total foreign-born population on January 1, 2006 (1g.) yields the estimate of the unauthorized immigrant population.

REFERENCES

- Ahmed, Bashir and J. Gregory Robinson, 1994. "Estimates of Emigration of the Foreign-Born Population: 1980-1990," Technical Working Paper No. 9, U.S. Bureau of the Census, <http://www.census.gov/population/www/documentation/twps0009/twps0009.html>
- Hoefer, Michael, Nancy Rytina and Christopher Campbell, 2006. "Estimates of the Unauthorized Immigrant Population Residing in the United States: January 2005," Office of Immigration Statistics, Policy Directorate, U.S. Department of Homeland Security, http://www.dhs.gov/xlibrary/assets/statistics/publications/ILL_PE_2005.pdf
- National Center for Health Statistics, 1997. U.S. Decennial Life Tables for 1989-91, Vol. 1, No. 1. Hyattsville, Maryland, U.S. Government Printing Office.
- Passel, Jeffrey S., 2006. "The Size and Characteristics of the Unauthorized Migrant Population in the U.S.: Estimates Based on the March 2005 Current Population Survey," Pew Hispanic Center, <http://pewhispanic.org/files/reports/61.pdf>
- U.S. Department of Homeland Security, 2003. "Estimates of the Unauthorized Immigrant Population Residing in the United States: 1990 to 2000," http://www.dhs.gov/xlibrary/assets/statistics/publications/Ill_Report_1211.pdf