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Report

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U.S. Unauthorized Immigration Flows Are Down Sharply Since Mid-Decade

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Executive Summary

The annual inflow of unauthorized immigrants to the United States was nearly two-thirds smaller in the March 2007 to March 2009 period than it had been from March 2000 to March 2005, according to new estimates by the Pew Hispanic Center, a project of the Pew Research Center.

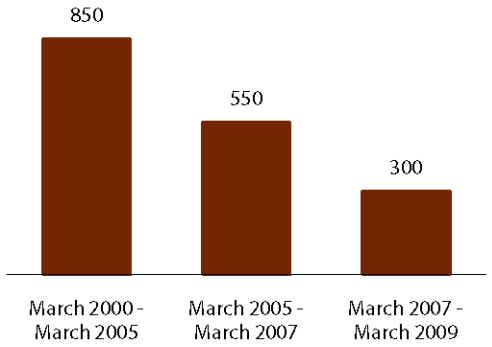
This sharp decline has contributed to an overall reduction of 8% in the number of unauthorized immigrants currently living in the U.S.—to 11.1 million in March 2009 from a peak of 12 million in March 2007, according to the estimates. The decrease represents the first significant reversal in the growth of this population over the past two decades.[1]

The Pew Hispanic Center's analysis also finds that the most marked decline in the population of unauthorized immigrants has been among those who come from Latin American countries other than Mexico. From 2007 to 2009, the size of this group from the Caribbean, Central America and South America decreased 22%.

By contrast, the Mexican unauthorized population (which accounts for about 60% of all unauthorized immigrants) peaked in 2007 at 7 million and has since leveled off. The number of unauthorized immigrants from the rest of the world did not change.

Even though the size of the Mexican unauthorized population living in the United States has not changed significantly since 2007, the inflows from that country have

Figure 1
Average Annual Inflow of Unauthorized Immigrants, by Period, 2000-2009
(thousands)



Notes: Flows are derived as differences of population totals over given intervals, classified by period of arrival in U.S., from March CPS supplements. Averages of alternative estimates are shown in chart. See Methodology.

Source: Pew Hispanic Center estimates based on augmented March Supplements to the Current Population Survey.

Table 1
States with Declines in Unauthorized Immigrant Populations, 2008-2009
(thousands)

	2009	2008	Change
South Atlantic	1,950	2,550	-600
Florida	675	1,050	-375
Virginia	240	300	-65
Others Combined	1,050	1,200	-160
Mountain	1,000	1,200	-160
Nevada	180	230	-50
AZ - CO - UT	700	825	-130

Notes: Changes shown are statistically significant and are the only statistically significant changes in 2008-2009 for individual states and census divisions. Unauthorized estimates are rounded. Change is computed from unrounded data and is independently rounded. The U.S. Census Bureau's South Atlantic Division consists of Delaware, the District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia and West Virginia. The Mountain Division consists of Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming.

Source: Table A1. Pew Hispanic Center estimates based on augmented March Supplements to the Current Population Survey. See Methodology.

[1] Warren (2003) includes annual population estimates for the 1990s.

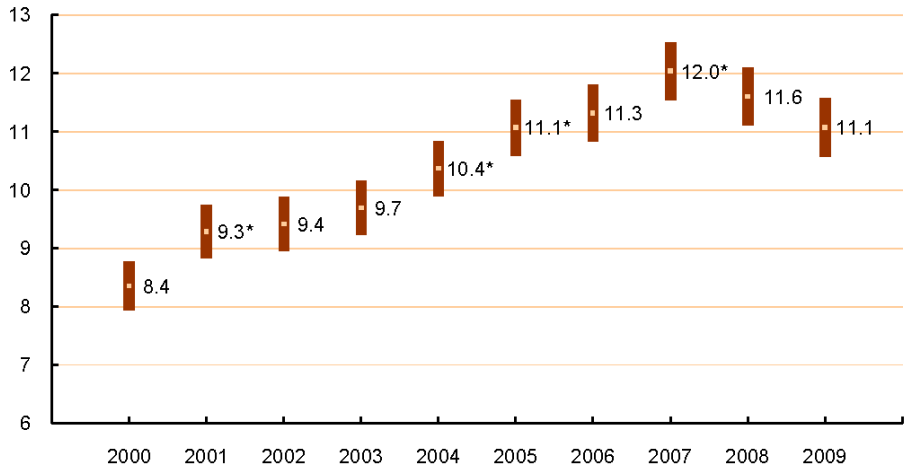
fallen off sharply in recent years. According to the center's estimates, an average of 150,000 unauthorized immigrants from Mexico arrived annually during the March 2007 to March 2009 period—70% below the annual average of 500,000 that prevailed during the first half of the decade.

The recent decrease in the unauthorized population has been especially notable along the nation's Southeast coast and in its Mountain West, according to the new estimates. The number of unauthorized immigrants in Florida, Nevada and Virginia shrank from 2008 to 2009. Other states may have had declines, but they fell within the margin of error for these estimates.

Not counting Florida and Virginia, the unauthorized immigrant population also declined in the area encompassing the rest of the South Atlantic division that extends between Delaware and Georgia.[2] In addition to the decline in Nevada, three other Mountain states—Arizona, Colorado and Utah—experienced a decrease in their combined unauthorized immigrant population from 2008 to 2009.

As shown in the accompanying chart, there may have been a decline in the unauthorized population between 2008 (11.6 million) and 2009 (11.1 million), but this finding is not conclusive because of the margin of error in these estimates.

Figure 2
Estimates of the U.S. Unauthorized Immigrant Population, 2000-2009
(millions)



Notes: Bars indicate low and high points of the estimated 90 % confidence interval (Table 2). The symbol * indicates the change from the previous year is statistically significant.

Source: Pew Hispanic Center estimates based on residual methodology applied to March Supplements to the Current Population Survey. See Methodology.

[2] Not including Florida and Virginia, the remainder of the South Atlantic Division consists of Delaware, the District of Columbia, Georgia, Maryland, North Carolina, South Carolina and West Virginia. The decline is statistically significant for the group of six states and D.C., but not for any individual state.

Despite the recent decline, the population of unauthorized immigrants was nearly a third larger (32%) in 2009 than in 2000, when it numbered 8.4 million. The size of this group has tripled since 1990, when it was 3.5 million.

Comparison with Previous Estimates

Estimates presented here for size and characteristics of the unauthorized immigrant population replace those previously published by the Pew Hispanic Center for 2000 to 2008. Methodological changes in the underlying Census Bureau data necessitated reweighting to allow for consistent measures across years. General trends over time are similar and differences tend to be small, but users are cautioned that previous estimates should not be compared with those in this report.

During the first half of the decade, an average of about 850,000 new unauthorized immigrants entered each year, increasing the unauthorized population from 8.4 million in 2000 to 11.1 million in 2005. Since then, the average annual inflow dropped to about 550,000 per year from March 2005 to March 2007 and declined further to an average of 300,000 per year for March 2007 to March 2009. As a result, the unauthorized population in 2009 returned to the level it had been in 2005.

The unauthorized population is not a static group of people. Each year, some unauthorized immigrants arrive and some return to their countries of origin. This population can also be reduced by deaths or by conversions to legal status.

Our method of analysis does not permit a precise estimation of how many in this population emigrate, achieve legal status or die. The underlying data are consistent with a previous Pew Hispanic Center report that found a sharply decreased flow of immigrants from Mexico to the United States since mid-decade but no evidence of a recent increase in the number of Mexican-born migrants returning home from the U.S. However, return flows to other countries may have increased.

The estimates presented here document trends in the unauthorized population and flows into the country, but the analysis does not explain why these changes occurred. During the period covered by the analysis, there have been major shifts in the level of immigration enforcement and in enforcement strategies, as well as large swings in the U.S. economy. The U.S. economy entered a recession late in 2007, at a time when border enforcement was increasing. Economic and demographic conditions in sending countries and strategies employed by potential migrants also change. All of these undoubtedly contribute to the overall magnitude of immigration flows. But the data in this report do not allow quantification of these factors and are not designed to explain why flows and population totals declined.

Other main findings of this report include:

- Unauthorized immigrants accounted for 28% of the nation's foreign-born population in 2009, a decline from 31% in 2007.
- Mexico accounted for 60% of unauthorized immigrants in 2009, or 6.7 million people. Other Latin American nations accounted for 20% of the total, or 2.2 million people. South and East Asia accounted for 11% of the total, or 1.2 million people.
- In 2009, 59% of unauthorized immigrants resided in California, Texas, Florida, New York, Illinois and New Jersey. However, the share living in those states has declined from 80% in 1990, as unauthorized immigrants have dispersed to new settlement areas.
- Nearly half of unauthorized immigrants living in the country in 2009—47%, or 5.2 million people—arrived in 2000 or later.
- The number of male unauthorized immigrants peaked in 2007 at 6.3 million and declined to 5.8 million in 2009. The number of female unauthorized immigrants, 4.2 million in 2009, is roughly the same as it was in 2007.
- The number of children who are unauthorized, 1.1 million in 2009, declined slightly over the decade. By contrast, the population of U.S.-born children with at least one unauthorized parent nearly doubled from 2000 to 2009, when they numbered 4 million.
- There were 7.8 million unauthorized immigrants in the labor force in 2009, or 5.1% of the total. The size of the unauthorized labor force peaked in 2007 and declined in both 2008 and 2009. There were 7 million unauthorized immigrants employed in March 2009.
- States with the largest shares of immigrants in the labor force are Nevada (9.4%), California (9.3%), Texas (8.7%) and New Jersey (8.7%).
- The unemployment rate for unauthorized immigrants of all ages in March 2009 was higher than that of U.S.-born workers or legal immigrants—10.4%, 9.2% and 9.1%, respectively.

About this Report

This report estimates the size of the unauthorized immigrant population, as well as the unauthorized immigrant labor force for the nation and each state in March 2009. For the nation, it also describes this population by region or country of birth, arrival period, gender and age. For some of these variables, the report estimates annual trends from 2000 onward. Expanding on an earlier report about U.S.-born children of unauthorized immigrants, the report provides estimates and trends for the status of children of unauthorized immigrants.

The Pew Hispanic Center estimates the unauthorized immigrant population using the "residual method," a well-developed and widely accepted technique that is based on official government data. Under this methodology, a demographic estimate of the legal foreign-born population—naturalized citizens, legal permanent residents, temporary legal residents and refugees—is subtracted from the total foreign-born population. The remainder, or residual, is the source of population estimates and characteristics of unauthorized immigrants.

These Pew Hispanic Center estimates use data mainly from the Current Population Survey (CPS), a monthly survey of about 55,000 households conducted jointly by the U.S. Bureau of Labor Statistics and the Census Bureau. It is best known as the source for monthly unemployment statistics. Each March, the CPS sample size and questionnaire are expanded to produce additional data on the foreign-born population and other topics. The Pew Hispanic Center estimates make adjustments to the government data to compensate for undercounting of some groups, and therefore its population totals differ somewhat from the ones the government uses. Estimates for any given year are based on a March reference date.

The estimates presented in this report form a consistent series spanning 2000-2009 and differ slightly from those previously published by the Pew Hispanic Center. The revisions to previous CPS-based estimates for 2000-2008 were necessitated by Census Bureau revisions in 2007 and 2008 to the official population estimates covering the period since the 2000 Census. Population data from the CPS are tied to the Census Bureau official population estimates for the nation and states through a weighting process. Each year, the CPS is weighted to the most current estimates available, and previous CPS estimates are not routinely revised or reweighted to take into account the newest population estimates. The reweighting in these new Pew Hispanic Center estimates is designed to account for the newest Census Bureau population estimates.

Overall, the 2007 and 2008 revisions are not large, but because they were disproportionately concentrated among groups with large foreign-born shares—especially Hispanics—they somewhat affected the residual estimates of the

unauthorized population. Moreover, accurate assessments of year-to-year change require a consistent set of population figures across years. The largest impact of the revised population estimates on the Pew estimates of unauthorized immigrants are in 2007 and 2008. For those two years, the new figures for unauthorized immigrants are about 3% lower than the previous estimates. For 2000-2006, the revisions are smaller in magnitude and not all in the same direction. For more detail, see the Methodology appendix.

A Note on Terminology

"Foreign born" refers to an individual who is not a U.S. citizen at birth or, in other words, who is born outside the U.S., Puerto Rico or other U.S. territories and whose parents are not U.S. citizens. The terms "foreign born" and "immigrant" are used interchangeably.

"U.S. born" refers to an individual who is a U.S. citizen at birth, including people born in the United States, Puerto Rico or other U.S. territories, as well as those born elsewhere to parents who are U.S. citizens.

The "legal immigrant" population is defined as people granted legal permanent residence; those granted asylum; people admitted as refugees; and people admitted under a set of specific authorized temporary statuses for longer-term residence and work. This group includes "naturalized citizens," legal immigrants who have become U.S. citizens through naturalization; "legal permanent resident aliens" who have been granted permission to stay indefinitely in the U.S. as permanent residents, asylees or refugees; and "legal temporary migrants" who are allowed to live and, in some cases, work in the U.S. for specific periods of time (usually longer than one year).

"Unauthorized immigrants" are all foreign-born non-citizens residing in the country who are not "legal immigrants." These definitions reflect standard and customary usage by the Department of Homeland Security and academic researchers. The vast majority of unauthorized immigrants entered the country without valid documents or arrived with valid visas but stayed past their visa expiration date or otherwise violated the terms of their admission. Some who entered as unauthorized immigrants or violated terms of admission have obtained work authorization by applying for adjustment to legal permanent status or by obtaining Temporary Protected Status (TPS). Data are very limited, but this "quasi-legal" group could account for as much as 10% of the unauthorized population. Many could also revert to unauthorized status.

"Children" are people under age 18 who are not married. "Adults" are ages 18 and older.

"Children of unauthorized immigrants" or "children of unauthorized immigrant parents" include both foreign-born and U.S.-born children who live with at least one unauthorized immigrant parent.

About the Authors

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Current Estimates and Trends

As of March 2009, 11.1 million unauthorized immigrants were living in the United States. Pew Hispanic Center estimates indicate that the size of the unauthorized immigrant population peaked in 2007 at 12 million. From 2007 to 2009, the number of unauthorized immigrants declined by a million people, or 8%.

This decline represents a change in the pattern throughout the decade. There were 8.4 million unauthorized immigrants in 2000, a number that increased in 2001, leveled off for two years and then grew steadily from 2003 to 2007. Despite the population's recent decline, the number of unauthorized immigrants grew 32% from 2000 to 2009.

Table 2
Estimates of the U.S. Unauthorized Immigrant Population, 2000-2009
(millions)

YEAR	ESTIMATE	RANGE
2009	11.1	(10.6 - 11.6)
2008	11.6	(11.1 - 12.1)
2007	**12.0**	(11.5 - 12.5)
2006	11.3	(10.8 - 11.8)
2005	**11.1**	(10.6 - 11.6)
2004	**10.4**	(9.9 - 10.8)
2003	9.7	(9.2 - 10.2)
2002	9.4	(9.0 - 9.9)
2001	**9.3**	(8.8 - 9.7)
2000	8.4	(7.9 - 8.8)

Notes: Range represents the bounds of the estimated 90% confidence interval. **Boldface** indicates the change from the previous year is statistically significant.

Source: Pew Hispanic Center estimates based on residual methodology applied to March Supplements to the Current Population Survey. See Methodology.

The number of unauthorized immigrants in 2008, 11.6 million, appears to be larger than the number in 2009, but this finding is inconclusive because the difference between estimates for the two years is not statistically significant. The estimates are derived from sample surveys and thus are subject to uncertainty from sampling error, as well as other types of error. Each annual estimate of the unauthorized population is actually the midpoint of a range of possible values that could be the true number. In addition, the change has its own margin of error.

These ranges represent 90% confidence intervals, meaning that there is a 90% probability that the interval contains the true value.

For example, as can be seen in the table on this page, the range of possible values for the unauthorized population in 2008 was 11.1 million to 12.1 million. In 2009, it was 10.6 million to 11.6 million, which overlaps the 2008 range. In this table, boldface numbers indicate when the change in any one year has a statistically significant difference from that of the year before. There also was one year in the decade—2009—when the decline from two years earlier was statistically significant; in four years—2004 through 2007—the increase was statistically significant compared with two years earlier.

According to estimates from the Department of Homeland Security, 10.8 million unauthorized immigrants were living in the United States in January 2009, compared with 11.8 million in 2007, the peak number for the decade. These estimates are consistent with the Pew Hispanic Center estimates. The DHS

estimates were developed using a similar methodology but were based on a different Census Bureau data source, the American Community Survey.

Foreign-born Population Trends

Of the nation's 39.4 million foreign-born residents in 2009, 72%, or 28.4 million, were legal immigrants in one of three main categories: 14.6 million naturalized citizens, 12.4 million legal permanent residents and 1.4 million legal temporary migrants.[3]

Table 3
Foreign-born Population by Legal Status, 2009
(population in millions)

	Population	Share of Foreign Born
Total foreign born	39.4	100%
Legal immigrants	28.4	72%
Naturalized citizens	14.6	37%
Legal permanent resident aliens	12.4	31%
Legal temporary migrants	1.4	4%
Unauthorized immigrants	11.1	28%

Note: Numbers may not sum to total due to rounding.
Source: Pew Hispanic Center estimates based on augmented March Supplements to the Current Population Survey. See Methodology.

The annual net average growth of the unauthorized immigrant population declined notably over the decade. By contrast, the flow of legal immigrants increased slightly. As documented in a 2008 Pew Hispanic Center report, the annual flows of legal residents began to surpass the annual flows of unauthorized residents around 2007, reversing a trend that began in the late 1990s.

The combination of decreased flow of unauthorized immigrants and slightly increased flow of legal immigrants has played a role in changing the composition of the nation's foreign-born population. Unauthorized immigrants have become a smaller share of the nation's foreign-born population: 28% in 2009, compared with 31% in 2007.

State Settlement Patterns

In concert with the national decrease in unauthorized immigration, some South Atlantic and Mountain states experienced statistically significant declines in their unauthorized immigrant populations from 2008 to 2009. No state had a statistically significant increase.

The South Atlantic division, which extends between Delaware and Florida and includes several states that have become new immigrant magnets in recent years, had a decline in its unauthorized population, from 2.5 million in 2008 to 2 million in 2009.

Within that division, Florida's unauthorized immigrant population declined by 375,000 during that one-year period, to an estimated 675,000 people. The number

[3] Because of rounding, numbers throughout the report may not sum to the total.

of unauthorized immigrants in Virginia declined by 65,000, to 240,000 people. In the area that encompasses the rest of the region, the unauthorized immigrant population declined by 160,000, to 1 million.

Among the Mountain states as a group,[4] the number of unauthorized immigrants declined by 160,000, to 1 million, from 2008 to 2009. Nevada was the only state to have its own statistically significant decline; its unauthorized immigrant population went down by 50,000 during that year, to an estimated 180,000. A group of three other Mountain states—Arizona, Colorado and Utah—had a combined decline of 130,000 unauthorized immigrants, to a 2009 total of 700,000.

Although unauthorized immigrants live in every state, they are highly concentrated in only a few states. In 2009, just over half (54%) lived in only five states that are longtime immigrant destinations—California, Texas, Florida, New York and Illinois. California alone houses nearly a quarter (23%) of the nation's unauthorized immigrants.

States with large numbers of unauthorized immigrants also include several that have become new destinations over the past two decades. They include Georgia, Arizona and North Carolina, where more than a million were estimated to reside in 2009. Those states' combined share of the unauthorized immigrant population grew to 10% in 2009 from 4% in 1990.

Table 4
States with Largest Unauthorized Immigrant Populations, 2009
(thousands)

	Estimated Population	Range
U.S. Total	11,100	(10,600 - 11,600)
California	2,550	(2,450 - 2,700)
Texas	1,600	(1,450 - 1,750)
Florida	675	(600 - 725)
New York	650	(600 - 700)
Illinois	525	(475 - 575)
New Jersey	475	(425 - 550)
Georgia	425	(375 - 475)
Arizona	375	(325 - 450)
North Carolina	275	(230 - 325)
Maryland	250	(210 - 300)
Virginia	240	(210 - 275)
Colorado	210	(180 - 230)

Note: State ranges represent one standard error above and below point estimate.
Source: Pew Hispanic Center estimates based on augmented March Supplements to the Current Population Survey. See Methodology.

Unauthorized immigrants accounted for 3.7% of the nation's population in 2009. Their shares of states' total population were highest in California (6.9%), Nevada (6.8%) and Texas (6.5%). Arizona (5.8%) and New Jersey (5.6%) round out the top five states where unauthorized immigrants made up the largest share of the population in 2009.

There also are seven states—Alaska, Maine, Montana, North Dakota, South Dakota, Vermont and West Virginia—where unauthorized immigrants account for less than 1% of the population; the Pew Hispanic Center estimates that the unauthorized immigrant population in each of those states was less than 10,000 in 2009.

[4] The Mountain states are Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming.

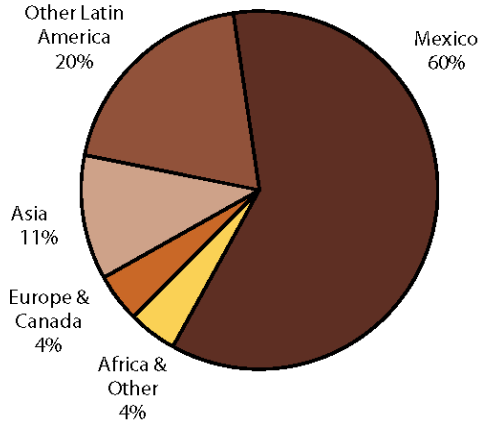
Country of Origin

Latin American countries account for the overwhelming majority—four-in-five—of unauthorized immigrants. In March 2009, there were 8.9 million unauthorized immigrants in the U.S. from Mexico and other parts of Latin America. Of those, 6.7 million were from Mexico, or 60% of all unauthorized immigrants. An additional 2.2 million unauthorized immigrants, or 20% of the total, were from other Latin American nations (about 1.3 million from Central America, 575,000 from South America and 350,000 from the Caribbean).

Figure 3

Estimated U.S. Unauthorized Immigrant Population, by Region and Country of Birth, 2009

(%)



Notes: See appendix for regional definitions. Numbers may not sum to total due to rounding.

Source: Pew Hispanic Center estimates based on augmented March Supplements to the Current Population Survey. See Methodology.

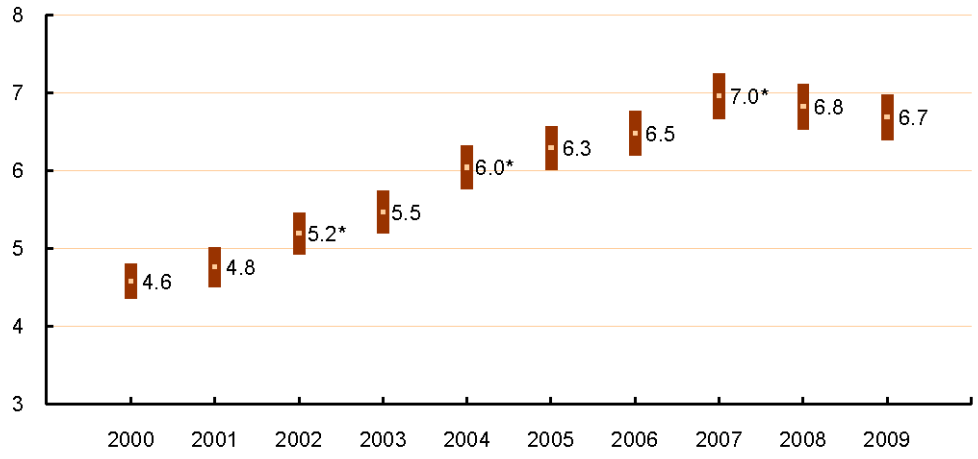
Unauthorized immigrants from South and East Asia accounted for 1.2 million of the total, or 11%; Europe and Canada accounted for about 475,000 unauthorized immigrants, or 4%. Smaller numbers came from the Middle East (150,000, or about 1% of the total).

The unauthorized population from Mexico grew steadily from 2001 through 2007, expanding from 4.8 million to 7 million during those years. Since then, the number from Mexico has been stable.

The population of unauthorized immigrants from other countries in Latin America did not grow at a statistically significant rate until it peaked at 2.8 million in 2006. After holding steady in 2007, the numbers dropped notably—to 2.2 million in 2009. That represents a decline of 22% over the two-year period.

The number of unauthorized immigrants from other nations grew in 2001 but was statistically unchanged after that. In 2009, 2.2 million unauthorized immigrants came from nations outside Latin America. That represents a 20% share of unauthorized immigrants in 2009.

Figure 4
Estimates of the U.S. Unauthorized Immigrant Population from Mexico, 2000-2009
(millions)



Notes: Bars indicate low and high points of the estimated 90% confidence interval (Table A3). The symbol * indicates the change from the previous year is statistically significant.
Source: Pew Hispanic Center estimates based on residual methodology applied to March Supplements to the Current Population Survey. See Methodology.

Over the decade, the share of unauthorized immigrants who are from Mexico rose from 51% in 2001[5] to 60% in 2009. The share from other Latin American nations declined from 25% in 2001 to 20% in 2009. The share from nations outside Latin America decreased slightly, from 24% in 2001 to 20% in 2009.

About three-quarters of unauthorized immigrants are Hispanic (76%); among non-Hispanics, 11% are Asian, 8% are white and 5% are black.

Year of Arrival

Nearly half the unauthorized population in 2009 (47%) arrived in the U.S. in 2000 or later. Of these, 1.7 million, or 15% of unauthorized immigrants, arrived from 2005 to 2009; 3.5 million, or 32% of the unauthorized population, came to the country from 2000 to 2004.

An additional 40% of unauthorized immigrants—4.5 million—arrived during the 1990s, when immigration rates in recent decades reached their peak. An estimated

Table 5
Estimates of the U.S. Unauthorized Immigrant Population by Period of Arrival, March 2009
(millions)

PERIOD	NUMBER	PERCENT
Total	11.1	100%
2005-2009	1.7	15%
2000-2004	3.5	32%
1990-1999	4.5	40%
1980-1989	1.4	13%

Note: Numbers may not sum to total due to rounding.
Source: Pew Hispanic Center estimates based on residual methodology applied to March Supplements to the Current Population Survey. See Methodology.

[5] National and state population estimates for 2000 are based on Census 2000; all other estimates of the population and its characteristics are based the Current Population Survey. Therefore, totals may differ slightly.

1.4 million unauthorized immigrants, or 13% of the total, arrived during the 1980s.

Gender and Age

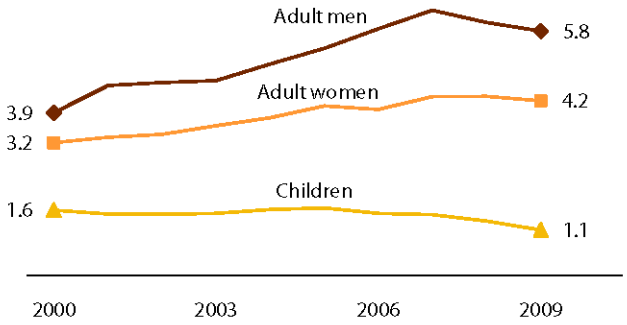
Among unauthorized immigrant adults, men outnumber women, 5.8 million to 4.2 million as of 2009. The number of men grew rapidly through the decade, peaked in 2007 at 6.3 million, and declined by about half a million people from 2007 to 2009. The number of women grew more slowly before peaking in 2007 at 4.3 million and leveling off since then.

As the accompanying age pyramid charts illustrate, the unauthorized immigrant population has a higher share of people in their 20s and 30s than do the legal-immigrant or the U.S.-born populations. More than half of unauthorized immigrants (58%) were ages 18 to 39 in 2009, compared with 28% of the U.S.-born population and 34% of legal immigrants.

The elderly make up a smaller share of unauthorized immigrants than they do legal immigrants or the U.S.-born. Only about 1% were ages 65 or older in 2009, compared with 16% of legal immigrants and 13% of U.S.-born residents.

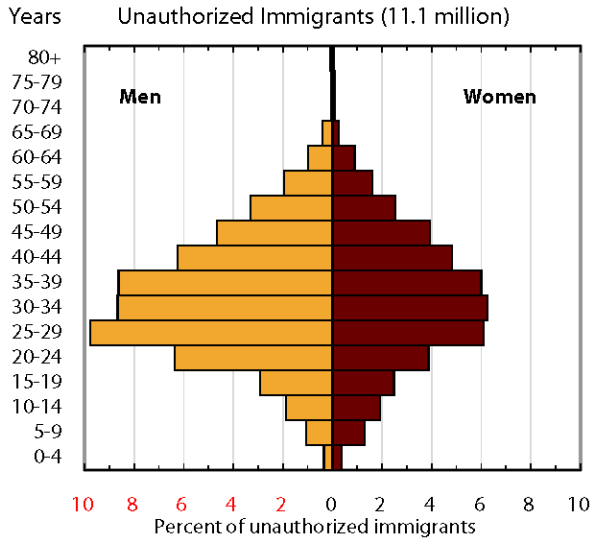
Children make up a smaller share of the unauthorized immigrant population than of the U.S.-born population, but one important caveat is that almost four-in-five children of unauthorized immigrant parents are born in the United States.

Figure 5
Unauthorized Immigrant Population, by Gender and Age, 2000-2009
(millions)



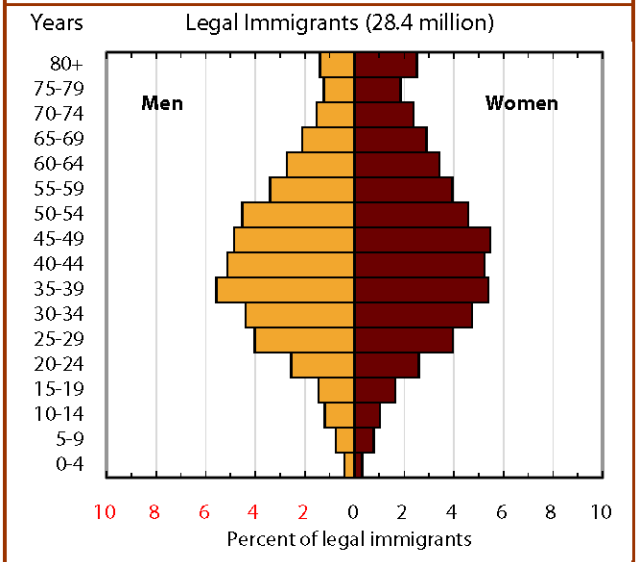
Note: Adults are ages 18 and older.
Source: Pew Hispanic Center estimates based on augmented March Supplements to the Current Population Survey. See Methodology.

Figure 6
Unauthorized Immigrants by Age and Sex, 2009



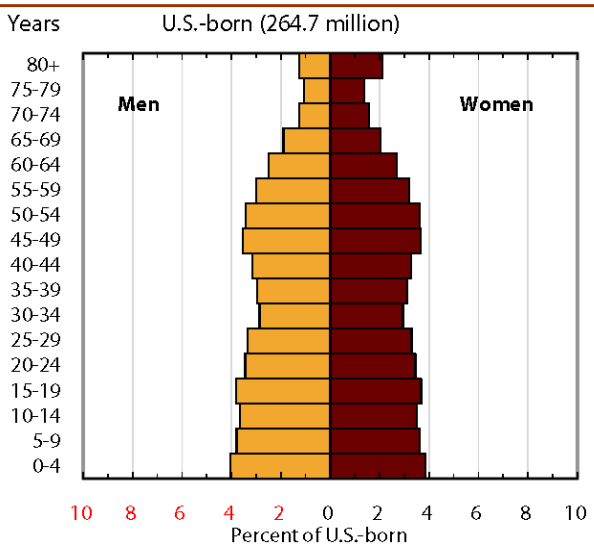
Source: Pew Hispanic Center estimates based on augmented March Supplements to the Current Population Survey. See Methodology.

Figure 7
Legal Immigrants by Age and Sex, 2009



Source: Pew Hispanic Center estimates based on augmented March Supplements to the Current Population Survey. See Methodology.

Figure 8
U.S.-born Population by Age and Sex, 2009



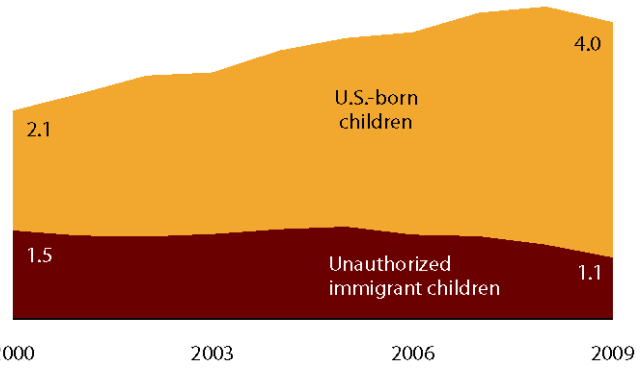
Source: Pew Hispanic Center estimates based on augmented March Supplements to the Current Population Survey. See Methodology.

Children

An earlier Pew Hispanic Center report estimated that 5.1 million children lived in households with at least one unauthorized immigrant parent in March 2009. Of that total, 4 million were born in the U.S. and are citizens by birthright and 1.1 million were born abroad and are themselves unauthorized. The population of children with at least one unauthorized immigrant parent was 42% larger in 2009 than in 2000, when it numbered 3.6 million. However, its growth essentially has leveled off since 2008.

Overall growth trends mask differing patterns in the two components of this population. The number of U.S.-born children of unauthorized immigrants nearly doubled from 2000 to 2009; it rose through the decade before leveling off in 2008. The number of

Figure 9
Children with at Least One Unauthorized Immigrant Parent, by Status, 2000-2009
(millions)



Note: Children are persons under age 18 who are not married.
Source: Pew Hispanic Center estimates based on augmented March Supplements to the Current Population Survey. See Methodology.

foreign-born children of unauthorized immigrants declined somewhat over the decade. As a result, 79% of the children of unauthorized immigrants were born in the United States in 2009, compared with 57% in 2000.

Labor Force

In March 2009, there were 7.8 million unauthorized immigrants in the nation's labor force, representing 5.1% of the labor force of 154.8 million people**.** The unauthorized immigrant labor force grew in 2001, leveled off for three years and increased again after 2003 until peaking in 2007 at 8.4 million people**.** It declined in 2008 and again in 2009.

Table 6
Share in Labor Force for Ages 18-64, by Gender and Status, 2009
(%)

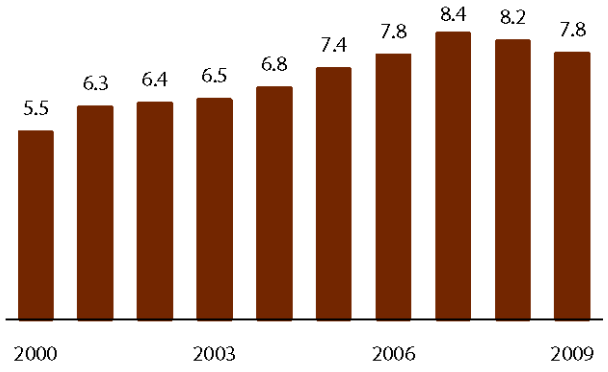
	MEN	WOMEN
U.S. born	81%	72%
Legal immigrants	86%	66%
Unauthorized immigrants	93%	58%

Source: Pew Hispanic Center estimates based on augmented March Supplements to the Current Population Survey. See Methodology.

Among men who are working age—18 to 64[6]—unauthorized immigrants are more likely to be in the labor force than are legal immigrants or the U.S. born. In 2009, 93% of working-age unauthorized immigrant men were in the labor force, compared with 86% of working-age legal immigrant men and 81% of working-age men who were born in the United States.

The opposite is true for women ages 18 to 64. In 2009, 58% of unauthorized immigrant women were in the labor force, compared with 66% of legal immigrant women and 72% of U.S.-born women. Among the reasons for this disparity is that women who are unauthorized immigrants are more likely than legal immigrants or U.S.-born women to say they are not working because they are raising children at home. Women who are unauthorized immigrants are less likely than U.S.-born women or legal immigrants to be out of the labor force because they are disabled or retired, and they are less likely than U.S.-born women to be in school.

Figure 10
Unauthorized Immigrants in U.S. Civilian Labor Force, 2000-2009
(millions)



Note: Includes employed and unemployed workers.
Source: Pew Hispanic Center estimates based on augmented March Supplements to the Current Population Survey. See Methodology.

As the number of unauthorized immigrants in the labor force declined from 2007 to 2009, so did the number employed. (In addition to those who are employed, the labor force includes those who are looking for work.) The number of employed

[6] This differs from the usual definition of the labor force, which includes people ages 16 and older.

workers of all ages who were unauthorized immigrants rose to 8 million in 2007 from 5.2 million in 2000, before declining to 7 million in 2009. Their share of employed workers declined to 5% in 2009 from 5.5% in 2007. The number of employed U.S.-born workers and legal immigrant workers also declined, but their shares did not.

The unemployment rate for unauthorized immigrants of all ages in March 2009 was higher than that of U.S.-born workers or legal immigrants—10.4%, 9.2% and 9.1%, respectively. This was the case in 2008, as well as from 2000 to 2003. From 2004 to 2007, unauthorized immigrants had similar or lower unemployment rates compared with the other two groups.

These overall unemployment rates mask differences by gender. Women who are unauthorized immigrants of all ages have had higher unemployment rates through the decade than U.S.-born workers or legal immigrants. Unauthorized immigrant men of all ages had lower unemployment rates than U.S.-born men or legal immigrant men from 2001 to 2007. In 2008, their rate exceeded those of the other groups but in 2009, their 10% unemployment rate was lower than the 11% rate for U.S.-born workers and similar to the 10.2% for legal immigrant workers.

State Labor Force

State patterns of unauthorized immigrants in the labor force vary widely. States with the largest population shares of unauthorized immigrants also tend to have the largest shares of unauthorized immigrants in the labor force.

California had the largest number (1.8 million) of unauthorized immigrants in the 2009 labor force, and they made up a larger share of the labor force there (9.3%) than in any other state except Nevada (9.4%). Texas had an estimated 1 million unauthorized immigrants in the labor force in 2009, which represented 8.7% of the labor force. New Jersey had the same share of unauthorized immigrants in the labor force (8.7%). In terms of numbers, Florida, Illinois, New York and New Jersey form the next tier of states (behind California and Texas), with between 400,000 and 525,000 unauthorized immigrants in the labor force.

Table 7
States with Largest Share of Unauthorized Immigrants in the Labor Force, 2009
(thousands)

	Labor Force, 2009		
	Total	Unauthorized	
		Estimate	Share
U.S. Total	154,780	7,850	5.1%
Nevada	1,360	130	9.4%
California	19,025	1,750	9.3%
Texas	11,977	1,050	8.7%
New Jersey	4,485	400	8.7%
Arizona	3,164	240	7.5%
New Mexico	939	65	6.7%
Georgia	4,813	325	6.5%
Maryland	3,033	190	6.3%
Oregon	2,056	130	6.2%
District of Columbia	346	20	6.1%
Illinois	6,594	400	5.9%
Florida	8,968	525	5.8%

Notes: Labor force estimates include employed and unemployed workers. Unauthorized estimates are rounded. Percentages are computed from unrounded data.
Source: Pew Hispanic Center estimates based on augmented March Supplements to the Current Population Survey. See Methodology.

A handful of states, generally the same ones with the smallest unauthorized immigrant populations, also have the smallest number and share of unauthorized immigrants in their labor forces. In 2009, Alaska, Maine, Montana, North Dakota, South Dakota, Vermont and West Virginia had fewer than 10,000 unauthorized immigrants in the labor force, less than a 1% share.

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Appendix A: Additional Figures and Tables

Table A1

Estimates of Unauthorized Immigrant Population by State

(thousands)

	2009		2008		2005	2000	1990
	Estimated Population	Range	Estimated Population	Range	Estimated Population	Estimated Population	Estimated Population
U.S. Total	11,100	(10,600 - 11,600)	11,600	(12,100 - 11,100)	11,100	8,375	3,525
Alabama	130	(95 - 170)	100	(80 - 130)	60	25	5
Alaska	<10	<10	<10	<10	<10	<10	<5
Arizona	375	(325 - 450)	475	(450 - 500)	450	300	90
Arkansas	60	(45 - 75)	55	(40 - 65)	45	30	5
California	2,550	(2,450 - 2,700)	2,650	(2,550 - 2,750)	2,650	2,300	1,500
Colorado	210	(180 - 230)	240	(220 - 250)	240	160	30
Connecticut	110	(95 - 130)	110	(95 - 120)	85	75	20
Delaware	20	(15 - 25)	30	(25 - 35)	25	15	5
District of Columbia	25	(20 - 30)	30	(25 - 35)	25	25	15
Florida	675	(600 - 725)	1,050	(950 - 1,100)	925	575	240
Georgia	425	(375 - 475)	475	(425 - 525)	425	250	35
Hawaii	35	(30 - 40)	30	(25 - 35)	25	25	5
Idaho	30	(25 - 40)	35	(25 - 40)	30	25	10
Illinois	525	(475 - 575)	475	(400 - 550)	350	475	200
Indiana	120	(85 - 150)	100	(90 - 110)	85	65	10
Iowa	65	(45 - 85)	55	(45 - 65)	55	25	5
Kansas	65	(50 - 80)	70	(60 - 80)	60	55	15
Kentucky	50	(35 - 60)	45	(30 - 55)	50	20	5
Louisiana	65	(45 - 85)	70	(50 - 85)	25	20	15
Maine	<10	<10	<10	<10	<10	<10	<5
Maryland	250	(210 - 300)	250	(230 - 275)	250	120	35
Massachusetts	160	(130 - 200)	180	(160 - 200)	200	150	55
Michigan	140	(100 - 170)	110	(85 - 140)	120	95	25
Minnesota	95	(80 - 120)	110	(95 - 120)	85	55	15
Mississippi	45	(25 - 65)	40	(30 - 50)	40	10	5
Missouri	60	(40 - 75)	45	(35 - 55)	40	30	10
Montana	<10	<10	<10	<10	<10	<10	<5
Nebraska	45	(35 - 60)	50	(40 - 55)	45	30	5
Nevada	180	(150 - 200)	230	(210 - 250)	190	140	25
New Hampshire	15	(10 - 20)	20	(15 - 25)	15	<10	<5
New Jersey	475	(425 - 550)	575	(525 - 625)	475	325	95
New Mexico	95	(75 - 120)	75	(70 - 85)	65	55	20
New York	650	(600 - 700)	800	(700 - 900)	675	725	350
North Carolina	275	(230 - 325)	350	(300 - 400)	375	210	25
North Dakota	<10	<10	<10	<10	<10	<10	<5
Ohio	120	(85 - 150)	100	(80 - 120)	100	55	10
Oklahoma	60	(45 - 75)	55	(40 - 65)	60	50	15
Oregon	170	(140 - 200)	140	(120 - 160)	140	110	25
Pennsylvania	160	(130 - 200)	130	(110 - 160)	150	85	25
Rhode Island	25	(20 - 30)	30	(20 - 35)	30	20	10
South Carolina	55	(35 - 70)	70	(55 - 80)	55	45	5
South Dakota	<10	<10	<10	<10	<10	<10	<5
Tennessee	130	(100 - 160)	150	(130 - 180)	130	50	10
Texas	1,600	(1,450 - 1,750)	1,400	(1,300 - 1,550)	1,400	1,100	450
Utah	110	(80 - 140)	120	(100 - 130)	95	65	15
Vermont	<10	<10	<10	<10	<10	<10	<5
Virginia	240	(210 - 275)	300	(275 - 325)	275	150	50
Washington	200	(160 - 240)	160	(120 - 210)	200	160	40
West Virginia	<10	<10	<10	<10	<10	<10	<5
Wisconsin	120	(95 - 160)	90	(70 - 110)	100	50	10
Wyoming	<10	<10	<10	<10	<10	<10	<5

Notes: State ranges represent one standard error above and below point estimate. 2008 and 2005 estimates differ from previously published values due to reweighting. See Methodology.

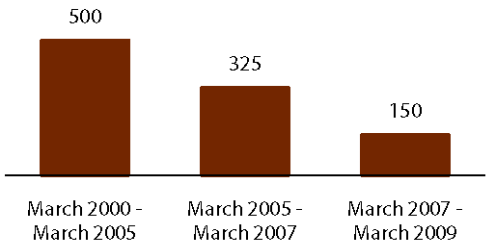
Sources: Estimates for 2009, 2008 and 2005 are Pew Hispanic Center estimates based on augmented March Supplements to the Current Population Survey. Estimates for 2000 based on tabulations from 5-percent Public-Use Microdata Sample (PUMS) by Passel et al. 2004. Estimates for 1990 from Warren 2003.

Table A2
Number and Share of Unauthorized Immigrants
for Labor Force and Total Population, by State, 2009
(thousands)

	Labor Force			Population		
	Total	Unauthorized Immigrants		Total	Unauthorized Immigrants	
		Estimate	Share		Estimate	Share
U.S. Total	154,780	7,850	5.1%	303,444	11,100	3.7%
Alabama	2,283	120	5.1%	4,739	130	2.8%
Alaska	353	<10	<1%	674	<10	<1%
Arizona	3,164	240	7.5%	6,591	375	5.8%
Arkansas	1,365	45	3.5%	2,836	60	2.1%
California	19,025	1,750	9.3%	37,186	2,550	6.9%
Colorado	2,745	140	5.0%	4,941	210	4.2%
Connecticut	1,864	85	4.6%	3,455	110	3.3%
Delaware	435	15	3.4%	866	20	2.5%
District of Columbia	346	20	6.1%	596	25	4.1%
Florida	8,968	525	5.8%	18,207	675	3.7%
Georgia	4,813	325	6.5%	9,613	425	4.3%
Hawaii	627	25	3.9%	1,265	35	2.7%
Idaho	754	20	2.7%	1,522	30	2.1%
Illinois	6,594	400	5.9%	12,789	525	4.2%
Indiana	3,158	80	2.5%	6,312	120	1.9%
Iowa	1,760	50	2.7%	2,999	65	2.1%
Kansas	1,515	50	3.2%	2,733	65	2.4%
Kentucky	2,101	30	1.4%	4,264	50	1.2%
Louisiana	2,021	40	2.1%	4,345	65	1.5%
Maine	680	<10	<0.5%	1,320	<10	<0.5%
Maryland	3,033	190	6.3%	5,577	250	4.5%
Massachusetts	3,351	130	3.8%	6,449	160	2.5%
Michigan	4,949	85	1.7%	9,844	140	1.4%
Minnesota	2,892	70	2.4%	5,135	95	1.9%
Mississippi	1,340	35	2.6%	2,916	45	1.6%
Missouri	3,064	45	1.5%	5,882	60	1.0%
Montana	521	<10	<1%	977	<10	<1%
Nebraska	988	30	3.2%	1,783	45	2.6%
Nevada	1,360	130	9.4%	2,608	180	6.8%
New Hampshire	758	10	1.5%	1,304	15	1.1%
New Jersey	4,485	400	8.7%	8,632	475	5.6%
New Mexico	939	65	6.7%	1,992	95	4.9%
New York	9,941	475	4.9%	19,512	650	3.3%
North Carolina	4,609	200	4.4%	9,293	275	3.0%
North Dakota	373	<10	<1%	627	<10	<1%
Ohio	5,846	80	1.3%	11,415	120	1.1%
Oklahoma	1,723	45	2.6%	3,569	60	1.7%
Oregon	2,056	130	6.2%	3,837	170	4.4%
Pennsylvania	6,276	110	1.8%	12,223	160	1.3%
Rhode Island	571	20	3.4%	1,048	25	2.6%
South Carolina	2,161	40	1.9%	4,479	55	1.2%
South Dakota	461	<10	<1.5%	799	<10	<1%
Tennessee	3,075	90	2.8%	6,201	130	2.1%
Texas	11,977	1,050	8.7%	24,440	1,600	6.5%
Utah	1,377	70	4.9%	2,775	110	3.9%
Vermont	355	<10	<0.5%	612	<10	<0.5%
Virginia	4,106	180	4.4%	7,787	240	3.0%
Washington	3,467	140	4.1%	6,574	200	3.0%
West Virginia	789	<10	<0.5%	1,800	<10	<0.5%
Wisconsin	3,079	75	2.4%	5,573	120	2.2%
Wyoming	285	<10	<1.5%	531	<10	<1.5%

Notes: Labor force estimates include both employed and unemployed workers. Percentages are computed from unrounded data.
Source: Pew Hispanic Center estimates based on augmented March Supplements to the Current Population Survey. See Methodology.

Figure A1
Average Annual Inflow of Unauthorized Immigrants from Mexico, by Period, 2000-2009
(thousands)



Notes: Flows are derived as differences of population totals over given intervals, classified by period of arrival in U.S., from March CPS supplements. Averages of alternative estimates are shown in chart. See Methodology.

Source: Pew Hispanic Center estimates based on augmented March Supplements to the Current Population Survey.

Table A3
Estimates of the U.S. Unauthorized Immigrant Population from Mexico, 2000-2009
(millions)

YEAR	ESTIMATE	RANGE
2009	6.7	(6.4 - 7.0)
2008	6.8	(6.5 - 7.1)
2007	**7.0**	(6.7 - 7.2)
2006	6.5	(6.2 - 6.8)
2005	6.3	(6.0 - 6.6)
2004	**6.0**	(5.8 - 6.3)
2003	5.5	(5.2 - 5.7)
2002	**5.2**	(4.9 - 5.5)
2001	4.8	(4.5 - 5.0)
2000	4.6	(4.4 - 4.8)

Notes: Range represents the bounds of the estimated 90% confidence interval. **Boldface** indicates the change from the previous year is statistically significant.

Source: Pew Hispanic Center estimates based on residual methodology applied to March Supplements to the Current Population Survey. See Methodology.

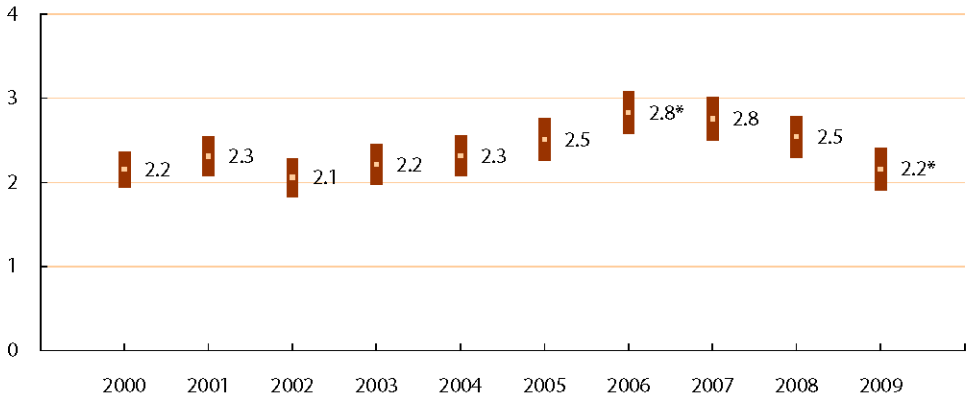
Table A4
Estimates of the U.S. Unauthorized Immigrant Population from Latin America, other than Mexico, 2000-2009
(millions)

YEAR	ESTIMATE	RANGE
2009	**2.2**	(1.9 - 2.4)
2008	2.5	(2.3 - 2.8)
2007	2.8	(2.5 - 3.0)
2006	**2.8**	(2.6 - 3.1)
2005	2.5	(2.3 - 2.8)
2004	2.3	(2.1 - 2.6)
2003	2.2	(2.0 - 2.5)
2002	2.1	(1.8 - 2.3)
2001	2.3	(2.1 - 2.5)
2000	2.2	(1.9 - 2.4)

Notes: Range represents the bounds of the estimated 90% confidence interval. **Boldface** indicates the change from the previous year is statistically significant.

Source: Pew Hispanic Center estimates based on residual methodology applied to March Supplements to the Current Population Survey. See Methodology.

Figure A2
Estimates of the U.S. Unauthorized Immigrant Population from Latin America, other than Mexico, 2000-2009
(millions)



Notes: Bars indicate low and high points of the estimated 90 % confidence interval (Table A4). The symbol * indicates the change from the previous year is statistically significant. Latin America includes Central America, South America and the Caribbean.

Source: Pew Hispanic Center estimates based on residual methodology applied to March Supplements to the Current Population Survey. See Methodology.

Table A5
Estimates of the U.S. Unauthorized Immigrant Population from Regions other than Latin America, 2000-2009

(millions)

YEAR	ESTIMATE	RANGE
2009	2.2	(1.9 - 2.6)
2008	2.2	(1.9 - 2.6)
2007	2.3	(2.0 - 2.7)
2006	2.0	(1.7 - 2.3)
2005	2.3	(1.9 - 2.6)
2004	2.0	(1.7 - 2.3)
2003	2.0	(1.7 - 2.3)
2002	2.2	(1.8 - 2.5)
2001	**2.2**	(1.9 - 2.5)
2000	1.9	(1.6 - 2.1)

Notes: Range represents the bounds of the estimated 90% confidence interval. **Boldface** indicates the change from the previous year is statistically significant.

Source: Pew Hispanic Center estimates based on residual methodology applied to March Supplements to the Current Population Survey. See Methodology.

Table A6
Unauthorized Immigrants in U.S. Civilian Labor Force, 2000-2009

(millions)

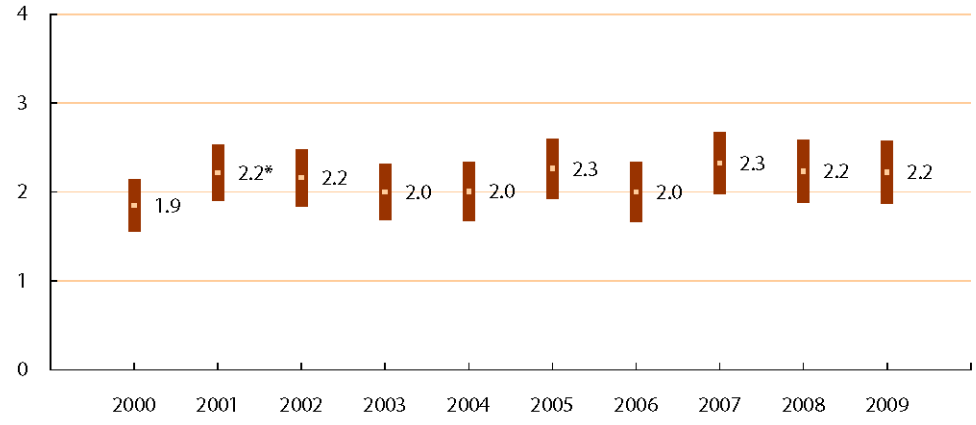
Year	Estimated Labor Force	Share of Labor Force
2009	7.8	5.1%
2008	8.2	5.3%
2007	8.4	5.5%
2006	7.8	5.2%
2005	7.4	5.0%
2004	6.8	4.6%
2003	6.5	4.4%
2002	6.4	4.4%
2001	6.3	4.3%
2000	5.5	3.8%

Note: Includes employed and unemployed workers.

Source: Pew Hispanic Center estimates based on augmented March Supplements to the Current Population Survey. See methodology.

Figure A3
Estimates of the U.S. Unauthorized Immigrant Population, from Regions other than Latin America, 2000-2009

(millions)

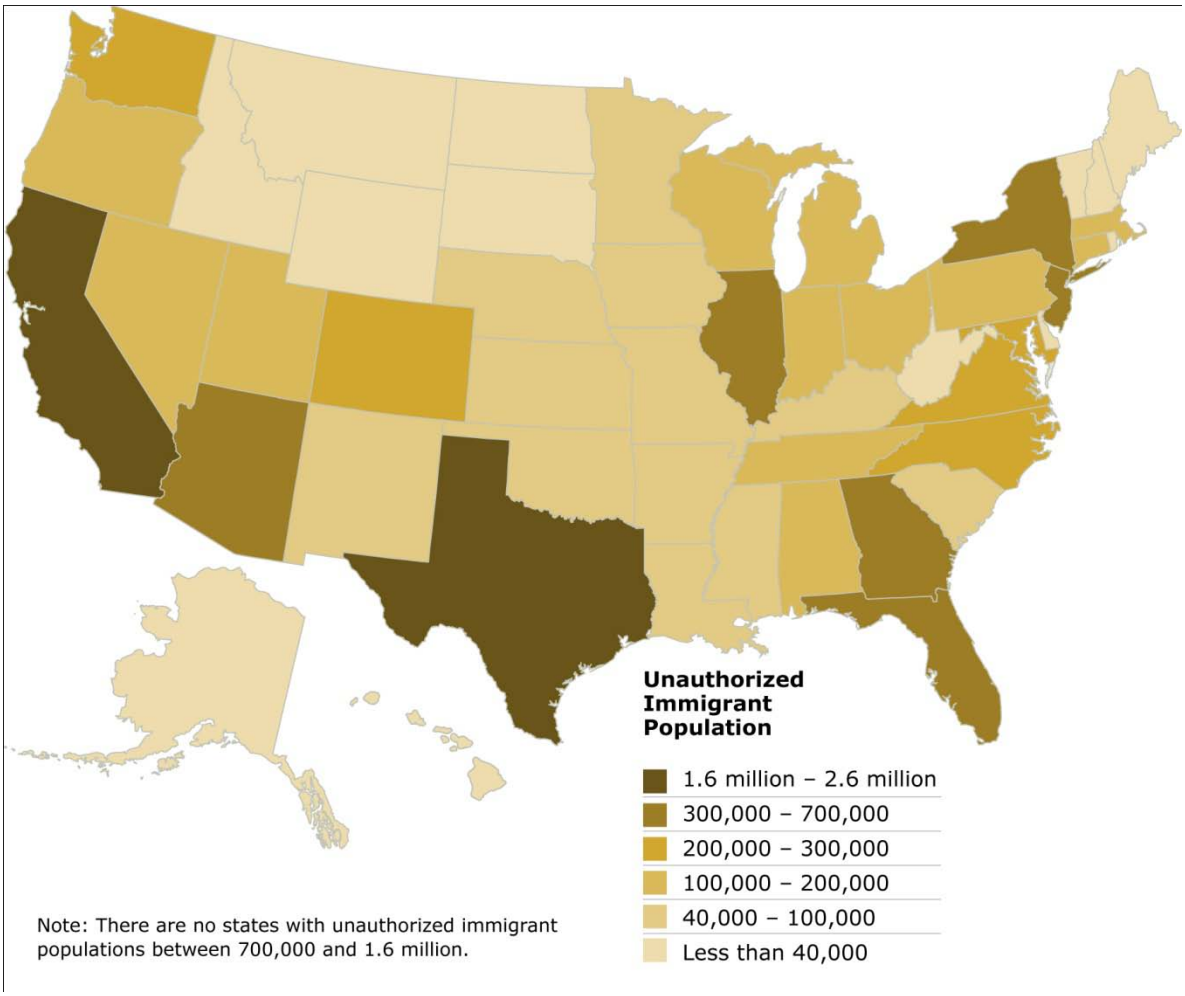


Notes: Bars indicate low and high points of the estimated 90 % confidence interval (Table A5). The symbol * indicates the change from the previous year is statistically significant.

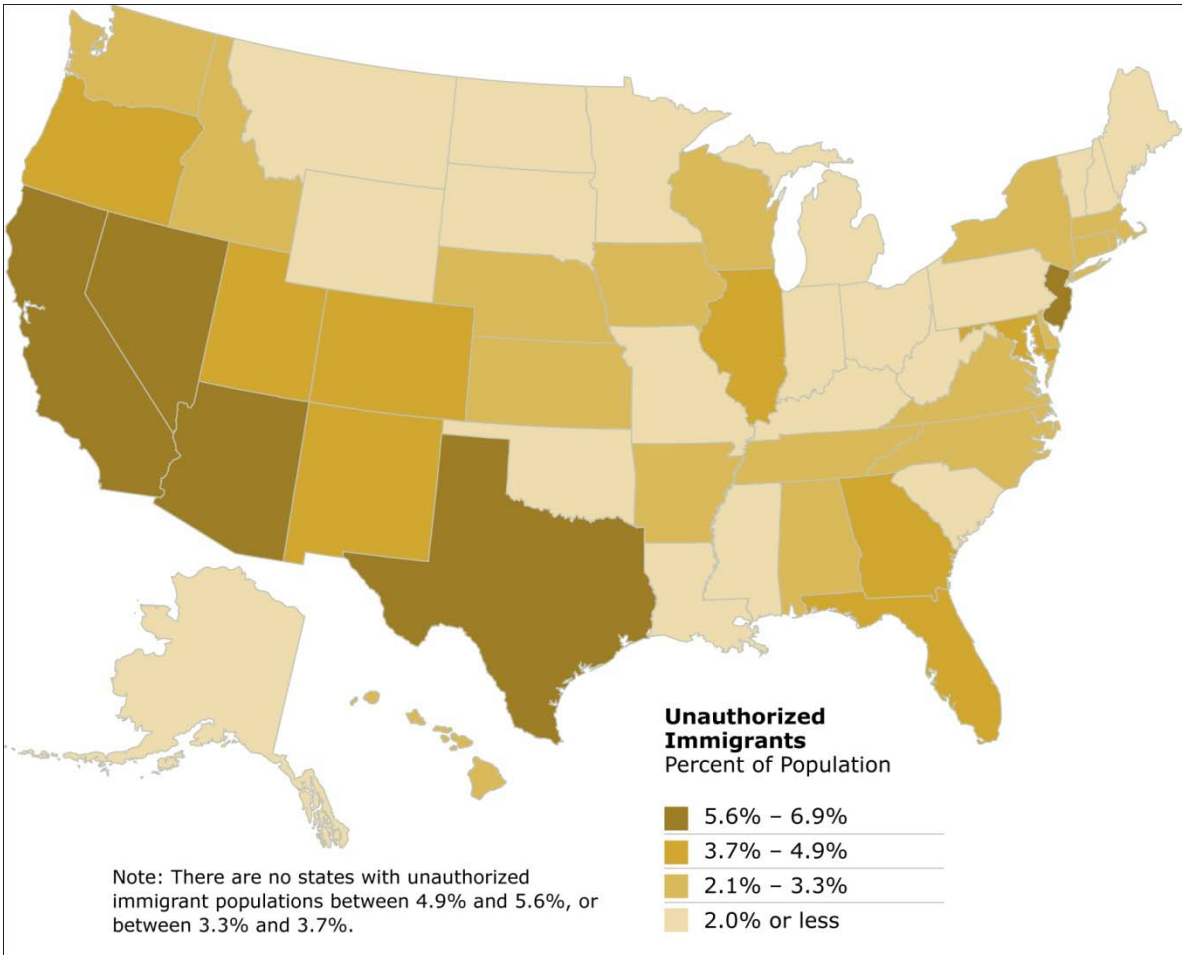
Source:Pew Hispanic Center estimates based on residual methodology applied to March Supplements to the Current Population Survey. See Methodology.

Appendix B: Maps

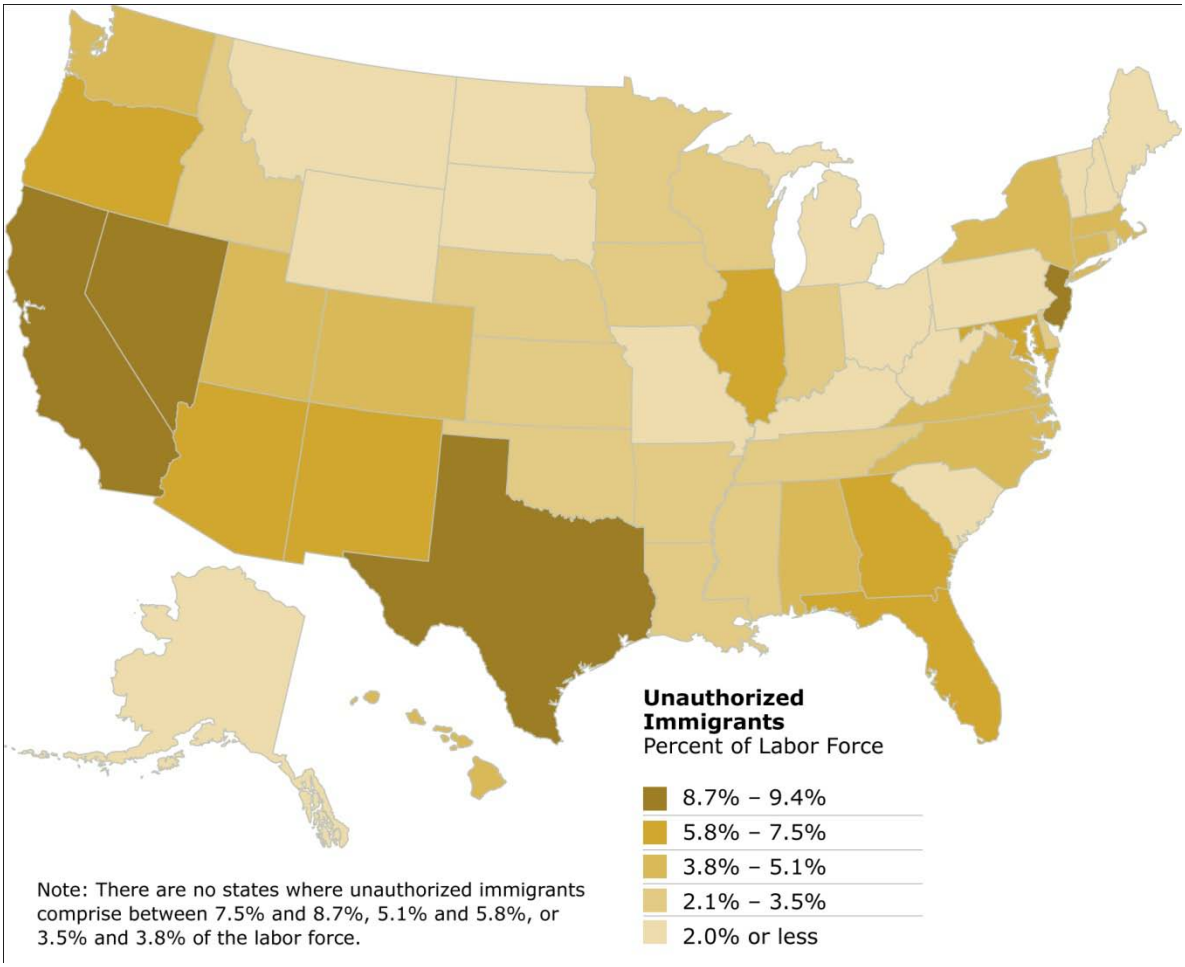
Map B1. Unauthorized Immigrant Population by State, 2009 (U.S. = 11.1 million)



Map B2. Unauthorized Immigrant Share of Population by State, 2009 (U.S. = 3.7%)



Map B3. Unauthorized Immigrants as Share of Labor Force by State, 2009 (U.S. = 5.1%)



Appendix C: Methodology

Unauthorized Immigrants—Overview

The data presented in this report on unauthorized and legal immigrants were developed through a multistage estimation process, principally using March Supplements to the Current Population Survey (CPS). The CPS is a monthly survey of about 55,000 households conducted jointly by the U.S. Bureau of Labor Statistics and the Census Bureau; the sample is expanded to about 80,000 households for the March supplement.

The first stage in the estimation process uses CPS data as a basis for estimating the number of legal and unauthorized immigrants included in the survey and the total number in the country using a residual estimation methodology. This method compares an estimate of the number of immigrants residing legally in the country with the total number in the CPS; the difference is assumed to be the number of unauthorized immigrants in the CPS. The legal resident immigrant population is estimated by applying demographic methods to counts of legal admissions covering the period from 1980 to the present obtained from the Department of Homeland Security's Office of Immigration Statistics and its predecessor at the Immigration and Naturalization Service. The initial estimates here are calculated separately for age-gender groups in six states (California, Texas, Florida, New York, Illinois and New Jersey) and the balance of the country; within these areas the estimates are further subdivided into immigrant populations from 35 countries or groups of countries by period of arrival in the United States. Variants of the residual method have been widely used and are generally accepted as the best current estimates. See also Passel and Cohn 2008; Passel 2007 for more details.

Then, having estimated the number of legal and unauthorized immigrants in the March CPS Supplements, we assign individual foreign-born respondents in the survey a specific status (one option being unauthorized immigrant) based on the individual's demographic, social, economic, geographic and family characteristics. (See below for more details.) The data and methods for the overall process were developed initially at the Urban Institute by Passel and Clark (especially 1998) and were extended by work of Passel, Van Hook and Bean (2004) and by subsequent work at the Pew Hispanic Center.

The final step adjusts the estimates of legal and unauthorized immigrants counted in the survey for omissions. The basic information on coverage is drawn principally from comparisons with Mexican data, U.S. mortality data and specialized surveys conducted at the time of the 2000 Census (Bean et al. 1998; Capps et al. 2002; Marcelli and Ong 2002). These adjustments increase the estimate of the legal foreign-born population, generally by 1-3% and the

unauthorized immigrant population by 10-15%. The individual survey weights are adjusted to account for immigrants missing from the survey. These augmented files serve as a basis for the detailed tabulations of the family, social, economic and geographic characteristics presented here.

Status Assignments—Legal and Unauthorized Immigrants

Individual respondents are assigned a status as a legal or unauthorized immigrant based on the individual's demographic, social, economic and geographic characteristics so the resulting number of immigrants in various categories agrees with the totals from the residual estimates. The assignment procedure employs a variety of methods, assumptions and data sources.

First, all immigrants entering the United States before 1980 are assumed to be legal. Then, the CPS data are corrected for known over-reporting of naturalized citizenship on the part of recently arrived immigrants (Passel et al. 1997) and all remaining naturalized citizens from countries other than Mexico and those in Central America are assigned as legal. Persons entering the U.S. as refugees are identified on the basis of country of birth and year of immigration to align with known admissions of refugees and asylees (persons granted asylum). Then, individuals holding certain kinds of temporary visas (including students, diplomats and "high-tech guest workers") are identified in the survey, and each is assigned a specific legal temporary migration status using information on country of birth, date of entry, occupation, education and certain family characteristics. Finally, some individuals are assigned as legal immigrants because they are in certain occupations (e.g., police officer, lawyer, military occupation, federal job) that require legal status or because they are receiving public benefits (e.g., welfare or food stamps) that are limited to legal immigrants.

After these initial assignments as "definitely legal" immigrants, a pool of "potentially unauthorized" immigrants remains. This group typically exceeds the target residual estimates by 20-35%. The "potentially unauthorized" immigrants are assigned as legal or unauthorized with probabilistic methods. This last step involves checks to ensure consistent statuses within families and several iterations to reach agreement with the demographically derived population totals.

At the end, the final estimates agree with the residual estimates for the six individual states noted earlier and for the balance of the country; for Mexican-born and other legal and unauthorized immigrants in each area; and for children, working-age men and working-age women within each category. Finally, the survey weights for foreign-born individuals are adjusted upward so the tabulated figures agree with the analytic, demographic estimates of the total number of legal and unauthorized migrants developed in the very first step. The

end product is a survey data set (of about 80,000 households) with individual respondents identified by nativity and legal status.

This methodology obviously requires a number of assumptions and is applied to survey data from a sample (albeit a large one). The resulting estimates, such as those presented here, are subject to both sampling and non-sampling error. Accordingly, small differences should not be treated as significant or substantive. Sampling error intervals have been developed for the national estimates of all unauthorized immigrants, totals by country or region of birth, and state-level estimates.

CPS Weights

Population data from the CPS are tied to the Census Bureau's official population estimates of the civilian, noninstitutional population for the nation and states through a weighting process designed so that the CPS figures agree with pre-specified national population totals by age, sex, race and Hispanic origin and with state-level totals by age, sex and race (U.S. Census Bureau 2006). At the end of each calendar year, the Census Bureau produces an estimate of the population of the United States and states for the middle of that calendar year (July 1). The estimate updates the population enumerated in the previous census using the latest available data on demographic components of change. So, in December 2008, the Census Bureau estimated the U.S. population as of July 1, 2008, by updating the census count of April 1, 2000, and taking into account the number of births over those eight years, the number of deaths, and net international migration since 2000. In the course of producing this estimate, the Census Bureau also produces estimates for each month from May 2000 through June 2008. This series of population estimates is referred to by the Census Bureau as the "Vintage 2008" population estimates. The Census Bureau then uses these estimates as a basis for projecting the population forward through the next calendar year (in this case, 2009). These short-term projections serve as the basis for the CPS weights throughout the calendar year. Thus, the weights for each month of the 2009 CPS are based on the Vintage 2008 population estimates; those for the 2008 CPS on the Vintage 2007 population estimates; etc.

For most years, any changes in the series of population estimates from one vintage to the next are small—reflecting mainly the incorporation of final data on births, deaths and immigration for the preliminary data used the year before. However, in the 2007 and 2008 population estimates, the Census Bureau made significant changes in the methodology used to measure international migration from 2000 onward. Although these changes do not directly affect the measured size of the immigrant population, they are concentrated in groups where a high percentage of the population is foreign born, notably working-age Hispanics and

Asians. As such, the new population controls have the potential for affecting the measured size of the foreign-born population.

Unfortunately for data users, the Census Bureau rarely reweights the CPS data series to take into account changes in the population estimates across vintages.[7] However, for each new vintage of population estimates, the Census Bureau does release the entire time series of monthly population estimates from April 2000 through the year when the estimates are used for CPS weights. These revised population estimates can be used to produce a consistent series of CPS data from 2000 onward by reweighting the CPS. The data on unauthorized immigrants shown in this report are based on reweighted data that follow the Census Bureau's (2006) weighting procedures to the extent possible with public-use data applied to Vintage 2008 population estimates for the civilian noninstitutional population—both published and unpublished data supplied by the U.S. Census Bureau to the Pew Hispanic Center. With this consistent series of CPS data, it is possible to more accurately measure changes over time in the immigrant population and flows.

Although the changes caused by reweighting are relatively small as a share of the population, their impact can be relatively greater on the residual estimates of unauthorized immigrants. These methodological changes led to a reduction of about 1.1 million in the estimated population for March 2007 between the Vintage 2006 estimates and the Vintage 2008 estimates. Although this change represented only about 0.4% of the U.S. population, it was concentrated in the Hispanic and Asian populations because immigration plays such a large role in these groups. The differences were further concentrated in adult age groups so that the impact on the Hispanic population was about 1.5%, with some age groups being more than 2% smaller in the Vintage 2008 population estimate than the previous one. As a result, there is a major discontinuity between the CPS results for 2007 and earlier compared with those for 2008 and later.

[7] The Census Bureau issued revised weights for 2000-2002 to incorporate large changes engendered by the replacement of the updated 1990 Census with results from the 2000 Census. Because of the large change between the Vintage 2006 and 2007 estimates noted here, the Census Bureau revised CPS weights for research purposes, but for only one month of data—December 2007.

Table C1
March CPS Population for Selected Groups with Revised Vintage 2008 Weighting and Original CPS Weighting: 2000-2009
(thousands)

Date	Total Population				Foreign-born Population				Hispanic Population Ages 18-64			
	Revised Weights	Original Weights	Difference Amount	Difference %	Revised Weights	Original Weights	Difference Amount	Difference %	Revised Weights	Original Weights	Difference Amount	Difference %
2009	301,483	301,483	--	--	36,771	36,771	--	--	28,311	28,311	--	--
2008	298,692	299,106	-414	-0.1%	37,039	37,278	-239	-0.6%	27,441	27,731	-290	-1.0%
2007	295,750	296,824	-1,074	-0.4%	36,718	37,290	-572	-1.5%	26,668	27,209	-541	-2.0%
2006	292,979	293,834	-855	-0.3%	35,415	35,681	-266	-0.7%	25,741	26,057	-316	-1.2%
2005	290,171	291,155	-984	-0.3%	34,872	35,166	-294	-0.8%	24,973	25,316	-343	-1.4%
2004	287,521	288,280	-760	-0.3%	33,942	34,263	-321	-0.9%	24,213	24,494	-281	-1.1%
2003	284,893	285,933	-1,040	-0.4%	32,984	33,485	-501	-1.5%	23,407	23,952	-546	-2.3%
2002	282,302	282,082	220	0.1%	32,455	32,462	-7	0.0%	22,638	22,656	-18	-0.1%
2001	279,690	279,517	173	0.1%	31,519	31,817	-298	-0.9%	21,783	21,736	47	0.2%
2000	276,944	276,979	-35	0.0%	30,716	30,089	627	2.1%	20,869	20,895	-25	-0.1%

Note: Revised weights developed by Pew Hispanic Center using Census Bureau (2006) methodology to be consistent with Vintage 2008 population estimates. Original weights released with each year's March CPS Supplement as variable MARSUPWT. See Methodology.
Source:Pew Hispanic Center tabulations of reweighted March Current Population Survey Supplements. Data are not adjusted for survey omissions or augmented with legal status assignments.

The estimated unauthorized population in March 2009, 11.1 million, is about 500,000 less than the 11.6 million estimate March 2008 although the difference was not statistically significant. The previously published estimate for March 2008 (not based on reweighted CPS data) was 11.9 million. The revised estimate for 2008 was only 2.5% less than the previous one, but the measured change was one-third less (-500,000 versus -800,000). The impact on change between the 2007 estimate and the 2009 estimate is even greater. Our previously published estimate for March 2007 based on the Vintage 2007 CPS was 12.4 million versus the current, Vintage 2008, estimate of 12.0 million—a difference of 3.1%. However, without the revision, the apparent change between 2007 and 2009 would have been 40% larger than the reduction of 1 million shown when consistent data are used. The reweighting has the largest impact on estimates for 2007 and 2008, leading to the reductions noted of about 3% in the size of the unauthorized population. For earlier years, none of the revisions exceeds 200,000 and in four years out of six, the revisions increase rather than decrease the estimated unauthorized population.

State-level Estimates

State-level estimates should be treated with some caution because they are based on much smaller samples than the national estimates. For 2008 and 2005, the estimates are generally averages across three years of data (2006-2008 and 2004-2006) with some estimates based on regression analyses. Ranges of error for the 2008 estimates are based on regression analyses of data for 2000-2008 and CPS standard errors.

The estimates presented for states in 2009 are based on tabulations of the augmented March 2009 CPS file. Because of the change in trend after 2007, there was no appropriate choice for averaging across years to reduce potential measurement error. This choice is reflected in expanded ranges for some states.

Rounding of Estimates. All state-level estimates for unauthorized immigrant populations are presented as rounded numbers to avoid the appearance of unwarranted precision in the estimates. No estimates smaller than 10,000 are shown. Estimates in the range of 10,000-100,000 are rounded to the nearest 5,000; estimates in the range of 100,000-250,000 to the nearest 10,000; estimates smaller than 1 million to the nearest 25,000; and estimates larger than that to the nearest 50,000. The same rounding conventions are applied to all state-level estimates of unauthorized immigrant populations and labor force for 2000 and later and, more generally, to most of the data presented on unauthorized immigrants.

Country of Birth

Some modifications in the original CPS countries of birth were introduced to ensure that all foreign-born respondents could be assigned to a specific country or region of birth. See Passel and Cohn (2008) for a detailed treatment of how persons with unknown country of birth were assigned to specific countries.

The estimates of the unauthorized population shown in this report divide the world into regions. “Latin America” is defined to include Mexico, Central America, Caribbean countries and South America. “Europe” includes Russia and all of the newly independent countries that were part of the former Soviet Union, even though some of the countries are geographically in Asia. This grouping is designed to maintain maximum consistency over time and with the administrative data series used. While all of these countries are separately identified in immigration statistics since their independence, they do not appear in immigration statistics of the 1980s and most are not identified as countries of birth in the CPS. “Middle East” as defined here includes countries of southwest Asia from Turkey and Cyprus in the north and west to Iran in the east to the Arabian Peninsula in the south; it also includes countries of North Africa (Egypt, Sudan, Libya, Tunisia, Algeria, Morocco and Western Sahara). Note that the Middle East does not include Afghanistan or Pakistan. “South and East Asia” is the rest of Asia from Afghanistan and Pakistan eastward. “Other” consists of sub-Saharan Africa and Oceania; in addition, the few respondents not assigned to any other areas are categorized as being from “Other.”

Estimates of Migration Flows

The estimates of unauthorized immigrants measure the number of unauthorized immigrants in the country at different point in time; they do not directly measure the number coming into the country in a year or the number leaving the country.

The residual methodology does provide estimates of the number arriving in five-year periods from 1980 to the estimate date. Similarly, tabulations of the CPS data with status assignments provide alternative estimates of arrivals in two-year periods beginning with 1980 and a final period of slightly more than two years or slightly more than three years ending at the survey date. Differences in the size of arrival cohorts based on these alternative measures can be used to assess inflows and outflows of unauthorized immigrants for shorter intervals, especially for one-year periods from March of one year to March of the next. The estimates shown in this report for inflows of unauthorized immigrants are averages of estimates based on tabulations of augmented March CPS datasets and the underlying residual estimates. A more detailed exposition of the methodology used can be found in Passel and Cohn 2009a.