Estimates of the Unauthorized Immigrant Population Residing in the United States: January 2009

MICHAEL HOEFER, NANCY RYTINA, AND BRYAN C. BAKER

This report provides estimates of the number of unauthorized immigrants residing in the United States as of January 2009 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 2008 (see Hoefer, Rytina, and Baker, 2009). 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, DHS estimates that the unauthorized immigrant population living in the United States decreased to 10.8 million in January 2009 from 11.6 million in January 2008. Between 2000 and 2009, the unauthorized population grew by 27 percent. Of all unauthorized immigrants living in the United States in 2009, 63 percent entered before 2000, 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, 2009. 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) Section 245(i) 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 foreignborn population living in the United States on January 1, 2009, 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. Therefore, the starting point for

¹The 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.



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 1980-2008 by country of birth, state of residence, year of entry, age, and gender were obtained from the 2008 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 2008 compared to 100,000 for the March 2009 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 through 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, Cubans living in the United States more than a year are eligible 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). In addition, 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 the size of the foreign born population and thus estimates of the unauthorized population. This report does not discuss changes in the unauthorized population between 2008 and 2009 by countries of origin or states of residence because of greater uncertainty in those estimates. For reference, Appendix 2 provides DHS estimates by leading countries of birth and states of residence for 2000 and 2005-2009.

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. 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 2008 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 1980-2008 period are subject to sampling variability. The estimated margin of error for the estimate of the foreign-born population in the 2008 ACS at the 90 percent confidence level is plus or minus approximately 154,000.

Accuracy of state of residence for the legally resident population. State of residence for legally resident 1980-2008 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, 2009.

RESULTS

Overall Trend

Between January 2008 and January 2009, the number of unauthorized immigrants living in the United States decreased seven percent from 11.6 million to 10.8 million (see Figure 1). Between 2000 and 2007, the unauthorized population grew by 3.3 million from 8.5 million to 11.8 million. The number of unauthorized residents declined by 1.0 million between 2007 and 2009, coincident with the U.S. economic downturn. The overall annual average increase in the unauthorized population during the 2000-2009 period was 250,000.

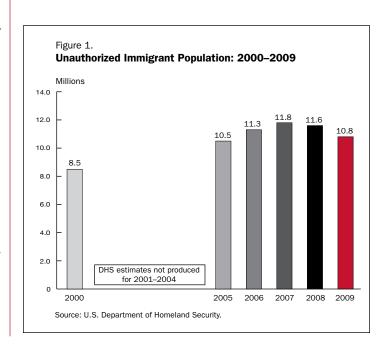


Table 1.

Period of Entry of the Unauthorized Immigrant Population:

	Estimated population January 2009		
Period of entry	Number	Percent	
All years	10,750,000	100	
2005-2008	910,000	8	
2000-2004	3,040,000	28	
1995-1999	3,080,000	29	
1990-1994	1,670,000	16	
1985-1989	1,190,000	11	

860,000

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

January 2009

The decrease in the size of the unauthorized population between 2008 and 2009 is not likely due to sampling error in the estimates of the foreign-born population in the 2007 or 2008 ACS. The margin of error at the 90 percent confidence level was 151,000 for the 2007 ACS and 154,000, as noted above, for the 2008 ACS.² 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 therefore the magnitude of change between 2008 and 2009. Trends in the unauthorized population reported by DHS are consistent with the most recent estimates by the Pew Hispanic Center showing 11.9 million unauthorized immigrants living in the United States in March 2008, 12.4 million in March 2007, 11.5 million in March 2006, and 11.1 million in March 2005 (Passel and Cohn, 2008).

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 11.5 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 11.3-13.0 million.

Period of Entry

8

Of the 10.8 million unauthorized immigrants in 2009, 4.0 million (37 percent) had entered the United States on January 1, 2000 or later (see Table 1). An estimated 0.9 million (8 percent) came to the United States between 2005 and 2008 while 3.0 million (28 percent) came during 2000 to 2004. Forty-four 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 2009

The size of each component of the unauthorized immigrant population estimates for 2009 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 29.0 million foreign-born residents in the 2008 ACS that entered the United States during 1980-2008. This population was increased by 2.2 million, or 8 percent, by adjustments for the shift in the reference date from mid-year 2008 to January 1, 2009 and the addition of undercounts for the populations of nonimmigrants, other legally resident immigrants, and unauthorized immigrants. The estimated undercount of

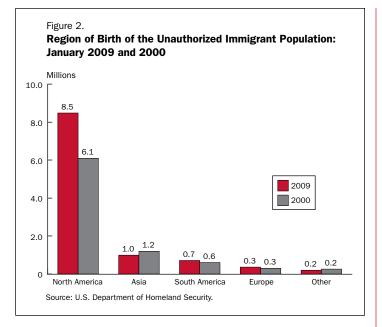
Table 2.

Components of the Unauthorized Immigrant Population: January 2009

	2009
1) Foreign-born population	
a. Foreign-born population, entered 1980-2008, 2008 ACS.	29,010,000
b. Adjustment for shift in reference date from July 1, 2008 to January 1, 2009	490,000
c. Undercount of nonimmigrants in ACS	190,000
d. Undercount of other legally resident immigrants (LPRs, recent refugee/asylee arrivals) in ACS	470,000
e. Undercount of unauthorized immigrant population in ACS	1,080,000
f. Estimated foreign-born population, January 1, 2009 (a.+b.+c.+d.+e.)	31,220,000
2) Legally resident population	
g. LPR, refugee, and asylee flow January 1, 1980-December 31, 2008	23,540,000
h. Mortality 1980-2008	1,520,000
i. Emigration 1980-2008	3,420,000
j. LPR, refugee, and asylee resident population, January 1, 2009 (ghi.)	18,610,000
k. Nonimmigrant population on January 1, 2009	1,860,000
I. Estimated legally resident population, January 1, 2009 (j.+k.).	20,470,000
3) Unauthorized immigrant population	
m. Estimated resident unauthorized immigrant population, January 1, 2009 (fl.)	10,750,000

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

 $^{^2}$ The additional sampling error introduced by shifting the reference date of the foreign born population to January 1 is not large enough for sampling error to account for the 2008-2009 change in the unauthorized population.



the unauthorized immigrant population in the ACS was nearly 1.1 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 23.5 million LPRs, refugees, and asylees during 1980-2008. By January 2009, the 23.5 million had been reduced by 4.9 million to 18.6 million due to mortality and emigration. Emigration accounted for 3.4 million, or 69 percent, of the 4.9 million. The addition of the nonimmigrant population, estimated at 1.9 million, resulted in a total estimated legally resident immigrant population of 20.5 million on January 1, 2009. Subtracting the 20.5 million legally resident immigrants from the total 31.2 million foreign-born population on January 1, 2009 that entered the United States during 1980-2008 yields the final estimated unauthorized population of 10.8 million.

Estimates by Region and Country of Birth

An estimated 8.5 million of the total 10.8 million unauthorized immigrants living in the United States in 2009 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 (980,000) and South America (740,000).

Mexico continued to be the leading source of unauthorized immigration to the United States (see Table 3 and Appendix 2). There were 6.7 million unauthorized immigrants from Mexico in 2009, representing 62 percent of the unauthorized population. The next leading source countries for unauthorized immigrants in 2009 were El Salvador (530,000), Guatemala (480,000), Honduras (320,000), and the Philippines (270,000). The ten leading countries of origin represented 85 percent of the unauthorized immigrant population in 2009.

Between 2000 and 2009, the Mexican-born unauthorized immigrant population increased 2.0 million or 42 percent. The greatest percentage increases occurred among unauthorized immigrants from Honduras (95 percent), Guatemala (65 percent), and India (64 percent).

Estimates by State of Residence

California remained the leading state of residence of the unauthorized immigrant population in 2009, with 2.6 million (see Table 4 and Appendix 2). The next leading state, Texas, had 1.7 million unauthorized residents, followed by Florida with 720,000,

Table 3.

Country of Birth of the Unauthorized Immigrant Population: January 2009 and 2000

	Estimated population in January		Percent of total		Percent change	Average annual change
Country of birth	2009	2000	2009	2000	2000 to 2009	2000 to 2009
All countries	10,750,000	8,460,000	100	100	27	250,000
Mexico	6,650,000	4,680,000	62	55	42	220,000
El Salvador	530,000	430,000	5	5	25	10,000
Guatemala	480,000	290,000	4	3	65	20,000
Honduras	320,000	160,000	3	2	95	20,000
Philippines	270,000	200,000	2	2	33	10,000
India	200,000	120,000	2	1	64	10,000
Korea	200,000	180,000	2	2	14	_
Ecuador	170,000	110,000	2	1	55	10,000
Brazil	150,000	100,000	1	1	49	10,000
China	120,000	190,000	1	2	-37	(10,000)
Other countries	1,650,000	2,000,000	15	24	-17	(40,000)

[—] Represents less than 5,000.

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

State of Residence of the Unauthorized Immigrant Population: January 2009 and 2000

	Estimated population in January		Percent of total		Percent change	Average annual change
State of residence	2009	2000	2009	2000	2000 to 2009	2000 to 2009
All states	10,750,000	8,460,000	100	100	27	250,000
California	2,600,000	2,510,000	24	30	3	10,000
Texas	1,680,000	1,090,000	16	13	54	70,000
Florida	720,000	800,000	7	9	-10	(10,000)
New York	550,000	540,000	5	6	1	_
Illinois	540,000	440,000	5	5	24	10,000
Georgia	480,000	220,000	4	3	115	30,000
Arizona	460,000	330,000	4	4	42	20,000
North Carolina	370,000	260,000	3	3	43	10,000
New Jersey	360,000	350,000	3	4	3	_
Nevada	260,000	170,000	2	2	55	10,000
Other states	2,730,000	1,760,000	25	21	55	110,000

[—] Represents less than 5,000

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

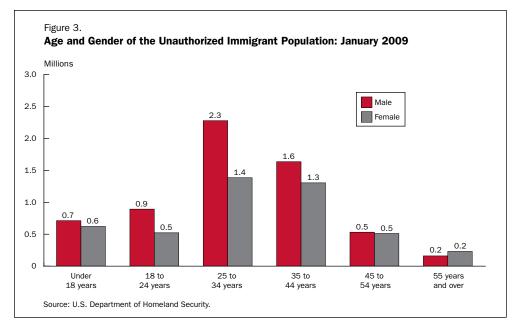


Table 5.

Age and Gender of the Unauthorized Immigrant Population: January 2009

	Total		Ma	ale	Female	
Age	Number	Percent	Number	Percent	Number	Percent
All ages	10,750,000	100	6,190,000	100	4,570,000	100
Under 18 years	1,320,000	12	710,000	11	620,000	13
18 to 24 years	1,410,000	13	890,000	14	520,000	11
25 to 34 years	3,650,000	34	2,270,000	37	1,380,000	30
35 to 44 years	2,930,000	27	1,630,000	26	1,300,000	29
45 to 54 years	1,040,000	10	530,000	8	510,000	11
55 years and over	390,000	4	160,000	3	230,000	5

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

New York with 550,000, and Illinois with 540,000. California's share of the national total was 24 percent in 2009 compared to 30 percent in 2000. The greatest percentage increases in the unauthorized population between 2000 and 2009 occurred in Georgia (115 percent), Nevada (55 percent), and Texas (54 percent).

Estimates by Age and Gender

In 2009, 61 percent of unauthorized immigrants were ages 25 to 44 years, and 58 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 2009 while females accounted for 52 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.

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 1980-2008

The estimated total foreign-born population that entered between 1980-2008 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 2008 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, 2009

The reference date for the 2008 ACS, the most recently available ACS data, was shifted from mid-year 2008 to January 1, 2009 by multiplying the population of 2008 entrants by 1.72, which is the average of three ratios: the ratio of the estimated population in the 2008 ACS that entered the United States during 2007 compared to the population in the 2007 ACS that entered in 2007 and the comparable ratios for the 2006 entrants in the 2006 and 2007 ACS surveys and the 2005 entrants in the 2005 and 2006 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 2005-2008 (Department of Homeland Security, 2003; Hoefer et al., 2006, 2007, 2008, 2009).

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 2005-2008 (Department of Homeland Security, 2003; Hoefer et al., 2006, 2007, 2008, 2009).

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 2005-2008 (Department of Homeland Security, 2003; Hoefer et al., 2006, 2007, 2008, 2009).

f. Estimated foreign-born population, January 1, 2009

The sum of 1a. through 1e. (above) is the estimated foreign-born population on January 1, 2009 that entered the United States during the 1980-2008 period.

2) Legally resident population

g. Legal permanent resident (LPR), refugee, and asylee flow, entered 1980-2008

The 1980-2008 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 2008 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, 2009. The refugee and asylee flow was estimated based on the average time spent in the status before adjustment to LPR status—3.0 years for refugees and 5.3 years for asylees adjusting in 2008. The refugee and asylee portion of the legally resident flow therefore included refugees who arrived in the United States during the 3.0 years prior to 2009 and persons granted asylum during the 5.3 years preceding 2009.

h. Mortality of legally resident flow 1980-2008

Data are not collected on the mortality of legally resident immigrants. LPRs were survived to 2009 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 1980-2008

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 2009 was about 22 percent after twenty years.

j. LPR, refugee, and asylee population on January 1, 2009

Subtracting mortality (2h.) and emigration (2i.) from the LPR, refugee, and asylee flow during 1980-2008 (2g.) results in the estimated LPR, refugee, and asylee resident population on January 1, 2009.

k. Nonimmigrant population on January 1, 2009

The number of nonimmigrants living in the United States on January 1, 2009 was estimated by counting days of presence between July 1, 2008 and June 30, 2009 and dividing the

result by 366. 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 2009 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; Hoefer et al., 2006, 2007, 2008, 2009).

l. Estimated legally resident immigrant population on January 1, 2009

Adding the population of LPRs, refugees, and asylees on January 1, 2009 (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, 2009.

3) Unauthorized immigrant population

m. Estimated unauthorized immigrant population on January 1, 2009

Subtracting the estimated legally resident immigrant population (21.) from the total foreign-born population on January 1, 2009 (1f.) yields the estimate of the unauthorized immigrant population.

APPENDIX 2

Country of Birth and State of Residence of the Unauthorized Immigrant Population: January 2000 and 2005–2009

	Estimated population in January					
Country of birth	2000	2005	2006*	2007	2008	2009
All countries	8,460,000	10,490,000	11,310,000	11,780,000	11,600,000	10,750,000
Mexico	4,680,000	5,970,000	6,570,000	6,980,000	7,030,000	6,650,000
El Salvador	430,000	470,000	510,000	540,000	570,000	530,000
Guatemala	290,000	370,000	430,000	500,000	430,000	480,000
Honduras	160,000	180,000	280,000	280,000	300,000	320,000
Philippines	200,000	210,000	280,000	290,000	300,000	270,000
India	120,000	280,000	210,000	220,000	160,000	200,000
Korea	180,000	210,000	230,000	230,000	240,000	200,000
Ecuador	110,000	120,000	150,000	160,000	170,000	170,000
Brazil	100,000	170,000	210,000	190,000	180,000	150,000
China	190,000	230,000	170,000	290,000	220,000	120,000
Other countries	2,000,000	2,280,000	2,290,000	2,100,000	2,000,000	1,650,000
			Estimated popul	ation in January		
State of residence	2000	2005	2006*	2007	2008	2009
All states	8,460,000	10,490,000	11,310,000	11,780,000	11,600,000	10,750,000
California	2,510,000	2,890,000	2,790,000	2,840,000	2,850,000	2,600,000
Texas	1,090,000	1,670,000	1,620,000	1,710,000	1,680,000	1,680,000
Florida	800,000	970,000	960,000	960,000	840,000	720,000
New York	540,000	560,000	510,000	640,000	640,000	550,000
Illinois	440,000	550,000	530,000	560,000	550,000	540,000
Georgia	220,000	490,000	490,000	490,000	460,000	480,000
Arizona	330,000	510,000	490,000	530,000	560,000	460,000
North Carolina	260,000	370,000	360,000	380,000	380,000	370,000
New Jersey	350,000	440,000	420,000	470,000	400,000	360,000
Nevada	170,000	230,000	230,000	260,000	280,000	260,000
Other states	1,760,000	1,800,000	2,900,000	2,950,000	2,950,000	2,730,000

Detail may not sum to totals because of rounding.

Source: U.S. Department of Homeland Security.

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

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

Hoefer, Michael, Nancy Rytina and Christopher Campbell, 2007. "Estimates of the Unauthorized Immigrant Population Residing in the United States: January 2006," Office of Immigration Statistics, Policy Directorate, U.S. Department of Homeland Security, http://www.dhs.gov/xlibrary/assets/statistics/publications/ill_pe_2006.pdf

Hoefer, Michael, Nancy Rytina and Bryan C. Baker, 2008. "Estimates of the Unauthorized Immigrant Population Residing in the United States: January 2007," Office of Immigration Statistics, Policy Directorate, U.S. Department of Homeland Security, http://www.dhs.gov/xlibrary/assets/statistics/publications/ois_ill_pe_2007.pdf

Hoefer, Michael, Nancy Rytina and Bryan C. Baker, 2009. "Estimates of the Unauthorized Immigrant Population Residing in the United States: January 2008," Office of Immigration Statistics, Policy Directorate, U.S. Department of Homeland Security, http://www.dhs.gov/xlibrary/assets/statistics/publications/ois_ill_pe_2008.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. and D'Vera Cohn, 2008. "Trends in Unauthorized Immigration: Undocumented Inflow Now Trails Legal Inflow," Pew Hispanic Center, http://pewhispanic.org/files/reports/94.pdf

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

U.S. 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