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U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade

Number from Mexico continues to decline, while Central America is the only growing region

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Terminology

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

Foreign born refers to people who are not a U.S. citizen at birth or who, in other words, are 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. There are two immigrant categories:

- **Lawful immigrants** are defined as naturalized citizens; people granted lawful permanent residence (previously known as 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.
- Unauthorized immigrants are all foreign-born noncitizens residing in the country who are not "lawful immigrants." These definitions reflect standard and customary usage by the U.S. 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. Immigrants who seek asylum (after arriving in the U.S. without authorization or staying after their visas expire) are included as unauthorized immigrants if their cases have not yet been processed. Some who entered as unauthorized immigrants or violated terms of admission have obtained work authorization by applying for adjustment to lawful permanent status, obtaining Temporary Protected Status (TPS) or receiving Deferred Action for Childhood Arrivals (DACA) status. This "quasi-lawful" group could account for as much as about 10% of the unauthorized population. Many could also revert to unauthorized status.

Labor force refers to the civilian labor force, consists of people ages 16 and older who are employed, or are unemployed and looking for work. **Workforce** is used interchangeably with labor force. People in the labor force are referred to as **workers** regardless of their employment status.

Occupation and **industry** category titles used in the report have been shortened for display purposes; see <u>Methodology</u> for the full list of U.S. Census Bureau categories. The words **occupation** and **job** are used interchangeably, as are the words **industry** and **sector**.

Population figures may differ from published U.S. Census Bureau totals because the data are augmented and adjusted for undercount when used as the basis for estimates.

Recent arrivals refer to immigrants who have come to live in the U.S. in the previous five years.

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U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade

Numbers from Mexico continue to decline, while Central America is the only growing region

The number of unauthorized immigrants in the U.S. fell to its lowest level in more than a decade, according to new Pew Research Center estimates based on 2016 government data. The decline is due almost entirely to a sharp decrease in the number of Mexicans entering the country without authorization.

But the Mexican border remains a pathway for entry by growing numbers of unauthorized immigrants from El Salvador, Guatemala and Honduras. Because of them, Central America was the only birth region accounting for more U.S. unauthorized immigrants in 2016 than in 2007.

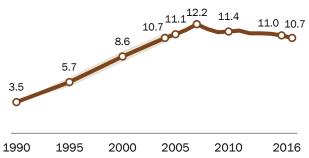
There were 10.7 million unauthorized immigrants living in the U.S. in 2016, down from a peak of 12.2 million in 2007, according to the new estimates.

The total is the lowest since at least 2004. It is tied to a decline of 1.5 million people in the number of Mexican unauthorized immigrants from 2007 to 2016. Nevertheless, Mexico remains the country of origin for 5.4 million unauthorized immigrants, or roughly half of the U.S. total.

The declining overall number of unauthorized immigrants is due mainly to a very large drop in the number of new unauthorized

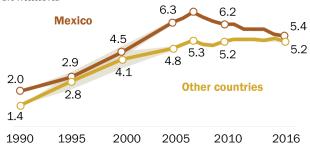
Number of unauthorized immigrants in the U.S. declined over the past decade

In millions



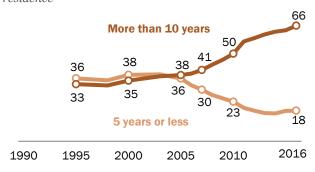
Those from Mexico have decreased





Most are now long-term residents

% of adult unauthorized immigrants, by duration of U.S. residence



Note: Shading shows range of estimated 90% confidence interval. Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details. "U.S. Unauthorized Immigrant Total Dips to Lowest Level in a

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immigrants, especially Mexicans, coming into the country. Consequently, today's unauthorized

immigrant population includes a smaller share of recent arrivals, especially from Mexico, than a decade earlier. Increasingly, unauthorized immigrants are likely to be long-term U.S. residents: Two-thirds of adult unauthorized immigrants have lived in the country for more than 10 years.

As overall numbers declined, other related changes occurred in the unauthorized immigrant population. Between 2007 and 2016, the number of unauthorized immigrant workers fell, as did their share of the total U.S. workforce over the same period. So did the number of unauthorized immigrant men in the prime working ages of 18 to 44, but not women in that age group.

As their typical span of U.S. residence has grown, a rising share of unauthorized immigrant adults – 43% in 2016 compared with 32% in 2007 – live in households with U.S.-born children.

Mexico's historical significance as a source of U.S. immigration – authorized and especially unauthorized – overshadows that of other parts of the world, even after a decade of decline in unauthorized immigrants from that country. (For this reason, Mexico is treated as both a region and a country in this report for comparison purposes.) In

Estimated unauthorized immigrant total declines or holds steady from most regions

In thousands

	2016	2007	Change
Latin America			
Mexico	5,450	6,950	-1,500
Central America	1,850	1,500	+375
South America	650	900	-240
Caribbean	450	475	-
Other regions			
Asia	1,300	1,300	-
Europe, Canada	500	650	-130
Middle East	140	140	-
Africa	230	250	-
U.S. total	10,700	12,200	-1,550

Note: All numbers are rounded; see Methodology for rounding rules. Change column calculated from unrounded totals; this gives a more accurate estimate of difference than subtracting rounded totals. Only statistically significant changes based on 90% confidence interval are shown; other measured changes are not statistically different from zero. Difference between consecutive ranks may not be statistically significant. Asia consists of South and East Asia. All central Asian republics of the former Soviet Union are included in Europe. The Middle East consists of Southwest Asia and North Africa; Africa consists of only sub-Saharan Africa. Included in the U.S. total is a residual (not shown) from other nations.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

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the past decade, the number of unauthorized immigrants from South America and from Canada and Europe, combined, has declined, although by a smaller amount than from Mexico.

In the opposite direction, the number of unauthorized immigrants from Central America increased by 375,000 over the same 2007 to 2016 period. The 1.85 million Central American

unauthorized immigrants in 2016 mainly came from the three Northern Triangle nations of El Salvador, Guatemala and Honduras, all of which registered increases since 2007.

Among the 20 largest birth countries, unauthorized immigrant totals also grew from India and Venezuela over the 2007-16 period. Meanwhile, there were statistically significant declines from Brazil, Colombia, Ecuador, Korea and Peru.

Overall, between 2007 and 2016, the unauthorized immigrant population shrank by 13%. By contrast, the lawful immigrant population grew 22% during the same period, an increase of more than 6 million people. In 2016, the U.S. was home to a total of 34.4 million lawful immigrants, both naturalized citizens and noncitizens on permanent and temporary visas.¹

More than a million unauthorized immigrants have temporary protection from deportation

Pew Research Center's estimate of the U.S. unauthorized immigrant population includes more than a million people who have temporary permission to stay and work in the U.S. under two programs that could be rescinded, potentially exposing them to deportation.

As of Aug. 31, 2018, <u>nearly 700,000</u> young adults who came to the U.S. illegally as

How did we estimate the U.S. unauthorized immigrant population?

The Pew Research Center bases the estimates in this report on a "residual method" similar to those employed by the U.S. Department of Homeland Security's Office of Immigration Statistics and nongovernmental organizations, such as the Center for Migration Studies and the Migration Policy Institute. Those organizations' estimates are generally consistent with ours. Our estimates also align with official U.S. data sources, including birth records, school enrollment figures and tax data, as well as Mexican censuses and surveys.

The first step in our method is to use U.S. census counts and government surveys, such as the American Community Survey, to calculate how many immigrants live in the U.S. in a particular year. Next, we use official counts of immigrant admissions and other demographic data (death rates, for example) to determine how many of these immigrants live in the U.S. legally. Then we subtract those lawful immigrants from the total to get an estimate of the unauthorized immigrant population.

Based on experience and research, we know the census counts and other official surveys tend to miss some people. Unauthorized immigrants are especially likely to be missed. Therefore, we do a further assessment of potential undercounts or undercoverage. Based on this additional research, our final estimate of the U.S. unauthorized immigrant population includes an upward adjustment for undercount.

For more details, see Methodology.

children were recipients of Deferred Action for Childhood Arrivals. DACA was created by the

¹ These estimates differ from published U.S. Census Bureau data because they are augmented and adjusted for undercount. See Methodology for details.

Obama administration in 2012; the Trump administration announced in 2017 that the program would end, but it has been kept alive by court challenges.

At least 317,000 people from 10 nations benefit from Temporary Protected Status, which is granted to visitors from countries where natural disaster or violence make it difficult to return. The Department of Homeland Security has announced plans to end protections for immigrants from six nations, including El Salvador, Honduras and Haiti, which account for the vast majority of the total.

The unauthorized immigrant estimates in this report also include some immigrants who applied for asylum status but whose applications had not yet been processed.²

A rising share of unauthorized immigrants arrive legally, but overstay visas

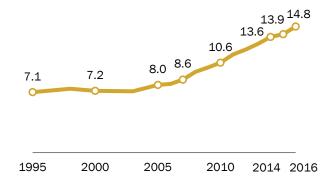
Not all unauthorized immigrants enter the U.S.

without documents, as is true of most Mexicans and Central Americans. Many arrive with legal visas but overstay their required departure date. Among unauthorized immigrants in the Center's estimates who arrived in the previous five years, the share who are *likely* to be people who overstayed their visas probably grew substantially between 2007 and 2016 – to the point where they probably constituted most of the recent unauthorized immigrant arrivals in 2016.

The reference to "*likely* overstays" reflects the limits of the U.S. Census Bureau data that are the basis for these estimates; census data do not indicate whether unauthorized immigrants arrived with legal visas. But there is growing evidence about immigrants with expired visas from recent analyses by the U.S. Department of Homeland Security, which has produced three annual reports <u>since 2016</u> analyzing statistics on the origins of immigrants who overstay and the types of visas they held. The latest report, for the <u>2017 fiscal year</u>, estimated that more than 700,000 overstays should have left sometime during the year ending Sept. 30, 2017.

The typical unauthorized immigrant has lived in the U.S. for nearly 15 years

Median years of U.S. residence for adult unauthorized immigrants



Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details. "U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

² To be eligible for asylum in the U.S., people must have fled their home countries due to fear of persecution based on race, religion, nationality or politics. Once in the U.S., those who apply for asylum may legally stay in the country while their application is evaluated. President Donald Trump has sought to deny asylum claims to those who cross the border illegally, but that policy change has been challenged in court.

These official figures do not cover all arrivals and encompass only three years of data, which are not entirely comparable. For these and other reasons, they do not offer enough information on their own to say with certainty whether the overstay rate is growing, stable or declining. They do, however, indicate where the overstays are from. In contrast to border apprehensions, where 95% or more of immigrants are from Mexico and Central America, the vast majority of overstays – almost 90% – are from elsewhere.

A key indicator of the probable rise in the share of overstays among the unauthorized immigrant population comes from a Pew Research Center analysis comparing government overstay estimates and border apprehension statistics. For Mexico, there were almost four times as many apprehensions as overstays, even with the very large drops in Mexican apprehensions. For the three Northern Triangle nations, there were about 10 times as many apprehensions as overstays in 2015-17 government data.

For virtually every other country, overstays substantially exceed apprehensions.³ Taken together, for the rest of the world, the number of overstays was more than 30 times the number of border apprehensions.

Number of recent arrivals declines

The new Pew Research Center estimates indicate that not only is the total number of unauthorized immigrants shrinking, but that population includes markedly fewer people who arrived in the previous five years. Only 20% of all unauthorized immigrants (including both adults and children) in 2016 had arrived in the previous five years, compared with 32% in 2007.

An analysis of annual arrival flows for the years leading up to 2007 and 2016, using U.S. Census Bureau data, illustrates the downward trend in recently arrived unauthorized immigrants. There was an average of 386,000 annual arrivals for the 2011-16 period, compared with 715,000 for the 2002-07 period. That amounts to a 46% decline.

Increasingly, unauthorized immigrants are long-term U.S. residents. By 2016, an unauthorized immigrant adult had typically lived in the U.S. for 14.8 years, compared with a median 8.6 years in 2007.

³ During this period, the number of apprehensions exceeded the number of overstays in 2015 and 2016 by smaller margins for Cubans, reflecting a <u>surge of immigration</u> after President Barack Obama announced renewed ties with Cuba. The number of apprehensions also exceeded overstays for Romanians in 2016.

Fewer recent arrivals from Mexico

The fall in recent arrivals is especially true for Mexicans – only 9% of unauthorized immigrants in 2016 had come to the U.S. in the previous five years, about half the share in the overall unauthorized immigrant population. Mexicans also were only about a quarter of all recent arrivals in 2016 compared with fully half in 2007.

The number of recent arrivals from regions other than Mexico also declined, but less sharply. So as Mexicans became a shrinking share of recent arrivals, the share of all unauthorized immigrants who had arrived from Asia within the previous five years increased from 13% in 2007 to 22% in 2016. The share from the Northern Triangle nations in Central America grew from 11% to 18%. In addition, the share from the rest of the world (other than Asia, Central America and Mexico) rose to

Increase in recent arrivals from Northern Triangle and Asia, decrease from Mexico

Population of arrivals in previous five years, in thousands

Birth country	2016	Share	2007	Share
Mexico	525	24%	2,050	52%
Northern Triangle	375	18	425	11
Asia	450	22	525	13
Other countries	775	36	925	24
Total	2,100		3,950	

Note: Northern Triangle consists of El Salvador, Guatemala and Honduras. Asia consists of South and East Asia. All numbers are rounded; see Methodology for details Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

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more than a third of recent arrivals in 2016, compared with about a quarter in 2007.

Border apprehensions of Mexicans decline, but rise for Central Americans

Apprehensions at the border do not exactly match attempts at unlawful entry, but enforcement officials and researchers view them as an <u>indicator of entries</u>. <u>Annual apprehensions</u> (sometimes the same person is caught more than once) peaked in 2000 at about 1.7 million before <u>declining sharply</u>. There were about 310,000 apprehensions in fiscal 2017, which includes part of the 2016 calendar year covered by these estimates.⁴

The border apprehensions are almost all attempted entries by Mexicans and Central Americans from the three Northern Triangle countries; people from those four nations accounted for 95% of apprehensions in 2017 and 98% in 2007. Mexicans accounted for about 130,000 apprehensions in 2017, more than those from any other single country. This represents the smallest number of

⁴ In fiscal 2018, which ended Sept. 30 and therefore was after the period covered by these estimates, apprehensions along the southwest border, where most take place, rose to nearly 397,000, according to Customs and Border Protection statistics.

apprehensions of Mexicans since 1968 and is a drop of more than 80% from the 809,000 Mexicans apprehended in 2007, another indicator of the decline of Mexican unauthorized immigrants.

Meanwhile, apprehensions of Central Americans from the Northern Triangle more than tripled from 54,000 in 2007 to 165,000 in 2017 (but was still well below the peak of 239,000 in fiscal 2014). In fact, Northern Triangle apprehensions exceeded border apprehensions of Mexicans in 2014, 2016 and 2017 – something that had never happened before and which corroborates the rise in Central American unauthorized immigrants in the Center's estimates. These apprehensions include those of unaccompanied children and families with children.

Deportations peaked in 2013

Deportations also can have an impact in limiting the size and growth of the unauthorized immigrant population. Deportations rose during the George W. Bush and Obama administrations – from 211,000 in 2003 to a record 433,000 in 2013, according to Department of Homeland Security statistics. They remained well above 300,000 a year through fiscal 2016, the last full year for which numbers are available. The vast majority of those deported were from Mexico and the three Northern Triangle nations in Central America.

Deportations appear to have declined since then, based on limited statistics. The <u>number of immigrants deported</u> by U.S. Immigration and Customs Enforcement within DHS – "removed" in government wording – declined 17% between fiscal 2016 and fiscal 2017, which ended Sept. 30, 2017. Nearly 230,000 unauthorized immigrants were removed, which included a decline in those detained at the U.S.-Mexico border as well as an increase in those arrested in the interior of the U.S., reflecting a shift in enforcement tactics.

About 5 million U.S.-born children live with unauthorized immigrant parents

Most unauthorized immigrants live with spouses, partners, their children or other relatives. In 2016, 5.6 million children younger than 18 were living with unauthorized immigrant parents.⁵ Of

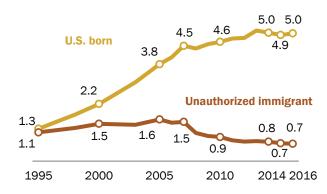
these, 675,000 were unauthorized immigrants themselves, a number that has fallen by half since 2007. The other 5 million children were born in the U.S., a number that rose from 4.5 million in 2007. The number of U.S.-born children leveled off in recent years as births to unauthorized immigrants have dipped and an increasing number of children of unauthorized immigrants have aged into adulthood.

By 2016, 975,000 adult U.S.-born children of unauthorized immigrants were living with their parents. This total does not include U.S.-born children of unauthorized immigrants who live elsewhere.

Unauthorized immigrants lived in 5.2 million U.S. households in 2016 – about one in every 23 U.S. households, not much different from 2007. About 170,000 lived in group quarters such as college dormitories, hospitals and prisons.

Most children living with unauthorized immigrant parents are born in the U.S.

In millions



Note: More than 99% of the U.S.-born and unauthorized immigrant children live with their unauthorized immigrant parents or live in households where the only adult(s) are a related unauthorized immigrant or a related couple where one or both spouses/partners are unauthorized immigrants. See Methodology for details. Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details. "U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

⁵ More than 99% of the U.S.-born and unauthorized immigrant children live with their unauthorized immigrant parents or live in households where the only adult(s) are a related unauthorized immigrant or a related couple where one or both spouses/partners are unauthorized immigrants. See Methodology for details.

Number and share of unauthorized immigrant workers declines

Just as with the population overall, the number of adult unauthorized immigrants in the workforce – 7.8 million – was lower in 2016 than a decade earlier. Their share of the workforce (4.8%) also declined from 2007. The decline in the unauthorized immigrant workforce stems mainly from the decline in the overall unauthorized immigrant population.

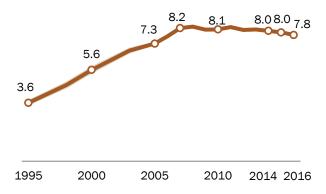
The decline in numbers came even though the labor force participation rate of unauthorized immigrants rose slightly from 2007 to 2016, as it did for both lawful immigrants and U.S.-born women, but not U.S.-born men.

Among occupations, unauthorized immigrants are a larger share of the workforce in low-skilled jobs such as farming (where they were about a quarter of the workforce in 2016) and construction (15%) than in higher-skilled categories.

The number of unauthorized immigrant workers in these lower-skilled occupational categories generally has declined since 2007. However, the number who work in management, business and professional jobs, a more skilled category, rose by a third, or 275,000 people, over the decade. Unauthorized immigrants make up only a small share of the overall workforce (2%) in this category.

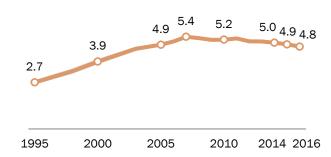
Number of unauthorized immigrants in U.S. workforce ticks down

In millions



Unauthorized immigrants decline as a share of the U.S. labor force

%



Note: Shading shows range of estimated 90% confidence interval. Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details. "U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

Numbers changed in 15 states

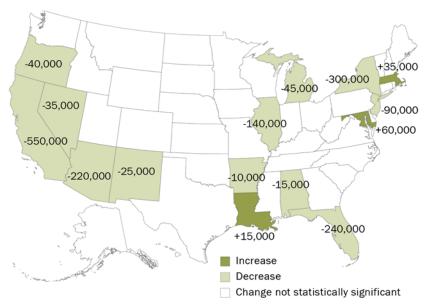
A dozen states registered declines in their populations of unauthorized immigrants since 2007: Alabama, Arizona, Arkansas, California, Florida, Illinois, Michigan, Nevada, New Jersey, New Mexico, New York and Oregon. Three had increases: Louisiana, Maryland and Massachusetts. In the remaining states, there may have been changes, whether up or down, but they fell within the margin of error and cannot be stated with statistical certainty.

The estimates in this report, while derived from U.S. Census Bureau data, differ from published statistics because we augment and adjust the data; see

Methodology for details. All

Unauthorized immigrant populations changed in 15 states over the past decade

Statistically significant change, 2007 to 2016



Note: All numbers are rounded; see Methodology for rounding rules. Significant changes based on 90% confidence interval.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

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estimates in this report supersede previously published estimates.

Wide partisan divide on attitudes about unauthorized immigration policies

When it comes to public opinion about unauthorized immigrants, most Americans say they feel sympathy toward them personally. Most also continue to say that unauthorized immigrants mostly fill jobs that American citizens do not want, and that they are not more likely than U.S. citizens to commit serious crimes. There are partisan differences on these questions, with Republicans more divided in their views of unauthorized immigrants and Democrats more favorable toward them.

A partisan gap was also evident when U.S. registered voters were asked before the recent midterm elections how serious a problem illegal immigration was for the nation. Given a list of 18 issues, Republican registered voters ranked illegal immigration the highest, and Democratic registered voters ranked it the lowest. Among Republicans, 75% said it was a very big problem, compared with 19% of Democrats.

On a <u>policy level</u>, most Americans favor granting permanent legal status to immigrants who came to the U.S. illegally as children. And a 56% majority opposes substantially expanding the wall along the U.S.-Mexico border. However, there are party differences on both issues. Democrats (89%) are more likely than Republicans (54%) to favor legal status for immigrants brought to the U.S. illegally as children. Republicans widely favor expanding the border wall, while Democrats widely oppose that proposal.

Asked whether the <u>nation's policy priority</u> should be "creating a way for immigrants already here illegally to become citizens if they meet certain requirements" or "better border security and stronger enforcement of our immigration laws," or whether both should be given equal priority, a plurality of registered voters (47%) say both. This is true for nearly half of Republicans (48%) and Democrats (45%) alike. Still, Republicans are more likely than Democrats to prefer an enforcement strategy, and Democrats are more likely than Republicans to prioritize a path to citizenship.

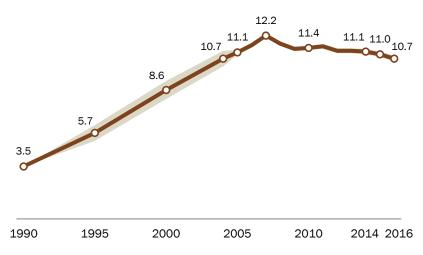
1. Unauthorized immigrants became a smaller share of U.S. foreign-born population

Compared with 2007, when their population was at its peak, unauthorized immigrants make up a

smaller share of all U.S. residents (3% vs. 4%) and of all immigrants (24% vs. 30%).

The number of unauthorized immigrants rose sharply in the 1990s and reached 12.2 million in 2007, as the recession began. It declined through the end of the recession in 2009, then stabilized until ticking down in 2015. The 2016 total represents a further decline and is the lowest since 2004, when it was 10.7 million. Still, the total is about triple what it was in 1990 and nearly double the 5.7 million in 1995.

U.S. unauthorized immigrant total rises, then falls In millions



Note: Shading shows range of estimated 90% confidence interval. Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

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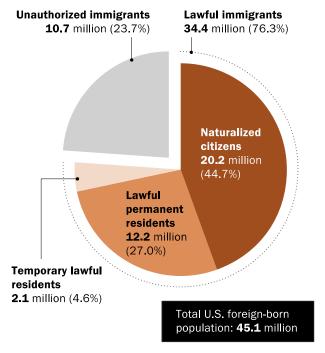
Compared with 2007, unauthorized immigrants are a smaller share of the U.S. foreign-born population, which numbered 45.1 million in 2016. Meanwhile, the share of legal immigrants has risen. Unauthorized immigrants were 24% of the total foreign born in 2016, compared with 30% in 2007. Naturalized citizens accounted for 45%, up from 38% in 2007. Lawful permanent residents – that is, immigrants with green cards who have not become citizens – constituted 27% of the foreign born in 2016, about the same as in 2007, when they were 28%.

Temporary lawful residents – mainly students and temporary workers – were 5% of the foreign-born population in 2016, compared with 4% in 2007.

The lawful immigrant population, numbering 34.4 million in 2016, grew from 28.3 million in 2007, a contrast to the decline in the unauthorized immigrant population. The total U.S.-born population also grew modestly during this period, to 279.8 million in 2016 from 263.3 million in 2007.

Unauthorized immigrants are a quarter of the U.S. foreign-born population

Foreign-born population estimates, 2016



Note: All numbers are rounded; see Methodology for rounding rules. Unauthorized immigrants include some with temporary protection from deportation under Deferred Action for Childhood Arrivals (DACA) and Temporary Protected Status (TPS). Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details. "U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

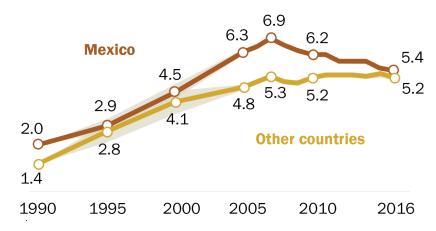
Decline in Mexicans fuels overall unauthorized immigrant decrease

The number of unauthorized immigrants grew from 2007 to 2016 from only one group of nations: Central America. Fueled mainly by immigrants from the Northern Triangle nations of El Salvador, Guatemala and Honduras, the total from Central America rose by 375,000 during that period.

The total unauthorized immigrant population is lower than its peak mainly because of a decrease in the number of unauthorized immigrants from Mexico, the largest country of origin (treated as a region in this report because of its importance).

U.S. unauthorized immigrant total declines from Mexico but is steady from other nations

In millions



Note: Shading shows range of estimated 90% confidence interval. Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

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From 2009 to 2014, according to a Pew Research Center <u>analysis of government data</u>, more Mexicans left the U.S. than arrived. About 1 million Mexicans left the U.S. during this period, and an estimated 870,000 arrived. The decline mainly was due to departures of unauthorized immigrants.

According to Mexican government survey data, most returnees said they left the U.S. of their own accord, and the majority cited family reunification as the main reason for going to Mexico. However, 14% said they came back because they were deported.

According to new additional analysis of the Mexican government statistics on return migrants, the overwhelming majority (72%) were male and most (77%) were in the prime working ages of 15 to 59, which is in accord with the decline in male, working-age unauthorized immigrants in Center estimates. Among return migrants who had lived in the U.S. one or five years earlier but were back in Mexico in 2014, nearly three-quarters were men. People ages 15 to 59 accounted for more than three-quarters of returnees.

Mexicans are a shrinking share of those apprehended at the border

Supporting the Pew Research Center findings about declines in unauthorized immigrants from Mexico are recent trends in Border Patrol apprehensions. Although apprehensions are not a direct measure of unauthorized immigration, they do offer helpful context.

In fiscal 2017, there were about 130,000 apprehensions of Mexicans and 180,000 apprehensions of non-Mexicans at all U.S. borders, mainly the southwest border. Apprehensions of non-Mexicans – about nine-in-ten from El Salvador, Guatemala and Honduras – exceeded those of Mexicans in 2016 and, for the first time, in fiscal 2014.

Apprehensions of Mexicans have declined markedly over the past decade, from more than 800,000 in fiscal 2007 and more than a million in some earlier years. But apprehensions of non-Mexicans have risen, from 68,000 in fiscal 2007.

In Pew Research Center surveys, the share of Mexicans saying they would work and live in the U.S. without authorization has declined. The share of Mexicans who say they would <u>like to move to the U.S.</u> has been somewhat stable since 2009. But among those who do want to move, a majority in 2017 (60%) said they would not be inclined to do so without authorization, a change from previous surveys, where half or fewer said they would not.

Unauthorized immigrant population declines not just from Mexico, but also South America and combined Europe/Canada region

Mexican unauthorized immigrant numbers peaked in 2007 and began to decrease the following year. The total in 2016 – 5.4 million – was 1.5 million lower than at its high point in 2007. Mexicans made up about half the U.S. total unauthorized immigrant population, down from 57% in 2007.

The total also went down over the 2007 to 2016 period for unauthorized immigrants from South America and the combined region of Europe and Canada. The remaining regions (the Caribbean, Asia, Middle East-North Africa, sub-Saharan Africa, and the rest of the world) did not have statistically significant change over that era. Central America was the only region that grew.

The race and ethnicity of unauthorized immigrants generally reflect their national origins. About three-quarters (74%) were Hispanic in 2016. Among non-Hispanics, 12% were Asian, 7% white and 5% black, while the rest were of multiple races or other races.

Estimated unauthorized immigrant total declines or holds steady from most regions

In thousands

	2016	2007	Change
Latin America			
Mexico	5,450	6,950	-1,500
Central America	1,850	1,500	+375
South America	650	900	-240
Caribbean	450	475	-
Other regions			
Asia	1,300	1,300	-
Europe, Canada	500	650	-130
Middle East	140	140	-
Africa	230	250	-
U.S. total	10,700	12,200	-1,550

Note: All numbers are rounded; see Methodology for rounding rules. Change column calculated from unrounded totals; this gives a more accurate estimate of difference than subtracting rounded totals. Only statistically significant changes based on 90% confidence interval are shown; other measured changes are not statistically different from zero. Difference between consecutive ranks may not be statistically significant. Asia consists of South and East Asia. All central Asian republics of the former Soviet Union are included in Europe. The Middle East consists of Southwest Asia and North Africa; Africa consists of only sub-Saharan Africa. Included in the U.S. total is a residual (not shown) from other nations.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

"U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

As Mexican numbers decline, those from other large birth nations grow

Among individual nations with the 20 largest unauthorized immigrant populations in the U.S., there were statistically significant increases between 2007 and 2016 from the three Northern Triangle nations, India and Venezuela. Decreases occurred not only from Mexico, but also from Brazil, Colombia, Ecuador, Korea, Nicaragua and Peru.

More recently, from 2015 to 2016, there was a statistically significant change, a decline, in the unauthorized immigrant population from only one region — Asia. Two of the 20 largest birth countries had changes in their U.S. unauthorized immigrant populations from 2015 to 2016: The number from Honduras rose, and the number from Peru decreased.

Other regions or nations may have had changes, but that cannot be stated with certainty because of the margin of error in the data.

Among largest birth countries, unauthorized immigrant totals rose from Central America and India since 2007 but fell from Mexico

In thousands

	2016	2007	Change
Mexico	5,450	6,950	-1,500
El Salvador	725	600	+130
Guatemala	575	400	+150
India	475	325	+140
Honduras	425	300	+140
China	325	325	-
Dominican Rep.	210	200	-
Philippines	140	190	-
Brazil	130	180	-50
Korea	130	180	-50
Ecuador	120	150	-30
Colombia	120	180	-60
Haiti	100	110	-
Jamaica	95	90	-
Canada	95	95	-
Venezuela	90	55	+35
Former USSR	80	75	-
Peru	75	150	-70
United Kingdom	75	85	-
Nicaragua	70	95	-20
U.S. total	10,700	12,200	-1,550

Note: All numbers are rounded; see Methodology for rounding rules. Change column calculated from unrounded totals; this gives a more accurate estimate of difference than subtracting rounded totals. Only statistically significant changes based on 90% confidence interval are shown; other measured changes are not statistically different from zero. Differences between consecutive ranks may not be statistically significant. China includes Hong Kong and Taiwan.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

"U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

2. Unauthorized immigrants are more likely to be long-term residents

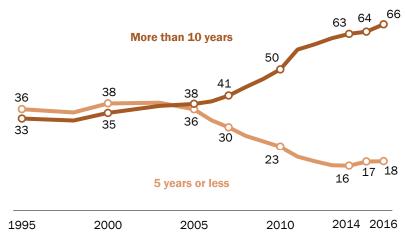
Long-term unauthorized immigrant adults are no longer the exception and have become a decided majority of this population in the years since 2007.

In 2016, about two-thirds of unauthorized immigrant adults had lived in the U.S. for more than a decade, and the share has risen from less than half (41%) in 2007. Only 18% have lived in the U.S. for five years or less, a decline from 30% in 2007.

Mexican unauthorized immigrant adults are among the most likely to be long-term

Short-term residents decline and long-term residents rise as share of U.S. unauthorized immigrants

% of adult unauthorized immigrants, by duration of U.S. residence



Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

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U.S. residents: In 2016, eight-in-ten had lived in the U.S. for more than 10 years. In fact, the typical unauthorized Mexican immigrant adult has lived in the U.S. for nearly 17 years.

A relatively low share of Mexican unauthorized immigrant adults -8% – have lived in the U.S. for five years or less. That is consistent with both the decline in apprehensions of Mexicans at the U.S. border and the decreased share of Mexicans among recently arrived unauthorized immigrants.

Majorities of unauthorized immigrant adults from other Latin American nations also have lived in the U.S. for more than 10 years. They include about two-thirds of unauthorized immigrant adults from Central America and nearly six-in-ten from South America.

Asian nations as a group are more evenly balanced between long- and short-term unauthorized immigrant adults, with nearly four-in-ten living in the U.S. for more than a decade and three-inten for five years or less. Nations in the Middle East and North Africa have higher shares of unauthorized immigrant adults in the U.S. for five years or less (50%) than for more than 10 years (32%).

As of 2016, the typical unauthorized immigrant adult had lived in the U.S. for nearly 15 years — that is, half had lived in the U.S. for longer and half for less time. That compares with a median of less than nine years in 2007.

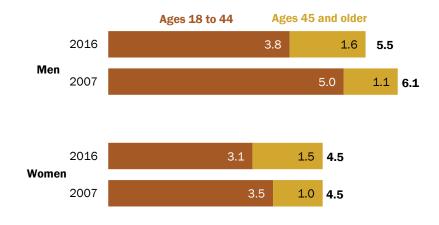
3. Most unauthorized immigrants live with family members

The unauthorized immigrant population in 2016 consisted of 5.5 million men, 4.5 million women and 675,000 children. The number of unauthorized immigrant adult men declined by about half a million since 2007, while the number of women did not change. The number of unauthorized immigrant children also declined by more than half.

The number of unauthorized immigrant men declined mainly because of a sharp decrease over the decade in those ages 18 to 44. The number of unauthorized

Among adult unauthorized immigrants, a decline in men over the decade, especially younger ones

In millions



Source: Pew Research Center estimates based on augmented U.S. Census bureau data. See Methodology for details.

"U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

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immigrant women ages 18 to 44 also declined, but not as sharply. By contrast, this age group grew modestly from 2007 to 2016 among the U.S. born and lawful immigrants.

The number of unauthorized immigrants ages 45 and older grew, among both men and women, mainly because of population aging and not from new arrivals of older unauthorized immigrants.

The majority of all unauthorized immigrants (54%) were male in 2016, compared with about half of legal immigrants (47%) and the U.S. born (49%). Unauthorized immigrants are somewhat less likely to be male than in 2007 (57%).

Among adults, the unauthorized immigrant population is younger than other groups. Nearly two-thirds are ages 18 to 44, compared with four-in-ten legal immigrants and about a third of people born in the U.S. Only 1% of unauthorized immigrants are 65 or older, far lower than for other groups.

Living arrangements and children

Most of the nation's 10.7 million unauthorized immigrants live with members of their families, which in this report includes cohabiting partners. The rest either live by themselves (625,000) or in households with other people to whom they are not related (1.1 million).

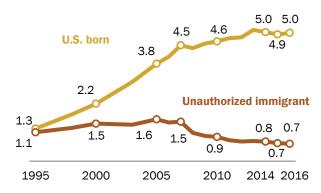
Unauthorized immigrants live in 5.2 million U.S. households that include a total of 20.2 million adults and children. Most of the 9.5 million other people who live with unauthorized immigrants are U.S.-born minor and adult children.

Reflecting their relatively young ages, unauthorized immigrants are more likely than other groups to head households with children. About four-in-ten households headed by an unauthorized immigrant, spouse or partner (43% in 2016) are two-parent households with children, higher than the shares for U.S.-born household heads (18%) or lawful immigrant heads (32%).

Unauthorized immigrant households also are increasingly likely to include U.S.-born adult children. The number of U.S.-born adult children living with their unauthorized immigrant parents has more than tripled since 2007, as minor children have grown up.

Most children living with unauthorized immigrant parents are born in the U.S.

In millions



Note: More than 99% of the U.S.-born and unauthorized immigrant children live with their unauthorized immigrant parents or live in households where the only adult(s) are a related unauthorized immigrant or a related couple in which one or both spouses/partners are unauthorized immigrants.

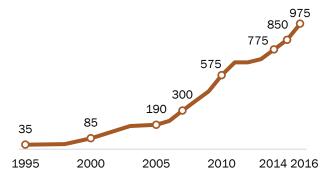
Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

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Rise in U.S.-born adults living with their unauthorized immigrant parents

In thousands



Note: All numbers are rounded. See Methodology for details. Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details. "U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

⁶ Some of these households may include cohabiting partners, but they cannot be identified due to data limitations.

More than 4 million K-12 students have unauthorized immigrant parents

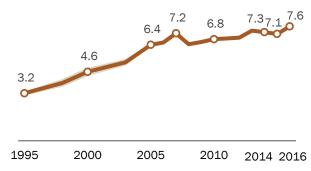
Children of unauthorized immigrant parents constituted nearly 8% of students in kindergarten through 12th grade in 2016. Of those 4.1 million children, 3.5 million are U.S. citizens and the rest are unauthorized immigrants themselves.⁷

The share of students with at least one parent who is an unauthorized immigrant varies widely from state to state. States with the highest shares include Nevada, where they were 20.2% of students in 2016; Texas, 13.3%; and California, 13.3%.

At the other extreme, these children make up fewer than 1% of students in Alaska, Maine, Montana, Vermont and West Virginia.

Growing share of U.S. K-12 students have unauthorized immigrant parents

% of K-12 students with at least one parent who is an unauthorized immigrant

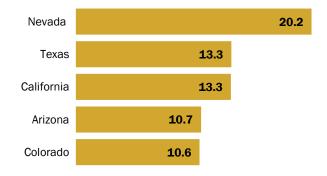


Note: Shading shows range of 90% confidence interval.
Source: Pew Research Center estimates based on augmented U.S.
Census Bureau data. See Methodology for details.
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States with largest share of K-12 students with unauthorized immigrant parents

% of K-12 students with at least one parent who is an unauthorized immigrant in 2016



Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

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⁷ A small number of unauthorized immigrant students, less than 50,000 or about 1%, do not live with their parents.

4. Unauthorized immigrant workforce is smaller, but with more women

A total of 7.8 million unauthorized immigrants ages 18 and older were in the labor force in 2016 – the first time since 2006 that the number working or looking for work has declined significantly below 8 million. The decline was driven by a decreased number of unauthorized immigrant men in the labor force – about 5.0 million in 2016, compared with 5.6 million in 2007. The number of women in the labor force grew, to 2.8 million from 2.6 million.

During the same period, the overall U.S. workforce grew, as did the number of U.S.-born workers and lawful immigrant workers.

Total U.S. labor force grows since 2007, but number of unauthorized immigrant workers declines

Labor force estimates, in millions

	2007	2016	Change
U.S. total	153.3	162.8	+9.6
U.S. born	127.9	134.4	+6.5
Lawful immigrant	17.2	20.6	+3.5
Unauthorized immigrant	8.2	7.8	-0.4

Note: All numbers are rounded; changes calculated from unrounded numbers. Based on civilian labor force.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

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Unauthorized immigrants were 4.8% of the nation's workforce in 2016, a dip from their peak of 5.4% in 2007. Over a more recent time span, both the number and share of unauthorized immigrants in the workforce also were down modestly from 2014.

Unauthorized immigrant men are more likely than U.S.-born men to be in the labor force. Among those ages 18 to 64, 91% of unauthorized immigrant men and 79% of U.S.-born men were in the workforce in 2016. Most of the difference is because higher shares of U.S.-born men are in school, disabled or retired, according to a Pew Research Center analysis of census data. The labor force participation rate for unauthorized immigrant men in this age group has changed little since 2007, while ticking down for the U.S. born.

Among women ages 18 to 64, unauthorized immigrants are less likely to be in the labor force – 61% were in 2016, compared with 73% of the U.S. born. Here, the difference mainly is because unauthorized immigrant women are more likely to have young children at home, according to other census data analyzed by Pew Research Center. Compared with 2007, labor force participation rates were slightly higher in 2016 for both U.S.-born and unauthorized immigrant women.

Agriculture is the job category with the highest share of unauthorized immigrants

Unauthorized immigrants are nearly a quarter of the workforce in farming, fishing and forestry occupations in 2016, which mainly consist of agriculture work. That represents a decline since 2007, but this category is still where unauthorized immigrants are most overrepresented. These occupations also have the highest share of unauthorized immigrants in at least 26 states.

Occupation and industry: What's the difference?

This report includes estimates about the occupations and industries in which unauthorized immigrants work. Occupation is the kind of work that people do on the job, while industry is the kind of business conducted by an employer.

Some occupation groups are similar to industry categories. For example, many construction workers are employed in the construction industry. But the construction industry also employs people in other occupations, such as manager or clerk.

The U.S. <u>Census Bureau</u> collects data on occupation and industry from responses to write-in and check-box questions. The responses are then coded using a standard classification system.

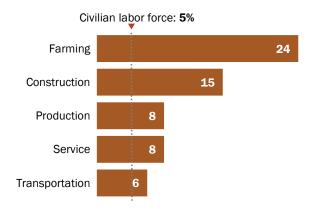
Unauthorized immigrants constitute 15% of construction workers, about triple their share of the overall workforce. In 14 states, construction is the occupation category with the largest share of unauthorized immigrants in the workforce.

In both farming and construction occupations, U.S.-born workers make up the majority of the workforce, unauthorized immigrants the next largest group and lawful immigrants the smallest. In all other major occupational categories, unauthorized immigrants are the smallest segment of the workforce, after the U.S. born and lawful immigrants. U.S.-born workers are a majority in all major occupational groups.

Unauthorized immigrants also hold a disproportionate share of service, transportation and production occupations – that is, a larger share than their overall

Some occupations have high shares of unauthorized immigrant workers

Unauthorized immigrant % of workforce



Note: Percentages calculated from unrounded numbers; rankings based on unrounded percentages. Occupation groups based on U.S. Census Bureau major occupation group classifications. Names shortened for display; see Methodology for full Census Bureau classifications.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details. "U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

5% share of the workforce. (Production jobs include manufacturing, food processing and textile occupations.)

Service jobs employ the largest number of unauthorized immigrants -2.4 million in 2016. They also are the largest occupation in at least 40 states.

But unauthorized immigrants are underrepresented in some white-collar occupations. They make up 2% or less of the workforce in management, professional and office occupations.

In both the jobs they hold and the industries in which they work, unauthorized immigrants tend to cluster in low-skilled employment, due at least in part to their below-average education levels and lack of legal status to work. Within the most detailed occupational categories, for example, they constitute about 10% or more of about two dozen job types that mainly are in food preparation, construction, and maintenance or cleaning. Unauthorized immigrants, who are one-in-twenty workers overall, account for about one-in-four roofers, drywall installers, carpet installers and painters (see detailed table in <u>Appendix C</u>).

However, all sectors and occupations of the civilian labor force have more U.S.-born workers than unauthorized immigrant workers.

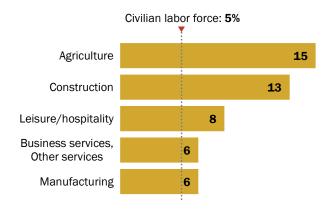
Unauthorized immigrants are overrepresented in some industries

Unauthorized immigrants constitute a larger share of the civilian workforce in some industries than their 5% share of the total workforce. In 2016, they accounted for 15% of workers in the agriculture industry and 13% in construction. Those also were the top industries in the largest number of states. Agriculture ranked first in 19 states, most of them in the West and Midwest, as the industry with the largest share of unauthorized immigrants in its workforce. Construction ranked first in 18 states, about two-thirds of them in the South.

Unauthorized immigrant workers also were overrepresented in the labor force in the leisure and hospitality industry, in some services and in manufacturing.

Unauthorized immigrants are a high share of some industries' labor force

Unauthorized immigrant % of workforce



Note: Percentages calculated from unrounded numbers; rankings based on unrounded percentages. Industry groups based on U.S. Census Bureau major industry group classifications. Names shortened for display; see Methodology for full Census Bureau classifications.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details. "U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decada"

Looked at from another perspective, those industries also employed a higher share of all unauthorized workers than of all U.S.-born workers. For example, the construction industry employed 18% of unauthorized immigrant workers but only 6% of all U.S.-born workers.

Although there are fewer unauthorized workers overall than in 2007, the number has grown in some industries. In professional and business services, as well as educational and health services, the number of unauthorized immigrant workers grew about 13% (to about 1.6 million combined), and the share of all unauthorized immigrant workers employed in those industries also rose in 2016.

5. Numbers fall in U.S. states with the largest unauthorized immigrant populations

From 2007 to 2016, the estimated unauthorized immigrant population declined in a dozen states and rose in three. Other states may have undergone changes, but that cannot be determined definitively because of the margin of error in the data.

Among the states with losses since 2007 were most of those with the largest unauthorized immigrant populations, including California, Florida, Illinois, New Jersey and New York. Along with Texas (where the unauthorized immigrant population was stable), these states are home to 58% of unauthorized immigrants in 2016.

Another state with a notable loss since 2007 was Arizona, whose unauthorized immigrant population fell by 44% since its peak that year. Arizona had ranked seventh among states for the size of its unauthorized immigrant population; in 2016, it ranked 10th. Arizona has enacted immigration enforcement laws in past years that include requiring employers to use a federal electronic database called E-Verify to check the legal status of employees; requiring law enforcement to inquire about immigration status during a lawful stop; and making unauthorized immigrant students ineligible for in-state college tuition rates.

Other states with losses from 2007 to 2016 were Alabama, Arkansas, Michigan, Nevada, New Mexico and Oregon.

Estimated unauthorized immigrant totals changed in 15 states from 2007 to 2016

In thousands

State	2016	2007	Change
Increased			
Louisiana	70	55	+15
Maryland	275	220	+60
Massachusetts	250	220	+35
Decreased			
Alabama	55	70	-15
Arizona	275	500	-220
Arkansas	55	70	-10
California	2,200	2,800	-550
Florida	775	1,050	-240
Illinois	400	550	-140
Michigan	100	140	-45
Nevada	210	240	-35
New Jersey	475	550	-90
New Mexico	60	85	-25
New York	725	1,000	-300
Oregon	110	150	-40
U.S. total	10,700	12,200	-1,550

Note: All numbers are rounded; see Methodology for rounding rules. Change column calculated from unrounded totals; this gives a more accurate estimate of difference than subtracting rounded totals. Significant changes are based on 90% confidence interval.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

"U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

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Over a more recent time span – 2014 to 2016 – unauthorized immigrant populations declined in eight states: Arizona, Arkansas, California, Illinois, Kentucky, New Mexico, North Carolina and

Oregon. Only one state – California, which has the country's largest unauthorized immigrant population – had a statistically significant decline in its unauthorized immigrant population from 2015 to 2016.

For a table showing unauthorized immigrant populations for selected years in all states, not just those with statistically significant changes, see

Appendix C.

The six states where most unauthorized immigrants live are home to a somewhat smaller share than in 2007 (61% in 2007 vs. 58% in 2016). But those states' share of the total is down markedly from a decade earlier: More than three-quarters of unauthorized immigrants lived in the six states in 1995.

States with increases

Only three states had increases in their unauthorized immigrant populations since 2007. Unauthorized immigrant populations grew in Maryland (where the three Northern Triangle nations are the largest birth countries), Massachusetts (where El Salvador is the top birth country) and Louisiana (where Mexico, Honduras and Guatemala are the top birth countries), in contrast to the national decrease. The total in Massachusetts also rose from 2015 to 2016.

State workforce trends

Twelve states experienced statistically significant declines in the size of their unauthorized immigrant workforces from 2007 to 2016, while eight states had increases.

Six states with the most unauthorized immigrants are longtime destinations

In thousands

	2016	Range (+ or -)
California	2,200	60
Texas	1,600	50
Florida	775	50
New York	725	40
New Jersey	475	30
Illinois	400	25
Georgia	400	20
North Carolina	325	15
Virginia	275	20
Arizona	275	20
Maryland	275	20
Massachusetts	250	20
Washington	240	25
Nevada	210	15
Colorado	190	15

Note: All numbers are rounded; see Methodology for rounding rules. Differences between consecutive ranks may not be statistically significant. Range based on 90% confidence interval.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

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Among states with the largest unauthorized immigrant workforces, California, Florida, Illinois,

Among states with the largest unauthorized immigrant workforces, California, Florida, Illinois, New Jersey and New York had lower numbers in 2016 than in 2007, and unauthorized immigrants also became a smaller share of the total workforce. Texas experienced a gain in its unauthorized immigrant workforce number during that period. However, unauthorized

immigrants were a smaller share of the total workforce in Texas in 2016, compared with 2007, because other groups in the workforce grew more rapidly.

Arizona's unauthorized immigrant workforce shrank by more than a third since 2007. The smaller labor force of unauthorized immigrants in Arizona means that the state ranked 12th in 2016 for the size of its unauthorized immigrant workforce, compared with seventh in 2007. Unauthorized immigrants also made up a smaller share of the workforce in Arizona in 2016 than in 2007.

In Maryland, meanwhile, the number of unauthorized immigrants in the workforce grew by about a third since 2007. Maryland had ranked 14th in 2007 for the size of its unauthorized immigrant workforce, but in 2016 ranked ninth. Unauthorized immigrants made up a larger share of the total workforce in Maryland in 2016 than in 2007. Neighboring Virginia also gained more unauthorized immigrant workers, but their share of the total workforce did not grow.

Number of unauthorized immigrant workers declined in 12 states and rose in eight

In thousands

	2016	2007	Change
Increased			
Delaware	20	15	+5
Hawaii	35	20	+10
Iowa	35	25	+15
Maryland	210	160	+50
Massachusetts	190	160	+30
Texas	1,150	1,000	+120
Utah	75	60	+10
Virginia	200	180	+20
Decreased			
Alabama	35	45	-10
Arizona	190	300	-110
California	1,700	1,850	-150
Florida	550	725	-170
Illinois	325	375	-55
Michigan	70	85	-15
Mississippi	15	20	-10
New Jersey	375	400	-45
New Mexico	40	50	-10
New York	550	700	-160
Oregon	80	110	-25
Rhode Island	20	25	-5
U.S. total	7,800	8,200	-425

Note: All numbers are rounded; see Methodology for rounding rules. Change column calculated from unrounded totals; this gives a more accurate estimate of difference than subtracting rounded totals. Significant changes are based on 90% confidence interval. Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

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The remaining states states with fewer unauthorized immigrants in the workforce in 2016 than in 2007 were Alabama, Michigan, Mississippi, New Mexico, Oregon and Rhode Island. In addition to

Texas, Maryland and Virginia, states with more unauthorized immigrants in the workforce in 2016 than in 2007 were Delaware, Hawaii, Iowa, Massachusetts and Utah.

For a table listing the workforce totals for all states, not just those with statistically significant changes, see Appendix C.

Acknowledgments

This report was written by Jeffrey S. Passel, senior demographer; and D'Vera Cohn, senior writer/editor. Editorial guidance was provided by James Bell, vice president for global strategy, and Mark Hugo Lopez, director of global migration and demography. Ana Gonzalez-Barrera, senior researcher, provided analysis of Mexican government data about returned migrants.

Charts and tables for the report were produced by research assistants Abby Budiman and Jynnah Radford. Radford also updated several blog posts that use data from this report. Maps and digital images were produced by Michael Keegan, senior graphics designer. The report was number-checked by Budiman; the graphics were checked by intern Luis Noe-Bustamante. Ariana Rodriguez-Gitler, digital producer, assisted with formatting and production of the report and a related interactive graphic; Danielle Alberti, web developer, built the interactive graphic; and Antonio Flores, research assistant, number-checked the graphic. Marcia Kramer copy edited the report.

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Methodology

The estimates presented in this report supersede all previously published Pew Research Center estimates. Although this report draws largely on U.S. Census Bureau data, our estimates will not generally agree exactly with those published by the Census Bureau because we include adjustments for survey omissions and corrections for various types of survey errors and anomalies.

Overview

The estimates for the U.S. unauthorized immigrant population presented in this report are based on a residual estimation methodology that compares a demographic estimate of the number of immigrants residing legally in the country with the total number of immigrants as measured by either the American Community Survey or the March Supplement to the Current Population Survey. The difference is assumed to be the number of unauthorized immigrants in the survey, a number that later is adjusted for omissions from the survey (see below). The basic estimate is:

Unauthorized		Survey, Total	Estimated Lawful
Immigrants	=	Foreign Born -	Immigrant Population
(U)		(F)	(L)

The lawful resident immigrant population is estimated by applying demographic methods to counts of lawful admissions covering the period since 1980 obtained from the Department of Homeland Security's Office of Immigration Statistics and its predecessor at the Immigration and Naturalization Service, with projections to current years, when necessary. Initial estimates here are calculated separately for age-gender groups in six states (California, Florida, Illinois, New Jersey, New York and Texas) 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 (Baker, 2017; Warren and Warren, 2013). See also Passel and Cohn (2016b); Passel, Cohn and Gonzalez-Barrera, (2013), Passel and Cohn (2008), Passel et al. (2004) for more details.

The overall estimates for unauthorized immigrants build on these residuals by adjusting for survey omissions in these six states and the balance of the country, subdivided for Mexican immigrants and other groups of immigrants (balance of Latin America, South and East Asia, rest of world) depending on sample size and state.

Once the residual estimates have been produced, individual foreign-born respondents in the survey are assigned a specific status (one option being unauthorized immigrant) based on the

individual's demographic, social, economic, geographic and family characteristics in numbers that agree with the initial residual estimates for the estimated lawful immigrant and unauthorized immigrant populations in the survey. These status assignments are the basis for the characteristics reported here (including, for example, specific countries of birth, detailed state estimates, period of arrival and household-family relationships). A last step in the weighting-estimation process involves developing state-level estimates that take into account trends over time in the estimates.

Comparability with previous estimates

The estimates presented here for 1990-2016 are internally consistent and comparable across years and states. The 2005-16 estimates are based on the American Community Survey (ACS); those for 1995, 1998, 2000 and 2003 are based on the March Current Population Survey (CPS); and for 1990, on the 1990 census (produced by Warren and Warren, 2013). The estimates presented in this report supersede all previous published Pew Research Center estimates, especially estimates for the same dates using different data. For 2005-15, some previous estimates have been based on the CPS rather than the ACS; see, for example, a 2012 Pew Research Center report covering 1995-2011 using only CPS-based estimates and a 2017 publication with ACS-based estimates for 2005-15 and a preliminary estimate for 2016 based on the CPS. ACS-based estimates are superior to CPS-based estimates for reasons discussed below. Previous Center releases since September 2013 (Passel and Cohn, 2016a, 2016b; Passel et al., 2014; Passel, Cohn and Gonzalez-Barrera, 2013 and related graphics) include a mix of CPS-based and ACS-based estimates and also show CPS-based estimates for additional years: 1996-97, 1999, 2001-02 and 2004. These earlier estimates are consistent with estimates published here.

The estimates in this report and previous Center publications since 2013 are based on survey data consistent with the censuses of 1990, 2000 and 2010. For the 1995-2009 surveys, special weights were developed to align with both the preceding and subsequent censuses (see below). As such, population figures for these years are not identical to those published from the original surveys. Moreover, these new estimates of unauthorized immigrants differ from previous estimates published before 2013, even from earlier estimates based on the same surveys. Although differences at the national level are not generally very large, some state-level differences may be relatively greater. (See below for the bases for the revisions.)

The ACS has a much larger sample size than the CPS (see below). As such, state-level estimates of unauthorized immigrants and those for countries of birth are much more precise (i.e., have smaller margins of error) from the ACS than from the CPS. The larger sample sizes also permit more detailed analyses of the characteristics of unauthorized immigrants at the state level and for individual countries of birth.

Rounding of estimates

All estimates for unauthorized immigrant populations are presented as rounded numbers to avoid the appearance of unwarranted precision in the estimates. The rounding conventions for unauthorized immigrant estimates, dependent somewhat on data sources, are:

Greater than 10,000,000	Nearest 100,000
1,000,000-10,000,000	Nearest 50,000
250,000-1,000,000	Nearest 25,000
100,000-250,000	Nearest 10,000
ACS-based 5,000-100,000 CPS-based 10,000-100,000 ACS-based <5,000	Nearest 5,000 Nearest 5,000 Shown as <5,000
CPS-based 10,000-100,000	Nearest 5,000

Estimates for 1990 are based on the 1990 census and use ACS-based rounding conventions. These same conventions are used to round the 90% confidence intervals limits, presented as "Range (+ or -)," with one exception – limits that round to less than 5,000 are rounded to the nearest 1,000. For state- and national-level data on the total population or total foreign-born population, figures are rounded to the nearest 10,000.

Unrounded numbers are used for significance tests, for plotting charts and for computations of differences and percentages. Where differences are reported, they are computed from unrounded estimates and then rounded separately. Because each figure is rounded separately, the rounded estimates may not add to rounded totals. Similarly, percentages computed from rounded numbers may differ from the percentages shown in this report.

Status assignments: Lawful and unauthorized immigrants

Individual survey respondents are assigned a status as a lawful or unauthorized immigrant based on the individual's demographic, social, economic and geographic characteristics so that 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 U.S. before 1980 are assumed to be lawful immigrants. Then, the ACS and CPS data are corrected for known overreporting of naturalized citizenship on the part of recently arrived immigrants (Passel et al., 1997). Specifically, immigrants who have been in the U.S. for less than six years are not eligible to naturalize unless they are married to a U.S. citizen, in which case they can naturalize after three years. Immigrants reporting as naturalized who fail to

meet these requirements are moved into the noncitizen category. All remaining naturalized citizens from countries other than Mexico and those in Central America are assigned as lawful immigrants because reporting of citizenship for these groups has been found to be largely accurate in the aggregate (Passel et al., 1997). Mexican and Central American immigrants who report being naturalized U.S. citizens are treated the same as noncitizens in the status assignment process. This means that some may be assigned as unauthorized immigrants; the rest remain as naturalized citizens.

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 are identified in the survey and each is assigned a specific lawful temporary migration status using information on country of birth, date of entry, occupation, education and certain family characteristics. The specific visa types identified and supporting variables are:

Diplomats and embassy employees (A visa)

Foreign students (F, M visa)

Visiting scholars (J visa)

Physicians (J visa)

Registered nurses (H-1A visas)

Intracompany transfers (L visas)

"High-tech" guest workers (H-1B visas)

International organizations (G visas)

Religious workers (R visas)

Exchange visitors (J visas)

Athletes, artists and entertainers (O, P visas)

Spouses and children within the various categories

Finally, immigrants are screened on the basis of occupations, participation in public programs and family relationships with U.S.-born individuals and lawful immigrants. Some individuals are assigned as lawful immigrants on the basis of these characteristics:

Refugees and naturalized citizens

Lawful temporary immigrants

Persons working for the government or the armed forces

Veterans or active-duty members of the armed forces, military Reserves or National Guard

Participants in government programs not open to unauthorized immigrants: Supplemental Security Income (SSI), Temporary Assistance for Needy Families

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(TANF), Medicare, Medicaid and food stamps (Supplemental Nutrition Assistance Program, or SNAP)

Persons entering the U.S. before 1980

Persons with certain occupations that require lawful status or government licensing (e.g., police officers and other law enforcement occupations, lawyers, health care professionals)

Children of citizens and lawful temporary migrants

Most immediate relatives of U.S. citizens, especially spouses

Other family members, especially those entering the U.S. before lawful residents

As result of these steps, the foreign-born population is divided between individuals with "definitely lawful" status (such as long-term residents, naturalized citizens, refugees and asylees, lawful temporary migrants and some lawful permanent residents) and a group of "potentially unauthorized" migrants. (See <u>Passel</u>, 2007 and <u>Passel</u> et al., 2004 for additional detail.)

Finally, virtually all Cubans entering the U.S. are lawful residents, even if they are not assigned refugee status, because they are treated differently from other arrivals based on the <u>Cuban</u> <u>Adjustment Act of 1966</u>. Status assignments in datasets for 2012 and earlier did not take the special status of Cubans into account and, as a result, assigned too many as unauthorized immigrants. To rectify the excess assignment of Cubans as unauthorized immigrants, a weighting adjustment was made in the CPS-based estimates for 1995-2003 and ACS-based estimates for 2005-12. In these adjustments, the weight previously assigned to unauthorized Cubans was reassigned to unauthorized immigrants from other parts of Latin America while keeping in place the overall unauthorized immigrant totals for states. These changes have been implemented in Pew Research Center publications since 2016.

The number of potentially unauthorized immigrants typically exceeds the estimated number of unauthorized immigrants from the residual estimates by 20%-35% nationally. So, to have a result consistent with the residual estimate of lawful and unauthorized immigrants, probabilistic methods are employed to assign lawful or unauthorized status to these potentially unauthorized individuals. The base probability for each assignment is the ratio of the residual estimate to the number of potentially unauthorized immigrants. These initial probabilities are first adjusted separately for parents living with their children and all others to ensure that an appropriate number of unauthorized immigrant children are selected and then by broad occupation categories.

After this last step in the probabilistic assignment process, there is a check to ensure that the statuses of family members are consistent; for example, all family members entering the country at the same time are assumed to have the same status. The resulting populations for unauthorized immigrants are compared with the residual estimates; if they disagree, the assignment probabilities are adjusted and the random assignments are repeated. The entire process requires

several iterations to produce estimates that agree 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 lawful and unauthorized immigrants in each area born in Mexico, Latin America, Asia and the rest of the world (subject to sample size considerations); and for children and for working-age men and women within each category. Finally, the survey weights for the foreign born are adjusted upward for survey omissions (undercount) so the tabulated figures agree with the adjusted analytic, demographic estimates of the total number of lawful immigrants and unauthorized migrants developed in the very first step.

Data sources and survey weights

The American Community Survey is an ongoing survey conducted by the U.S. Census Bureau that represents the population as of July 1 of each year. The survey collects detailed information on a broad range of topics, including country of birth, year of immigration and citizenship – the information required for the residual estimates. The ACS has a continuous collection design with monthly samples of almost 300,000 households. The initial sample has been slightly more than 3.5 million addresses each year since 2012. Initial nonresponse addresses are then subsampled for further interviews. The final sample for 2016 comprised more than 2.1 million addresses. The ACS began full-scale operation in 2005 covering only the household population; since 2006 it has covered the entire U.S. population. ACS data are released by the Census Bureau in September for the previous year. For this report, public-use samples of individual survey records from the ACS are tabulated to provide the data used in the estimation process. The public-use file is a representative 1% sample of the entire U.S. (including more than 3 million individual records for each year since 2008 – 3,156,000 in 2016). The public-use data employed in these estimates were obtained from the Integrated Public-Use Microdata Series, or IPUMS (Ruggles et al., 2015).

The other survey data source used for residual estimates comes from March Supplements to the Current Population Survey. The CPS is a monthly survey currently of about 55,000 households conducted jointly by the U.S. Bureau of Labor Statistics and the Census Bureau. The March CPS Supplement has a greatly expanded questionnaire that collects detailed information on income sources, participation in a range of government programs and health insurance coverage. The March sample is also expanded over the regular monthly CPS by including additional households with children, Hispanics and specific race groups. Since 2001, the March Supplement sample has been expanded to about 80,000 households; before then, the expanded March Supplement sampled about 50,000 households. The CPS was redesigned in 1994 and, for the first time, included the information required for the residual estimates (i.e., country of birth, date of immigration and citizenship). Some limitations of the initial March Supplement of redesigned CPS, 1994 – especially the limited coding of country of birth – preclude its use in making these estimates, so the first CPS-based estimates of the unauthorized immigrant population are for March 1995. The CPS universe covers the civilian noninstitutional population. The March

Supplement data from the CPS are released by the U.S. Census Bureau in September for the previous March.

Population figures from both the ACS and CPS are based on the Census Bureau's official population estimates for the nation, states and smaller areas through a weighting process that ensures that the survey figures agree with prespecified national population totals by age, sex, race and Hispanic origin. At the subnational level, the two surveys differ in their target populations. The March CPS data agree with state-level totals by age, sex and race and are based on a process that imposes other conditions on weights for couples. The ACS weights use estimates for much smaller geographic areas that are summed to prespecified state totals.

The population estimates for the surveys are based on the latest available figures at the time the survey weights are estimated. This process produces the best estimates available at the time of the survey, but it does not guarantee that a time series produced across multiple surveys is consistent or accurate. Significant discontinuities can be introduced when the Census Bureau changes its population estimation methods, as it did several times early in the 2000s and in 2007 and 2008 (Passel and Cohn, 2010), or when the entire estimates series is recalibrated to take into account the results of a new census. The Census Bureau generally revises its historical population estimates when such changes are introduced, but it rarely re-estimates survey weights for past surveys.

The estimates shown for unauthorized immigrants and the underlying survey data are derived from ACS IPUMS 1% samples for 2005-16 and March CPS public-use files for 1995, 1998, 2000 and 2003, which have been reweighted to take into account population estimates consistent with the 1990, 2000 and 2010 censuses and the most recent population estimates. The population estimates used to reweight the ACS for 2005 through 2009 and the March 2003 CPS are the Census Bureau's <u>intercensal population estimates for the 2000s</u>; these population estimates use demographic components of population change for 2000-10 and are consistent with both the 2000 and 2010 censuses. Similarly, the population estimates used to reweight the CPS for March 1995, 1998 and 2000 are the intercensal population estimates for the 1990s (U.S. Census Bureau, 2012a), which are consistent with the 1990 and 2000 censuses. The ACS data for 2010-16 do not require reweighting as they are weighted to recent population estimates based on the 2010 census. The original 2005 ACS covered the household population but not the population living in group quarters (about 8 million people). For Pew Research Center analyses, we augmented the 2005 ACS with group quarters records from the 2006 ACS but weighted to agree with the 2005 population estimates. The reweighting methodology for both the ACS and CPS follows, to the extent possible, the methods used by the Census Bureau in producing the sample weights that equal the population totals. See <u>Passel</u>, <u>Cohn and Gonzalez-Barrera</u>, <u>2013</u> for more details on weighting and adjustments for survey undercoverage.

Because of the much, much larger sample size in the ACS (more than 3.1 million sample cases in 2016 including more than 370,000 foreign-born cases) than the March CPS (185,000 sample cases in 2016 with about 24,000 foreign-born cases), the ACS-based estimates should be considered more accurate than the CPS-based estimates. In this publication, we have replaced the previously published CPS-based estimates for years from 2005 onward with ACS-based estimates.

Other methodological issues

Adjustment for undercount

Adjustments for omissions from the surveys (also referred to as adjustments for undercount) are introduced into the estimation process at several points. The initial comparisons with the survey (based on the equation shown above) take the difference between the immigrants in the survey and the estimated lawful immigrant population. Since the comparison is people appearing in the survey, the estimated lawful immigrant population must be discounted slightly because some lawful immigrants are missed by the survey. This initial estimate represents unauthorized immigrants included in the survey. To estimate the total number of unauthorized immigrants in the country, it must be adjusted for those left out. Similarly, the estimated number of lawful immigrants appearing in the survey must be adjusted for undercount to arrive at the total foreign-born population.

These various coverage adjustments are done separately for groups based on age, sex, country of birth and year of arrival. The patterns and levels of adjustments are based on U.S. Census Bureau studies of overall census coverage (see U.S. Census Bureau, 2012a for links to evaluation studies of the 1980, 1990, 2000 and 2010 censuses; also Passel, 2001) that are adjusted up or down to reflect the results of a number of specialized studies that focus on immigrants. Census Bureau undercount estimates have generally been subdivided by race/Hispanic origin, age, and sex. So, the adjustments to the Pew Research Center data use rates for countries of birth based on the predominant race of immigrants from the country – Hispanic and non-Hispanic races for white, black and Asian. Undercount rates for children do not differ by gender, but for younger adults (ages 18 to 29 and 30 to 49) the undercount rates for males tend to be higher, and for some groups much higher, than those for females. At older ages, the undercount rates are lower than for younger adults with no strong patterns of gender differences (and with some estimated overcounts).

The basic information on specific coverage patterns of immigrants is drawn principally from comparisons with Mexican data, U.S. mortality data and specialized surveys conducted at the time of the 2000 census (<u>Van Hook et al., 2014</u>; <u>Bean et al., 1998</u>; <u>Capps et al., 2002</u>; <u>Marcelli and Ong, 2002</u>). In these studies, unauthorized immigrants generally have significantly higher undercount rates than lawful immigrants who, in turn, tend to have higher undercounts than the U.S.-born population. More recent immigrants are more likely than longer-term residents to be missed. The

most recent study (<u>Van Hook et al., 2014</u>) finds marked improvements in coverage of Mexicans in the ACS and CPS between the late 1990s and the 2000s. This and earlier work suggest very serious coverage problems with immigrants in the data collected before the 2000 census but fewer issues in the 2000 census and subsequent datasets. This whole pattern of assumptions leads to adjustments of 10% to 20% for the estimates of unauthorized immigrants in the 1995-2000 CPS, with slightly larger adjustments for unauthorized Mexicans in those years. (Note that this means even larger coverage adjustments, sometimes exceeding 30% for adult men younger than age 40.)

After 2000, the coverage adjustments build in steady improvements in overall coverage and improvements specifically for Mexican immigrants. The improvements are even greater than noted in the research comparing Mexico and U.S. sources because the reweighted ACS and CPS data imply significant improvements in reducing undercounts, since they incorporate results of the 2010 census. With all of these factors, coverage adjustments increase the estimate of the unauthorized immigrant population by 8% to 13% for 2000-09 and by 5% to 7% for 2010-16. For the overall immigrant population, coverage adjustments hovered slightly below 5% during the 1990s and trended downward to around 2% to 3% by 2014. Since the population estimates used in weighting the ACS and the CPS come from the same sources, the coverage adjustments tend to be similar.

State estimates

The initial estimates of unauthorized immigrants for states other than the six largest (California, Texas, Florida, New York, Illinois and New Jersey) arise from the tabulated totals of the individual microdata records assigned as unauthorized immigrants. The overall trends at the state level are assumed to progress somewhat smoothly from one year to the next, though the initial estimates based on status assignments may not behave in exactly that way. Accordingly, the final estimated state totals for any given year take into account estimates for surrounding years; however, only a small number of state estimates require significant adjustment based on the trend analysis. The last step in developing the individual weights for the unauthorized immigrants involves adjusting the initial weights in each state to agree with the totals from the trend analysis. The largest adjustments are in those states where the trend analysis showed a substantial difference between the initial estimates and the trend analysis. Nonetheless, all states are adjusted so that the state totals agree as closely as possible with either the initial estimate or the trend-based estimate. At the same time, the adjustment is done so that the national totals of the state populations agree with the residual estimates for the total unauthorized immigrant population and the totals from each of the four broad regions of birth.

Compared with the most recent previously published estimates, the estimates published here bring in two additional years of ACS-based estimates, 2015 and 2016. With these new data, some state totals for the last two years in the previous publication, 2013 and 2014, have been revised

(<u>Passel and Cohn, 2016</u>). This earlier report has further discussion of how the state trend analysis affected estimates for years before 2013.

Margins of error

Estimates of the unauthorized immigrant population are computed as the difference between a deterministic, administratively based estimate (i.e., the lawful foreign-born population, or "L" in the equation above) and a sample-based estimate (i.e., the survey total of the foreign-born population, or "F"). Consequently, the margin of error (or variance) for the estimated unauthorized population is the margin of error for "F," the sample-based estimate of the foreign-born population. Thus, the margins of error are generally based on the variance of the foreign-born population entering since 1980.

For all years of the ACS, variances are computed with <u>replicate weights supplied by the U.S.</u>

<u>Census Bureau</u> through <u>IPUMS</u>; for earlier CPS data, generalized variance formulas supplied in <u>Census Bureau documentation</u> were used to compute margins of error.

The ranges reported represent a 90% confidence interval around the estimates. They represent the sampling error associated with the survey-based estimate. Other sources of potential error – including the variability associated with the random assignment of statuses, potential errors in the status assignment process and non-sampling error in the surveys – are not represented in the reported margins of error. For this report, statistical tests rely on a 90% confidence level.

Countries and regions 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.

Defining regions of the world and, in some cases, specific countries using the various data sources requires grouping areas into identifiable units and "drawing lines" on the world map. In the historical data used to construct the lawful foreign-born population, it is not possible to differentiate the individual republics within the former Soviet Union. In both the CPS and ACS microdata, not all the individual republics can be identified; some are identified in some years but not others. However, a code is assigned for USSR in all years, even when the USSR no longer existed. Thus, for analytic purposes in this report, the former republics are grouped together and considered to be part of Europe.

For this report, China, Hong Kong and Taiwan are combined and reported as "China" because of potential inconsistencies between the administrative data sources and the surveys and because of

concerns over consistency of reporting on the part of respondents. South and East Asia is defined to include Afghanistan, Pakistan and countries east of them. The Middle East comprises Southwest Asia from Iran and westward to Turkey and Cyprus plus countries in North Africa. "Africa" comprises sub-Saharan Africa —the rest of the continent. Data for North and South Korea are not generally separated in the survey data used for the estimates. Thus, estimates reported for persons born in Korea cover both North and South Koreans; the vast majority of Korean immigrants in the U.S. are from South Korea. A small number of unauthorized immigrants are from Oceania and from a residual "Other" category shown in ACS data. The total of the residual "other" and Oceania is included in the overall national estimates but not shown separately in any tables or figures.

Labor force and workers

The labor force includes all people ages 16 and older who are working or looking for work. For the analyses of occupations and industries, we exclude people who did not report an occupation or industry. In our analysis, we also exclude people in the military or with a military occupation. These exclusions drop about less than 2% of the total labor force of roughly 164 million – 2.4 million are excluded from the occupation analyses and 2.9 million from the industry analyses. About 95,000 unauthorized immigrants, or 1.2% of those in the workforce, are excluded from this analysis because they do not report an occupation or industry; unauthorized immigrants are generally not eligible to be in the military or to hold military employment, so they are not excluded for that reason. Unemployed people are only excluded if they do not report an occupation or industry, although most do report one.

Industry and occupation category labels

The U.S. Census Bureau has three levels of aggregation each for industry and occupation. At the highest level are 12 classifications for "major occupation" groups (11 for civilians, plus the armed forces). At the next level are 23 "detailed occupation" groups, though eight of them are identical to the "major" groups; the three major occupation groups for management, professional and service occupations are subdivided into 15 smaller, detailed groups. Finally, there are a large number of very specific occupation categories – almost 600 – that can be grouped into either the "detailed" or "major" groups. So, for example, the code for "aerospace engineers" (1320) is part of the detailed category for "architecture and engineering occupations" which, in turn, is part of the major category of "professional and related occupations."

For industries, the highest level has 14 "major industry" groups (13 for civilians and one for the armed forces). At the next level are 52 "detailed industry" groups. Unlike with occupations, only four of the "major" groups are identical to "detailed" groups. Finally, there are 273 very specific industry categories that can be grouped into either the "detailed" or "major" groups. So, for

example, the industry called "retail bakeries" (code 1190) is part of the detailed category for "food manufacturing" which, in turn, is part of the major category of "manufacturing."

The analyses presented here use the "major" categories for both occupations and industries. Some data are presented for the very specific occupations and industries with the highest concentrations of unauthorized immigrants.

For ease of presentation, the full titles of many industry and occupation categories have been condensed from the Census Bureau's terminology in some figures and text. If so, they are shortened as follows:

Agriculture, forestry, fishing, and hunting Agriculture

Mining
Construction
Manufacturing

Wholesale and retail trade Wholesale/retail

Transportation and utilities Transport/utilities

Information ... Financial activities ...

Professional and business services
Educational and health services
Education/health

Leisure and hospitality Leisure/hospitality

Other services ...
Public administration ...

Data on "major" occupation categories are sometimes condensed in figures and the text. If so, they are shortened as follows:

Management, business, and financial Management Professional and related Professional

Service ... Sales and related Sales

Office and administrative support Office support

Farming, fishing, and forestry Farming (or Agriculture)

Construction and extraction Construction
Installation, maintenance, and repair Maintenance

Production ...

Transportation and material moving Transportation

References in the text, text charts and tables can be cross-referenced to the lists above.

More information on the Census Bureau's industry and occupation categories can be found here: https://www.census.gov/topics/employment/industry-occupation/guidance/indexes.html

Children, adults and spouses

In this report, the term "spouse" encompasses both married couples and unmarried partners. Because of limitations in reporting family relationships in the ACS, essentially all unmarried partners involve the individual who is called the head of a household and not other couples within the household.

In most uses in this report, "children" are defined as individuals younger than 18 who are not the head or spouse in a family unit. This means that individuals younger than 18 who have their own children or are the spouse/partner of another household member are not included in the child population. "Adults" are people who are not "children," that is, they are 18 years old or older or are a parent/spouse/partner of someone else in the household.

Small modifications to these definitions are made in defining "U.S.-born children of unauthorized immigrants" and "unauthorized immigrant children." First, these groups comprise all individuals under 18 who are the child of an unauthorized immigrant in the household even if the child is a parent or spouse/partner themselves. More than 99% of individuals classified as children of unauthorized immigrants fit this definition. Then, individuals under 18 who live in households where the only adult(s) are an unauthorized immigrant or a couple in which one or both are unauthorized immigrants; further, an adult is a relative of the child. This group accounts for about 45,000 of the 5 million U.S.-born children of unauthorized immigrant in 2016 and about 4,000 of the 675,000 unauthorized immigrant children. Finally, the 5 million U.S.-born children of unauthorized immigrants include about 10,000 children who are actually lawful immigrants with an unauthorized immigrant parent.

Adult children of unauthorized immigrants are individuals aged 18 and older who live in a household with at least one parent who is an unauthorized immigrant. People (either 18 and older or under 18) who have an unauthorized immigrant parent but do not live with an unauthorized immigrant parent cannot be classified as the child of an unauthorized immigrants because there is no information in the census data linking them with their parents. Thus, the estimates presented here for children of unauthorized immigrants are smaller than the number of people who have an unauthorized immigrant parent.

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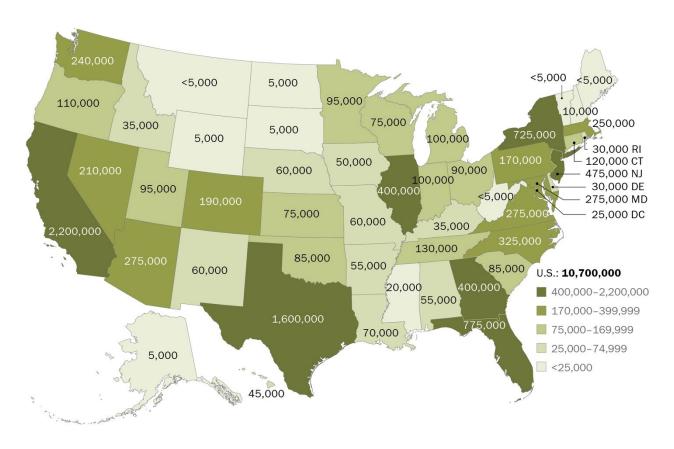
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Appendix B: Additional maps

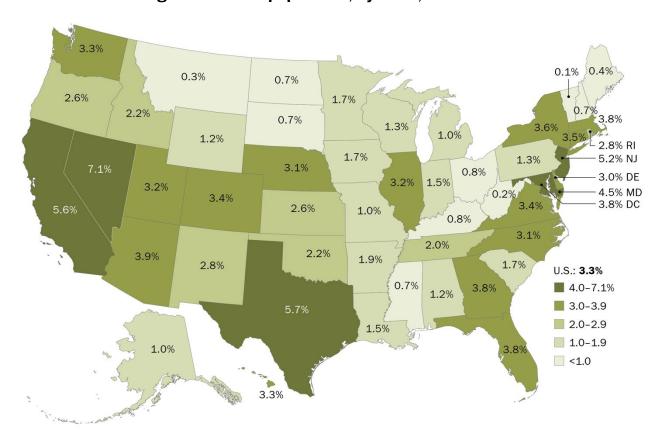
Unauthorized immigrant population by state, 2016



Note: All numbers are rounded; see Methodology for rounding rules.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.
"U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

Unauthorized immigrant share of population, by state, 2016

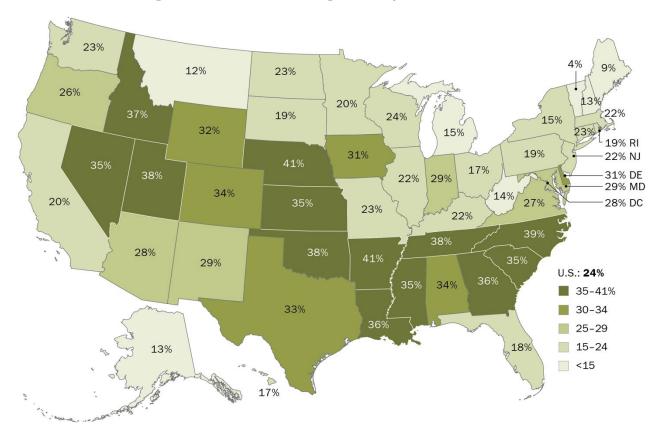


Note: Percentages calculated from unrounded numbers; see Methodology for rounding rules.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

"U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

Unauthorized immigrant share of all immigrants, by state, 2016



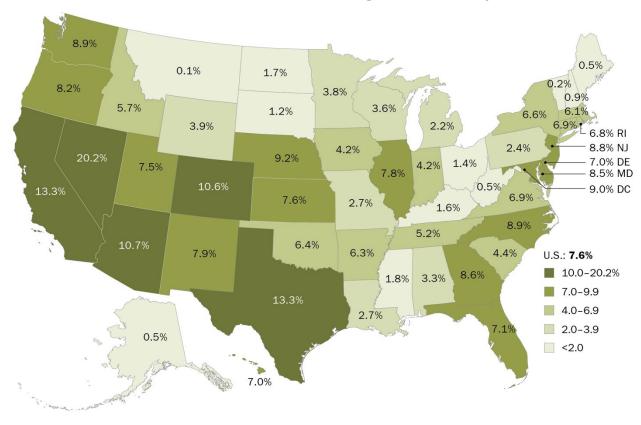
Note: Percentages calculated from unrounded numbers; see Methodology for rounding rules.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

"U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

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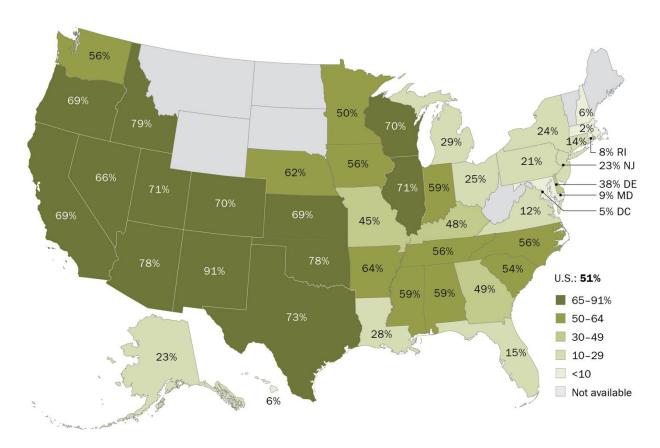
Share of K-12 students with unauthorized immigrant parents, by state, 2016



Note: Based on students with at least one unauthorized immigrant parent; includes a small number of unauthorized immigrants with no parents in the household. Percentages calculated from unrounded numbers; see Methodology for rounding rules.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.
"U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

Mexican share of unauthorized immigrant population, by state, 2016

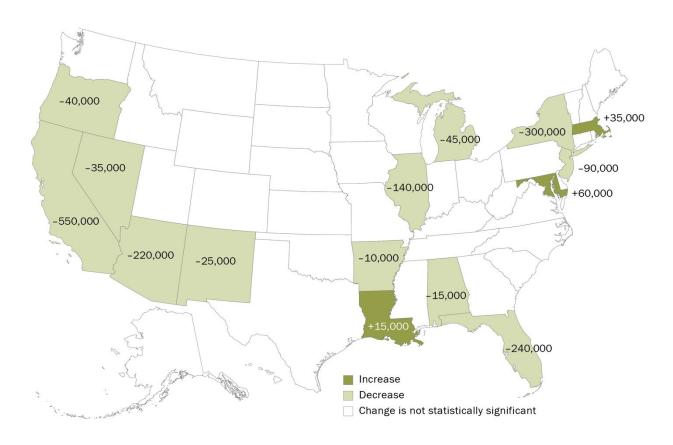


Note: Percentages calculated from unrounded numbers; see Methodology for rounding rules. States shaded gray indicate that the size of the unauthorized immigrant population is too small to produce a reliable estimate.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

"U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

Change in unauthorized immigrant population, by state, 2007 to 2016

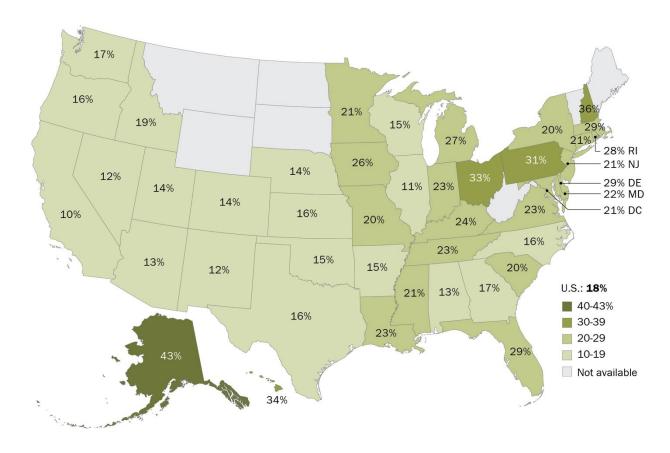


Note: State changes shown are statistically significant based on 90% confidence interval. All numbers are rounded; see Methodology for rounding rules.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

"U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

Share of unauthorized immigrant adults in the U.S. for five years or less, 2016

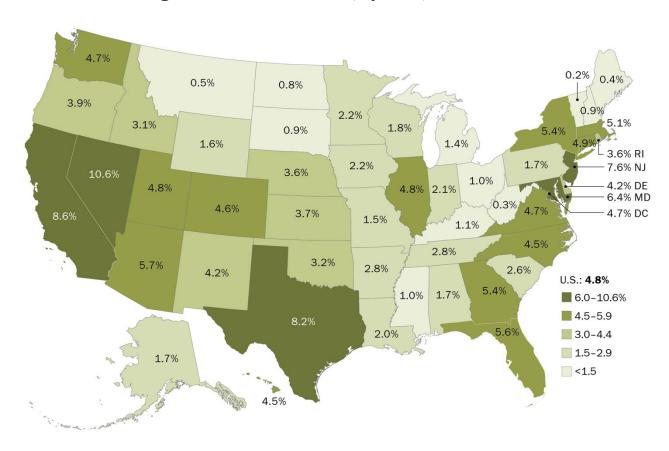


Note: Percentages based on unrounded numbers; see Methodology for rounding rules. States shaded gray indicate that the size of the unauthorized immigrant population is too small to produce a reliable estimate.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

"U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

Unauthorized immigrant share of labor force, by state, 2016

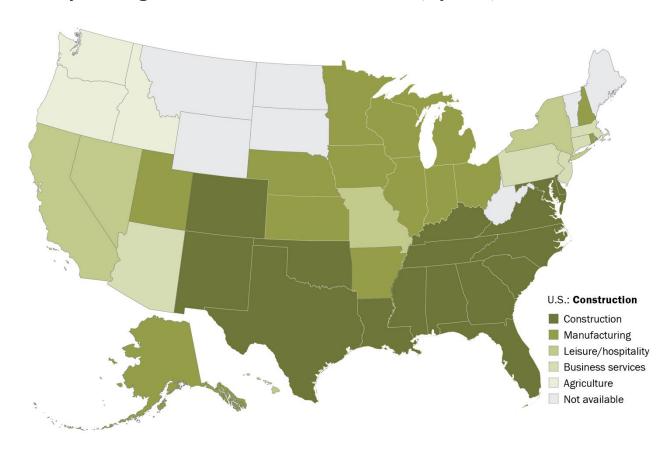


Note: Percentages based on each state's total civilian labor force. Percentages calculated from unrounded numbers; see Methodology for rounding rules

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

"U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

Industry with largest number of unauthorized workers, by state, 2016

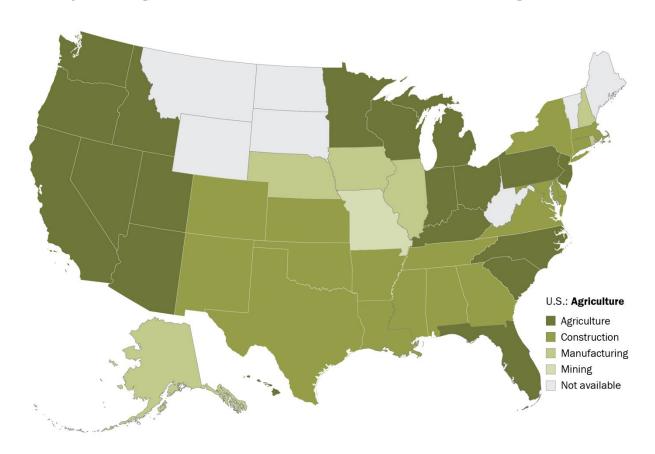


Note: Industry names shortened for display; see Methodology for full U.S. Census Bureau classifications. States shaded gray indicate that the size of the unauthorized immigrant population is too small to produce a reliable estimate.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data; see Methodology for details.

[&]quot;U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

Industry with largest share of workers who are unauthorized immigrants, 2016

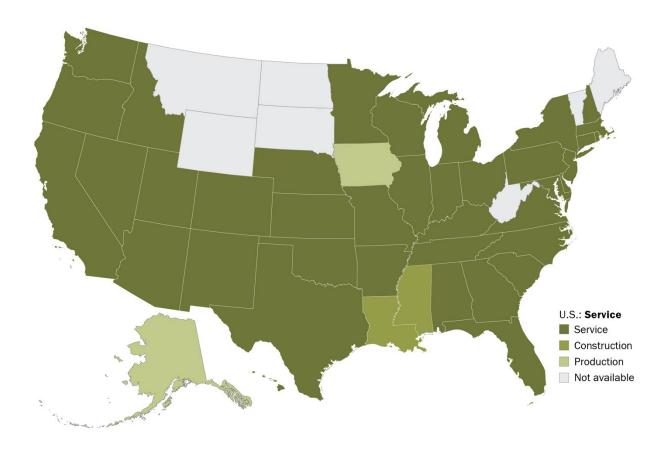


Note: Industry names shortened for display; see Methodology for full U.S. Census Bureau classifications. States shaded gray indicate that the size of the unauthorized immigrant population is too small to produce a reliable estimate.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

"U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

Occupation with largest number of unauthorized immigrant workers, 2016

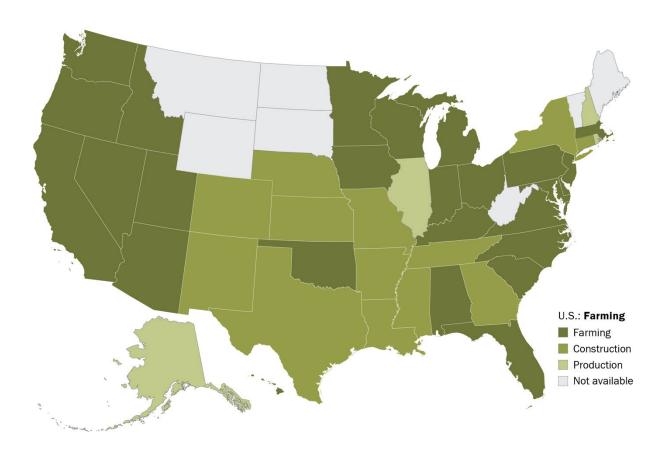


Note: Occupation names shortened for display; see Methodology for full U.S. Census Bureau classifications. States shaded gray indicate that the size of the unauthorized immigrant population is too small to produce a reliable estimate.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data; see Methodology for details.

"U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

Occupation with largest share of workers who are unauthorized immigrants, 2016



Note: Occupation names shortened for display; see Methodology for full U.S. Census Bureau classifications. States shaded gray indicate that the size of the unauthorized immigrant population is too small to produce a reliable estimate.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

"U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

Appendix C: Additional tables

Estimates of unauthorized immigrant population, by state, selected years 1990-2016

In thousands

	20:	16	2015	2010	20	007	2000	1995	1990
		Range				Range			
	Estimate	(+ or -)	Estimate	Estimate	Estimate	(+ or -)	Estimate	Estimate	Estimate
Total U.S.	10,700	190	11,000	11,400	12,200	160	8,600	5,700	3,500
Alabama*	55	10	60	90	70	10	35	10	5
Alaska	5	5	10	10	10	5	5	<10	<5
Arizona*	275	20	275	325	500	25	350	160	90
Arkansas*	55	5	65	70	70	10	45	15	5
California*	2,200	60	2,350	2,500	2,800	60	2,250	2,050	1,450
Colorado	190	15	200	190	210	20	130	85	30
Connecticut	120	15	120	130	130	15	50	25	20
Delaware	30	5	25	20	25	5	15	<10	<5
District of Columbia	25	5	25	20	25	5	25	20	15
Florida*	775	50	800	900	1,050	35	900	575	240
Georgia	400	20	375	400	425	20	170	55	35
Hawaii	45	15	45	40	35	10	30	15	5
Idaho	35	5	40	35	40	10	30	15	10
Illinois*	400	25	425	500	550	30	375	240	200
Indiana	100	15	110	100	100	15	35	25	10
Iowa	50	10	45	45	40	10	35	15	5
Kansas	75	10	75	85	70	10	40	25	15
Kentucky	35	10	45	50	40	10	25	<10	<5
Louisiana*	70	10	65	65	55	10	20	15	15
Maine	<5	4	<5	<5	<5	5	<10	<10	<5
Maryland*	275	20	275	250	220	15	160	65	35
Massachusetts*	250	20	220	180	220	25	170	60	55
Michigan*	100	15	110	110	140	20	95	60	25
Minnesota	95	15	100	90	85	20	65	45	15
Mississippi	20	5	25	25	25	10	10	<10	<5
Missouri	60	10	60	65	60	10	35	15	10
Montana	<5	3	<5	<5	<5	3	<5	<10	<5
Nebraska	60	10	55	45	45	10	35	15	5
Nevada*	210	15	200	230	240	15	170	75	25
New Hampshire	10	5	10	10	10	5	10	<10	<5

Continued on next page

Estimates of unauthorized immigrant population, by state, selected years 1990-2016, continued

In thousands

	202	16	2015	2010	20	07	2000	1995	1990
	Estimate	Range (+ or -)	Estimate	Estimate	Estimate	Range (+ or -)	Estimate	Estimate	Estimate
New Jersey*	475	30	475	475	550	35	325	200	95
New Mexico*	60	10	75	85	85	10	55	45	20
New York*	725	40	725	800	1,000	40	750	600	350
North Carolina	325	15	325	350	325	15	220	35	25
North Dakota	5	4	<5	<5	<5	3	<5	<10	<5
Ohio	90	20	90	100	90	15	60	40	10
Oklahoma	85	10	90	90	95	10	45	30	15
Oregon*	110	15	120	130	150	15	100	50	25
Pennsylvania	170	25	180	150	150	20	95	65	25
Rhode Island	30	10	30	35	35	10	25	15	10
South Carolina	85	10	85	100	90	10	30	<10	5
South Dakota	5	4	5	<5	<5	2	<5	<10	<5
Tennessee	130	15	120	120	120	15	55	30	10
Texas	1,600	50	1,650	1,650	1,550	50	1,050	725	450
Utah	95	10	100	110	100	10	70	35	15
Vermont	<5	3	<5	<5	<5	3	<5	<10	<5
Virginia	275	20	275	275	250	20	200	65	50
Washington	240	25	250	220	250	20	150	50	40
West Virginia	<5	3	<5	<5	<5	3	<5	<10	<5
Wisconsin	75	15	80	75	85	15	55	20	10
Wyoming	5	3	5	5	5	3	<5	<10	<5

^{* 2007-2016} change is statistically significant at the 90% confidence interval; for other states the apparent change is not significantly different from zero. Range based on 90% confidence interval.

Note: All numbers are rounded and may not sum to total. See Methodology for details.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

[&]quot;U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

Estimates of unauthorized immigrants in the total population, labor force and foreign-born population, by state, 2016

Populations in thousands

		Populatio	on	Labor force		Foreign born			
			thorized igrants			thorized igrants			
	Total	Estimate	% of total population	Total	Estimate	% of labor force	Total	% foreign born	n% unauthorized of foreign born
Total U.S.	324,880	10,700	3.3	162,810	7,800	4.8	45,100	13.9	24
Alabama	4,870	55	1.2	2,230	35	1.7	170	3.4	34
Alaska	740	5	1.0	380	5	1.7	55	7.7	13
Arizona	6,970	275	3.9	3,250	190	5.7	975	13.9	28
Arkansas	3,000	55	1.9	1,370	40	2.8	140	4.6	41
California	39,550	2,200	5.6	19,780	1,700	8.6	10,900	27.6	20
Colorado	5,570	190	3.4	2,970	140	4.6	550	10.0	34
Connecticut	3,600	120	3.5	1,960	95	4.9	550	15.0	23
Delaware	960	30	3.0	470	20	4.2	95	9.8	31
District of Columbia	690	25	3.8	390	20	4.7	95	13.8	28
Florida	20,780	775	3.8	9,890	550	5.6	4,400	21.1	18
Georgia	10,360	400	3.8	5,050	275	5.4	1,050	10.3	36
Hawaii	1,430	45	3.3	720	35	4.5	275	18.7	17
Idaho	1,690	35	2.2	800	25	3.1	100	5.8	37
Illinois	12,850	400	3.2	6,690	325	4.8	1,800	14.2	22
Indiana	6,650	100	1.5	3,350	70	2.1	350	5.4	29
Iowa	3,140	50	1.7	1,680	35	2.2	170	5.4	31
Kansas	2,920	75	2.6	1,510	55	3.7	220	7.6	35
Kentucky	4,440	35	0.8	2,080	25	1.1	160	3.5	22
Louisiana	4,690	70	1.5	2,180	45	2.0	190	4.1	36
Maine	1,330	<5	0.4	690	<5	0.4	50	3.9	9
Maryland	6,050	275	4.5	3,270	210	6.4	950	15.6	29
Massachusetts	6,850	250	3.8	3,790	190	5.1	1,150	17.0	22
Michigan	9,950	100	1.0	4,920	70	1.4	700	6.9	15
Minnesota	5,540	95	1.7	3,050	70	2.2	475	8.4	20
Mississippi	2,990	20	0.7	1,330	15	1.0	60	2.0	35

Continued on next page

Estimates of unauthorized immigrants in the total population, labor force and foreign-born population, by state, 2016, continued

Populations in thousands

		Population	າ	Labor force		Foreign born			
			thorized igrants			thorized igrants			
	Total	Estimate	% of total population	Total	Estimate	% of labor force	Total	% foreigr born	n % unauthorized of foreign born
Missouri	6,100	60	1.0	3,050	45	1.5	275	4.3	23
Montana	1,040	<5	0.3	530	<5	0.5	25	2.3	12
Nebraska	1,920	60	3.1	1,030	35	3.6	150	7.6	41
Nevada	2,970	210	7.1	1,490	160	10.6	600	20.3	35
New Hampshire	1,340	10	0.7	760	5	0.9	75	5.7	13
New Jersey	9,040	475	5.2	4,760	375	7.6	2,100	23.1	23
New Mexico	2,090	60	2.8	960	40	4.2	200	9.6	29
New York	19,930	725	3.6	10,180	550	5.4	4,700	23.6	15
North Carolina	10,190	325	3.1	4,980	220	4.5	825	8.0	39
North Dakota	760	5	0.7	420	<5	0.8	25	3.3	23
Ohio	11,630	90	0.8	5,890	60	1.0	525	4.5	17
Oklahoma	3,940	85	2.2	1,850	60	3.2	230	5.8	38
Oregon	4,110	110	2.6	2,070	80	3.9	400	10.0	26
Pennsylvania	12,820	170	1.3	6,490	110	1.7	900	7.0	19
Rhode Island	1,060	30	2.8	550	20	3.6	150	14.5	19
South Carolina	4,970	85	1.7	2,390	65	2.6	250	5.0	35
South Dakota	870	5	0.7	460	<5	0.9	30	3.7	19
Tennessee	6,670	130	2.0	3,220	90	2.8	350	5.2	38
Texas	28,110	1,600	5.7	13,840	1,150	8.2	4,900	17.5	33
Utah	3,070	95	3.2	1,510	75	4.8	250	8.4	38
Vermont	630	<5	0.1	340	<5	0.2	25	3.8	4
Virginia	8,450	275	3.4	4,350	200	4.7	1,050	12.5	27
Washington	7,330	240	3.3	3,710	170	4.7	1,050	14.4	23
West Virginia	1,830	<5	0.2	800	<5	0.3	35	1.8	14
Wisconsin	5,790	75	1.3	3,100	55	1.8	300	5.4	24
Wyoming	590	5	1.2	300	<5	1.6	20	3.7	32

Note: Labor force estimates based on civilian labor force. All numbers are rounded; percentages calculated from unrounded numbers. See Methodology for details.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

[&]quot;U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

Top countries of birth of unauthorized immigrants, by state, 2016

	#1 largest	country of birth	#2 largest	country of birth	#3 largest c	ountry of birth
	Country of birth	% of unauthorized immigrant pop.	Country of birth	% of unauthorized immigrant pop.	Country of birth	% of unauthorized immigrant pop.
Total U.S.	Mexico	51	El Salvador	7	Guatemala	5
Alabama	Mexico	59	Guatemala	13	Korea	4
Alaska	Philippines	64	Mexico	23	China	3
Arizona	Mexico	78	Guatemala	3	India	3
Arkansas	Mexico	64	El Salvador	9	Marshall Islands	9
California	Mexico	69	El Salvador	6	Guatemala	5
Colorado	Mexico	70	El Salvador	4	India	2
Connecticut	Mexico	14	Guatemala	11	Brazil	8
Delaware	Mexico	38	Guatemala	16	India	11
District of Columbia	El Salvador	38	Honduras	13	Guatemala	9
Florida	Mexico	15	Honduras	10	Guatemala	7
Georgia	Mexico	49	Guatemala	7	India	6
Hawaii	Philippines	36	Micronesia	21	Marshall Islands	12
Idaho	Mexico	79	India	5	Peru	3
Illinois	Mexico	71	India	7	Poland	3
Indiana	Mexico	59	India	7	El Salvador	7
Iowa	Mexico	56	Guatemala	8	Liberia	5
Kansas	Mexico	69	El Salvador	7	India	4
Kentucky	Mexico	48	Guatemala	12	Honduras	5
Louisiana	Mexico	28	Honduras	28	Guatemala	10
Maine	N/A	N/A	N/A	N/A	N/A	N/A
Maryland	El Salvador	33	Guatemala	10	Honduras	10
Massachusetts	El Salvador	15	Brazil	14	Dominican Rep.	10
Michigan	Mexico	29	India	12	China	8
Minnesota	Mexico	50	India	8	El Salvador	6
Mississippi	Mexico	59	Honduras	7	Guatemala	6

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Top countries of birth of unauthorized immigrants, by state, 2016, continued

	#1 largest o	ountry of birth	#2 largest o	ountry of birth	#3 largest country of birth		
	Country of birth	% of unauthorized immigrant pop.	Country of birth	% of unauthorized immigrant pop.	Country of birth	% of unauthorized immigrant pop.	
Missouri	Mexico	45	India	8	Guatemala	6	
Montana	N/A	N/A	N/A	N/A	N/A	N/A	
Nebraska	Mexico	62	Guatemala	16	El Salvador	4	
Nevada	Mexico	66	El Salvador	8	Guatemala	6	
New Hampshire	Dominican Rep.	18	India	15	Brazil	13	
New Jersey	Mexico	23	India	12	Guatemala	7	
New Mexico	Mexico	91	India	2	Canada	1	
New York	Mexico	24	Dominican Rep.	10	El Salvador	8	
North Carolina	Mexico	56	Honduras	10	El Salvador	8	
North Dakota	N/A	N/A	N/A	N/A	N/A	N/A	
Ohio	Mexico	25	India	13	Guatemala	9	
Oklahoma	Mexico	78	Guatemala	5	Honduras	3	
Oregon	Mexico	69	China	4	Guatemala	4	
Pennsylvania	Mexico	21	Dominican Rep.	12	India	8	
Rhode Island	Dominican Rep.	32	Guatemala	16	Mexico	8	
South Carolina	Mexico	54	Honduras	10	Guatemala	8	
South Dakota	N/A	N/A	N/A	N/A	N/A	N/A	
Tennessee	Mexico	56	Guatemala	9	Honduras	6	
Texas	Mexico	73	El Salvador	8	Honduras	4	
Utah	Mexico	71	El Salvador	5	Peru	4	
Vermont	N/A	N/A	N/A	N/A	N/A	N/A	
Virginia	El Salvador	26	Honduras	14	Mexico	12	
Washington	Mexico	56	India	7	China	5	
West Virginia	N/A	N/A	N/A	N/A	N/A	N/A	
Wisconsin	Mexico	70	India	10	China	3	
Wyoming	N/A	N/A	N/A	N/A	N/A	N/A	

 $[\]mbox{N/A}$ Sample size of the unauthorized immigrant population is too small to produce a reliable estimate. Note: China includes Hong Kong and Taiwan.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details. "U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

Estimates of unauthorized immigrants, by birth region, selected years 1990-2016

In thousands

	202	-	2015	2010	200		2000	1995	1990
	Estimate	Range (+ or -)	Estimate	Estimate	Estimate	Range (+ or -)	Estimate	Estimate	Estimate
Total U.S.	10,700	190	11,000	11,400	12,200	160	8,600	5,700	3,500
Latin America									
Mexico	5,450	95	5,550	6,150	6,950	120	4,450	2,900	2,050
Central America	1,850	60	1,800	1,650	1,500	55	1,050	675	525
South America	650	50	650	775	900	50	625	425	190
Caribbean	450	55	425	425	475	45	525	425	200
Other regions									
Asia	1,300	65	1,500	1,400	1,300	70	1,050	775	250
Europe, Canada	500	50	550	600	650	45	600	400	150
Middle East	140	40	130	120	140	30	120	75	80
Africa	230	40	250	210	250	30	120	N/A	N/A

N/A Data not comparable to later estimates.

Note: All numbers are rounded. See Methodology for details. Range based on 90% confidence interval. Asia consists of South and East Asia. All central Asian republics of the former Soviet Union are included in Europe. The Middle East consists of Southwest Asia and North Africa; Africa consists only of sub-Saharan Africa. Included in the U.S. total is a residual (not shown) from other nations. Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

"U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

Estimates of unauthorized immigrants, for largest birth countries, selected years 1990-2016

In thousands

	20:	16	2015	2010	200	07	2000	1995	1990
	Estimate	Range (+ or -)	Estimate	Estimate	Estimate	Range (+ or -)	Estimate	Estimate	Estimate
Mexico	5,450	95	5,550	6,150	6,950	120	4,450	2,900	2,050
El Salvador	725	40	725	675	600	35	500	325	300
Guatemala	575	35	550	475	400	30	200	150	120
India	475	40	525	400	325	30	240	120	30
Honduras	425	30	375	350	300	25	140	80	40
China	325	40	375	300	325	40	325	200	80
Dominican Republic	210	30	170	160	200	25	180	170	50
Philippines	140	35	190	190	190	30	120	150	70
Brazil	130	20	110	140	180	20	90	55	20
Korea	130	25	160	200	180	30	110	160	25
Ecuador	120	20	130	150	150	20	90	50	35
Colombia	120	25	130	160	180	25	150	110	50
Haiti	100	25	110	100	110	25	130	65	65
Jamaica	95	20	90	95	90	20	110	150	35
Canada	95	15	110	110	95	15	55	70	25

Note: Based on largest birth countries in 2016. All numbers are rounded. See Methodology for details. Range based on 90% confidence interval. Differences between consecutive ranks may not be statistically significant. Birth countries with the same estimated populations are shown alphabetically. China includes Hong Kong and Taiwan.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

[&]quot;U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

Major occupation groups, by nativity and status, 2016

Major occupation group	Total	U.S. born	Lawful immigrants	Unauthorized immigrants			
		Civilian labor for	ce (in thousands))			
Total, civilian labor force (with an occupation)	161,420	133,290	20,400	7,700			
Management, business, and financial	23,920	20,620	2,850	450			
Professional and related	35,430	29,960	4,850	650			
Service	29,650	22,910	4,350	2,400			
Sales and related	17,040	14,760	1,750	525			
Office and administrative support	20,700	18,300	1,950	425			
Farming, fishing and forestry	1,200	650	275	275			
Construction and extraction	8,430	6,040	1,100	1,300			
Installation, maintenance and repair	5,040	4,260	525	250			
Production	9,430	7,280	1,350	800			
Transportation and material moving	10,590	8,530	1,400	650			
		Share of occupation (%)					
Total, civilian labor force (with an occupation)	100.0	82.6	12.7	4.8			
Management, business, and financial	100.0	86.2	11.9	1.9			
Professional and related	100.0	84.5	13.6	1.8			
Service	100.0	77.3	14.7	8.0			
Sales and related	100.0	86.6	10.3	3.0			
Office and administrative support	100.0	88.4	9.5	2.1			
Farming, fishing and forestry	100.0	54.2	22.2	23.6			
Construction and extraction	100.0	71.7	13.1	15.2			
Installation, maintenance and repair	100.0	84.6	10.5	5.0			
Production	100.0	77.2	14.3	8.5			
Transportation and material moving	100.0	80.5	13.4	6.1			
		Share of stat	us group (%)				
Total, civilian labor force (with an occupation)	100.0	100.0	100.0	100.0			
Management, business, and financial	14.8	15.5	13.9	5.9			
Professional and related	22.0	22.5	23.6	8.4			
Service	18.4	17.2	21 .3	31.0			
Sales and related	10.6	11.1	8.6	6.7			
Office and administrative support	12.8	13.7	9.6	5.6			
Farming, fishing and forestry	0.7	0.5	1.3	3.7			
Construction and extraction	5.2	4.5	5.4	16.6			
Installation, maintenance and repair	3.1	3.2	2.6	3.2			
Production	5.8	5.5	6.6	10.4			
Transportation and material moving	6.6	6.4	7.0	8.4			

Note: All numbers are rounded; percentages calculated from unrounded numbers. See Methodology for rounding rules. Occupation categories shortened for display; see Methodology for full U.S Census Bureau classifications. Under "Share of occupation," **boldface** numbers mean lawful immigrants or unauthorized immigrants are a higher share of that category than they are of the total workforce. Under "Share of status group," **boldface** numbers mean that the occupation has a higher share of lawful immigrants or unauthorized immigrants than of the U.S. born.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details. "U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

Major industry groups, by nativity and status, 2016

Major industry group	Total	U.S. born	Lawful Immigrants	Unauthorized Immigrants
		Civilian labor for	ce (in thousands)
Total, civilian labor force (with an industry)	160,910	132,820	20,400	7,700
Agriculture, forestry, fishing and hunting	2,110	1,460	325	325
Mining	790	700	65	25
Construction	10,580	7,900	1,300	1,350
Manufacturing	16,260	13,130	2,150	975
Wholesale and retail trade	22,910	19,530	2,500	875
Transportation and utilities	8,330	6,830	1,200	275
Information	3,320	2,870	375	85
Financial activities	10,380	8,900	1.200	250
Professional and business services	18,470	14,720	2,650	1,100
Educational and health services	36,310	31,050	4,700	575
Leisure and hospitality	16,380	13,100	2,000	1.300
Other services	7,930	6,110	1,250	575
Public administration	7,130	6,510	625	N/A
	.,200	· · · · · · · · · · · · · · · · · · ·	ndustry (%)	
Total, civilian labor force (with an industry)	100.0	82.5	12.7	4.8
Agriculture, forestry, fishing and hunting	100.0	69.1	15.5	15.5
Mining	100.0	88.8	8.2	3.0
Construction	100.0	74.7	12.4	12.9
Manufacturing	100.0	80.7	13.3	6.0
Wholesale and retail trade	100.0	85.2	10.9	3.8
Transportation and utilities	100.0	82.0	14.5	3.4
Information	100.0	86.3	11.1	2.6
Financial activities	100.0	85.8	11.7	2.4
Professional and business services	100.0	79.7	14.5	5.8
Educational and health services	100.0	85.5	12.9	1.6
Leisure and hospitality	100.0	80.0	12.2	7.9
Other services	100.0	77.0	15.6	7.3
Public administration	100.0	91.3	8.7	N/A
			tus group (%)	. 4
Total, civilian labor force (with an industry)	100.0	100.0	100.0	100.0
Agriculture, forestry, fishing and hunting	1.3	1.1	1.6	4.2
Mining	0.5	0.5	0.3	0.3
Construction	6.6	6.0	6.5	17.7
Manufacturing	10.1	9.9	10.6	12.6
Wholesale and retail trade	14.2	14.7	12.3	11.4
Transportation and utilities	5.2	5.1	5.9	3.7
Information	2.1	2.2	1.8	1.1
Financial activities	6.4	6.7	6.0	3.3
Professional and business services	11.5	11.1	13.1	14.0
Educational and health services	22.6	23.4	23.0	7.3
Leisure and hospitality	10.2	9.9	9.8	16.8
Other services	4.9	4.6	6. 1	7.5
Public administration	4.4	4.9	3.0	N/A
i dono dallimotidation	7.7	7.5	5.0	14/7

Note: All numbers are rounded; percentages calculated from unrounded numbers. See Methodology for rounding rules. Industry categories shortened for display; see Methodology for full U.S. Census Bureau classifications. Under "Share of industry," **boldface** numbers mean lawful immigrants or unauthorized immigrants are a higher share of that category than they are of the total workforce. Under "Share of status group," **boldface** numbers mean that the occupation has a higher share of lawful immigrants or unauthorized immigrants than of the U.S. born. Under "Public administration," data are not available because estimates exclude unauthorized immigrants from this category. Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details. "U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

Occupations with highest shares of unauthorized immigrant workers, 2016

Populations in thousands

1 opalations in inousanas			Lawful		
	Total	Unauthorized immigrants		U.Sborn	immigrant
Detailed occupation	workers	Workers	Share (%)	share (%)	share (%)
Total, civilian labor force (with an occupation)	161,420	7,700	5	83	13
Roofers	230	70	31	54	15
Drywall installers, ceiling tile installers & tapers	160	45	30	50	20
Miscellaneous agricultural workers Carpet, floor & tile installers & finishers	920 180	250 50	27 27	49 55	24 18
Painters, construction & maintenance	630	170	27	54	19
Maids & housekeeping cleaners	1,760	425	24	50	26
Brickmasons, blockmasons & stonemasons	160	40	24	61	16
Sewing machine operators	200	45	22	48	30
Construction laborers	2,020	425	21	62	16
Laundry & dry-cleaning workers	210	40	20	57	23
Packaging & filling machine operators & tenders	300	60	19	60	21
Packers & packagers, hand	560	110	19	60	21
Grounds maintenance workers	1,540	300	19	66	15
Dishwashers	400	65	17	71	13
Carpenters	1,320	220	16	70	14
Butchers & other meat, poultry & fish processing workers	290	45	16	63	20
Food cooking machine operators & tenders	160	25	15	64	20
Bakers	250	40	15	68	17
Cooks	2,640	400	15	71	14
Cleaners of vehicles & equipment	430	55	13	74	12
Painting workers	150	20	12	73	15
Dining room & cafeteria attendants & bartender helpers	390	45	12	72	16
Chefs & head cooks	480	55	11	67	22
Automotive body & related repairers	140	15	10	75	15
Janitors & building cleaners	2,770	275	10	73	17
Food preparation workers Supervisors of landscaping,	1,160	110	10	78	12
lawn service & groundskeeping workers	170	15	10	78	12

Note: Occupation groups based on U.S. Census Bureau major occupation group classifications. Names shortened for display. Occupations in this table have at least 100,000 workers nationally and more than double the U.S. share of unauthorized immigrant workers. Smaller categories with high concentrations not shown. Number of total workers rounded to nearest 10,000. Number of unauthorized immigrant workers rounded according to rules specified in Methodology. Percentages calculated from unrounded numbers; rankings based on unrounded percentages.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details. "U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"

Detailed industries with highest shares of unauthorized immigrant workers, 2016

Populations in thousands

Detailed industry Total, civilian labor force (with an industry)	Total workers 160,910	Unauthorize Workers 7,700	ed immigrants Share (%) 5	U.Sborn share (%) 83	Lawful immigrant share (%) 13
Private households Landscaping services Crop production Dry cleaning & laundry services Services to buildings & dwellings Cut & sew apparel manufacturing Animal slaughtering & processing	920 1,450 1,180 310 1,600 240 520	200 300 230 60 300 45 90	22 20 19 19 18 18	55 64 61 56 61 50 64	23 16 20 25 20 32 19
Car washes Fruit & vegetable preserving & specialty food manufacturing Support activities for	210	35	16	73	11
	180	30	15	65	20
agriculture & forestry Bakeries, except retail Construction Retail bakeries	180	25	15	64	21
	230	30	14	67	20
	10,580	1,350	13	75	12
	190	25	12	72	16
Seafood & other miscellaneous foods Animal production Traveler accommodation Specialty food stores Not specified manufacturing	250	30	11	72	16
	560	65	11	80	9
	1,710	180	11	68	21
	250	25	10	75	15
	500	50	10	74	16

Note: Industry groups based on U.S. Census Bureau major industry group classifications. Names shortened for display. Industries in this table have at least 100,000 workers nationally and more than double the U.S. share of unauthorized immigrant workers. Smaller sectors with high concentrations not shown. Number of total workers rounded to nearest 10,000. Number of unauthorized immigrant workers rounded according to rules specified in Methodology. Percentages calculated from unrounded numbers; rankings based on unrounded percentages.

Source: Pew Research Center estimates based on augmented U.S. Census Bureau data. See Methodology for details.

[&]quot;U.S. Unauthorized Immigrant Total Dips to Lowest Level in a Decade"