Estimates of the Unauthorized Immigrant Population Residing in the United States: 1990 to 2000

Office of Policy and Planning
U.S. Immigration and Naturalization Service

Introduction

This paper describes estimates of the unauthorized immigrant population residing in the United States in January 2000, by State of residence and country of origin. The estimates were developed using data on the foreign-born population from the 2000 Census, INS administrative data, and a new methodology for estimating annual trends in population growth. It is the third in a series of estimates developed by the Immigration and Naturalization Service (INS).

The INS estimates that the total unauthorized immigrant population residing in the United States in January 2000 was 7.0 million. The total population estimates presented here are somewhat higher than INS' previous estimates. In its last set of estimates, INS estimated that the population was 5.0 million in October 1996; the new estimates produced a total of about 5.8 million for the same date. Estimated population growth was variable in the 1990s; on average, however, the population grew by about 350,000 per year from 1990 to 1999, about 75,000 higher than INS' previous annual estimate of 275,000 for the 1990s.

In addition to the total population, estimates were compiled for each State of residence and for 75 countries of origin (Tables 1 and 2). As expected, California is estimated to have the most unauthorized residents in January 2000, about 2.2 million, or 32 percent of the national total. The States with the largest numerical increases in unauthorized population in the 1990s were California, Texas, Illinois, Arizona, Georgia, and North Carolina.

Mexico is the largest source country for unauthorized immigration to the United States. The estimated unauthorized resident population from Mexico increased from about 2.0 million in 1990 to 4.8 million in January 2000. Mexico's share of the total unauthorized resident population increased from 58 percent in 1990 to 69 percent in 2000. In addition to Mexico, six countries had more than 100,000 unauthorized residents in the United States in January 2000 -- El Salvador, Guatemala, Colombia, Honduras, China, and Ecuador.

Background

In 1994, the INS developed the first detailed national estimates of the unauthorized immigrant population residing in the United States. Those estimates indicated that the unauthorized resident population was 3.4 million as of October 1992, and that the population was growing at an average annual rate of 300,000. Updated figures for October 1996, released in February 1997, estimated the total population to be 5.0 million and growing at an average annual rate of 275,000.

The previous INS estimates were based primarily on statistics from IRCA,[1] estimates of unauthorized immigrants counted in the 1980 Census, and estimates of nonimmigrant overstays from the INS Nonimmigrant Information System. With the notable exception of Mexico,[2] estimates by country of origin and State of residence were derived beginning with the estimated number of unauthorized residents in October 1988 (the number still unauthorized after IRCA), adding estimated nonimmigrant overstays, and subtracting estimates of emigration and deaths.

The methodology used to construct the earlier INS estimates can no longer be used because 1) one of the primary sets of data[3] used to make the estimates became less dependable in the early 1990s; and (2) the data from earlier periods become less reliable the farther out they were projected. Because of these limitations, the INS developed an approach for estimating unauthorized immigration that can generate annual estimates of the population and trends in population growth, using the most dependable annual data available.

The INS estimates for January 2000 were derived using the residual technique: the legally resident population was estimated and then subtracted from the census-based foreign-born population, leaving estimated unauthorized residents as a residual. The estimates rely primarily on data from two sources: 1) annual INS statistics (immigrants admitted, deportable aliens removed, and nonimmigrant residents admitted); and 2) data for the foreign-born population from the 2000 Census. Questions on country of birth, citizenship, and year of immigration were asked on the "long form," which was used to collect detailed information from approximately one-sixth of the total U.S. population in the 2000 Census.

The primary reason that the total population estimate shown here is higher than INS' earlier total is that the new estimate for Mexico is about 1.2 million higher than the previous estimate (for the comparable date, October 1996). The increase in the estimate for Mexico occurred because the new estimate for Mexico is based on data collected in the 2000 Census rather than survey data, which was used previously to estimate the unauthorized resident population from Mexico. Census data are more complete and reliable because of the national scope of the data collection, the vastly larger sample size, and the extensive preparation and

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[1] IRCA is the Immigration Reform and Control Act of 1986; nearly 2.7 million unauthorized residents adjusted from unauthorized to temporary lawful residence in 1987 and 1988 under IRCA. In 1989-92, most of them were granted lawful permanent residence.

[2] The estimate for Mexico for October 1996 in INS' previous estimates was derived using the residual approach. An estimate of lawful Mexican-born residents who entered from 1990 to 1996 was subtracted from the estimated Mexican-born population (entered 1990-96) in the Current Population Survey, adjusted for undercount. The higher estimate shown here for Mexico (mostly the result of relatively better coverage in the 2000 Census compared to the CPS) accounts for most of the difference between the new estimates and INS' previous estimates of the total population. For the sum of all countries except Mexico, the new estimate is .4 million *lower* than the previous estimate (for October 1996, the comparable date). See section, "Comparison with previous INS estimates."

[3] Previous INS estimates relied extensively in information collected in the INS Nonimmigrant Information System, which was designed to record arrivals and departures of all nonimmigrants (non-U.S. citizens, such as visitors, students, and temporary workers admitted for a temporary period). Changes in the collection and processing of departure forms at land ports and by airline personnel led to uncertainty about the number who failed to depart. The data system continued to fulfill its mission of documenting the arrival of nonimmigrants; however, after 1992 it was no longer possible to distinguish adequately between failure to depart and failure to collect departure forms and match them to arrival forms. These estimates are not based on nonimmigrant arrival and departure data.

follow-up activities involved in conducting the decennial census. For all countries excluding Mexico, the new estimate is .4 million *lower* than the previous estimate for the comparable date.

Definitions

The INS estimates of unauthorized immigrants refer to foreign-born persons who entered without inspection or who violated the terms of a temporary admission and who have not acquired LPR status or gained temporary protection against removal by applying for an immigration benefit. For example, the following foreign-born persons are *not* considered to be unauthorized residents in these estimates: refugees, asylees, and parolees who have work authorization but have not adjusted to LPR status; and aliens who are allowed to remain and work in the United States under various legislative provisions or court rulings.

In general, the definition of the unauthorized resident population corresponds to the U.S. census definition of usual residence (where a person spends more nights during a year than any other place) and the United Nations definition of immigrants (residents in a country for more than 1 year). Although the estimates refer predominantly to residents, temporary unauthorized migrants are included in these estimates if they were living in households enumerated in the 2000 Census or if they were added as the result of INS' adjustments for undercount of the foreign-born population in the census.

Definitions for various terms used here, such as permanent resident aliens (also referred to as lawful permanent residents, or LPRs), nonimmigrants, removals, refugees, asylees, parolees, and temporary protected status (TPS) can be found in the <u>2000 Statistical Yearbook of the Immigration and Naturalization Service</u>, Appendix 2.

Summary of Methodology

Estimates for January 2000

The first step was to estimate the number of unauthorized residents living in the United States in January 2000. Estimates were derived separately for: (1) unauthorized residents who entered the United States in the 1990s; and (2) those who entered before 1990 and still lived here illegally in January 2000.

1. For unauthorized residents who entered in the 1990s and resided illegally in the United States in January 2000, estimates were derived by subtracting estimates of the *legally resident* foreign-born population from the *total* foreign-born population. The difference is the number of unauthorized residents, as of January 2000, who entered in the 1990s.

About 12.6 million foreign-born persons who entered the United States from 1990 to 1999 were counted in the 2000 Census. The INS adjusted that number upward by about 850,000, primarily to account for estimated undercount in the census,[4] yielding a total foreign-

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[4] The estimate of net census undercount of 10% for unauthorized residents is consistent with results reported in a paper by Enrico Marcelli, "2000 Census Coverage of Foreign-born Mexicans in Los Angeles County: Implications for Demographic Analysis," presented at the 2000 Annual Meeting of the Population Association of America, Atlanta, GA. For lawful residents, as defined here, the rate of net census undercount was set at one fourth of the rate for unauthorized residents, or 2.5 percent.

born population of nearly 13.5 million who entered from 1990 to 1999.[5] The INS estimates that 8.0 million of the 13.5 million foreign-born residents who moved to the United States in the 1990s were in a legal status. The difference, 5.5 million, is the estimated unauthorized population that entered the United States from 1990 to 1999 and resided here in January 2000 (Table 3).

2. For unauthorized residents who moved here before 1990 and still resided here illegally in January 2000, the estimates are based on the estimated population that resided illegally in the United States in January 1990, reduced by the number that left the population in the 1990s. The INS estimates that 3.5 million unauthorized residents were living in the United States in January 1990. Of those, nearly 2 million left the unauthorized resident population in the 1990s.[6] Thus, an estimated 1.5 million who entered before January 1990 were still residing illegally in the United States in January 2000 (Table 3).

Combining the estimates in paragraphs 1 and 2 above yields a total of 7.0 million unauthorized immigrants residing in the United States in January 2000. The figures shown above are for the entire U.S. foreign-born population; comparable estimates were derived for all States and for 75 source countries of unauthorized immigration.

Estimation of population trends
The estimates described in the preceding paragraphs refer to unauthorized immigrants who resided in the United States in January 2000. The next step was to determine how many actually moved to the United States each year in the 1990s. Estimates were made by starting with the estimated population in January 2000 and, in effect, "working backward" (that is, adding back the number that left from entry to January 2000) to derive the number that entered originally. To derive the estimates, it was necessary first to determine the estimated number that *left* the unauthorized resident population each year.

The INS identified five ways in which unauthorized residents can leave the unauthorized resident population each year. They can: (1) be removed by the INS, (2) die, (3) emigrate, (4) adjust to lawful status in the United States, or (5) depart briefly from the United States and return with immigrant visas allowing them to reside here legally. Detailed annual estimates were derived for each of these ways that unauthorized immigrants left the population in the 1990s.

The estimation procedure can be illustrated with an example for unauthorized residents who moved to the United States in 1994. The estimated number who entered in 1994 and still resided here illegally in January 2000 was 515,000, computed as described in the previous section. The number of unauthorized immigrants who entered in 1994 and left the unauthorized population from 1994 to January 2000 was estimated to be 171,000. Thus, the estimated number of unauthorized immigrants who *moved to the United States in 1994* was 686,000 (515,000 + 171,000). This procedure was repeated for each entry cohort to estimate the number of unauthorized immigrants who moved to the United States each year in the 1990s.

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[5] To make the census data comparable to INS' estimates of the legally resident population as of January 2000, the detailed census data for April 2000 were: a) adjusted back to January 2000; and, b) adjusted for estimated census undercount (2.5 percent for the legally resident foreign-born population and ten percent for unauthorized residents).
[6] See Table 3, item 22, for detailed estimates of the number that left the unauthorized population in the 1990s.

Finally, the INS combined the information above to estimate annual arrivals and departures, and thus population growth, for each year from 1990 to 1999. It is important to note that the beginning population of 3.5 million for January 1990 was lower than might be expected because nearly 2.7 million unauthorized residents left the unauthorized immigrant population as the result of the Immigration Reform and Control Act of 1986 (IRCA).

Limitations of the data

As described above, the estimates of unauthorized residents were derived by subtracting estimates of the *legally resident* foreign-born population from the *total* foreign-born population. The figures used here for the total foreign-born population are relatively straightforward: they are 2000 Census counts of the foreign-born population, adjusted for estimated undercount. Estimating the legally resident population was considerably more complex. In addition to those admitted for lawful permanent residence and refugee arrivals, it was necessary to make reliable estimates for a number of difficult-to-estimate populations. Detailed estimates were made for:

- nonimmigrant residents (temporary workers, students, etc.);
- unauthorized residents who have pending, and likely to be approved, applications for LPR status in the INS processing backlog;
- asylees and parolees who have work authorization but have not adjusted to LPR status; and
- aliens, mostly from Central American countries, who otherwise would be unauthorized residents but are allowed to remain and work in the United States under various legislative provisions or court rulings.

All of these groups have been included in the legally resident population used to derive the estimates shown here; the total for these groups is nearly 2.1 million (Table 3, rows 16-18). Failure to fully account for these groups would cause a significant overestimate of the unauthorized resident population (see later section, "Comparison with recent estimates").

It should be noted that net internal migration (moves from State to State) of lawful residents after admission could affect the accuracy of the estimates of unauthorized immigration for States. For example, if relatively more lawful residents (who arrived in the 1990s) moved *out of* California than moved *into* California in the 1990s, then INS' estimate of lawful residents in California in 2000 would be too high.[7] Consequently, the unauthorized resident population in California would be underestimated.

The effects of net internal migration of lawful residents might be relatively small because: 1) the majority of LPRs are admitted on the basis of close kinship with U.S. relatives, possibly reducing the probability of subsequent out-of-State moves; and 2) a majority of the lawfully resident population already had a residence in the United States at the time they entered the INS data systems, for example by adjusting from temporary to permanent lawful residence. The estimated unauthorized resident population in each State would be unaffected by net internal migration of lawful residents who moved to the United States before 1990.

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[7] State of residence of the legally resident population usually is the State in which immigrants lived when they entered INS' databases. Subsequent changes of residence generally are not recorded.

The 2000 Census data for the foreign-born population are based on a sample of the population, and therefore the annual estimates of the unauthorized resident population in January 2000 are subject to sampling variability.[8] Also, the estimates for some components of the population, primarily the estimated emigration rates and the size of the resident nonimmigrant population, are subject to other kinds of error. Thus, relatively small year-to-year differences should be disregarded, and the actual trends might be somewhat higher or lower than those shown here.

Population Estimates

The estimated total unauthorized resident population increased from 3.5 million in January 1990 to about 7.0 million in January 2000 (Table A). The average annual population growth of 350,000 in the decade was about 75,000 higher than INS' previous average annual estimate of about 275,000 for the 1992 to 1996 period. As noted, the main reason that these estimates are relatively higher than the earlier estimates is that the foreign-born population from Mexico was more completely enumerated in the 2000 Census than in the survey used to derive the earlier estimates.
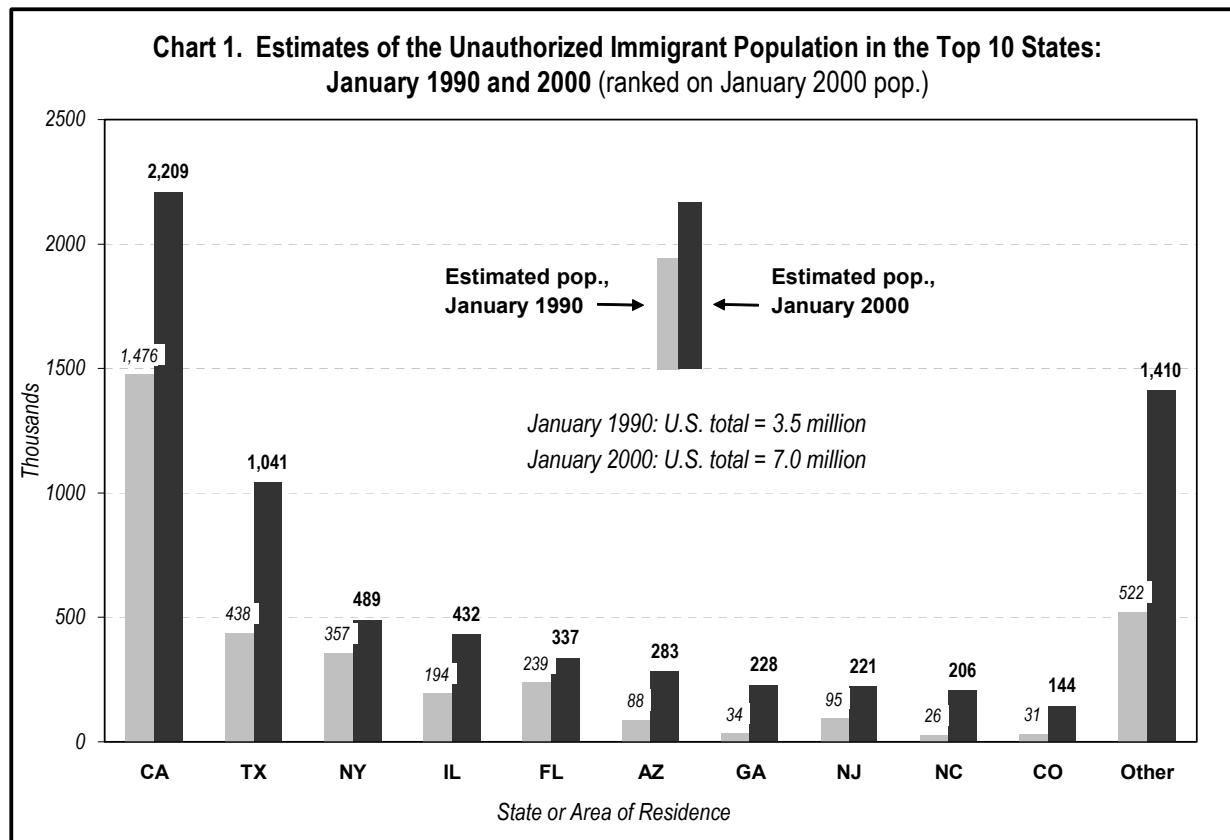
The previous estimates distinguished between the share of the unauthorized resident population that enters the United States by crossing the border without inspection (EWIs) from those who enter legally with a temporary visa and stay beyond the valid time limits (nonimmigrant overstays). In the new estimates, it was no longer possible to distinguish between EWIs and overstays for each country. However, based on the percentage breakdowns of EWIs and overstays for each country in the previous report, an estimated 2.3 million, or 33 percent, of the 7.0 million unauthorized immigrants residing in the United States in January 2000 were nonimmigrant overstays. The comparable figure in the previous report was 39 percent.

Estimates by State of Residence

About 4.5 million of the 7.0 million unauthorized residents lived in the five States with the largest unauthorized resident populations in January 2000 -- California, Texas, New York, Illinois, and Florida (Table A). The estimated number of unauthorized residents in California was about 2.2 million, or nearly 32 percent of the total in January 2000. Texas became the second State, after California, to have more than 1 million unauthorized residents. The fifteen States with the largest unauthorized resident populations in January 2000 are shown in Table A.

California and Texas had the largest numerical increases in the number of unauthorized residents in the 1990's. More than one third of the 3.5 million total increase in the unauthorized resident population in the 1990s occurred in these two States (Table A). In addition to California and Texas, seven States – Illinois, Arizona, Georgia, North Carolina, New York, New Jersey, and Colorado -- had increases of more than 100,000 in the number of unauthorized residents between 1990 and 2000. Chart 1 shows estimates of the population in 1990 and 2000 for the ten States with the largest unauthorized resident populations in January 2000.

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[8] Sampling variability, or sampling error, refers to statistical uncertainty that occurs because only part of the population is directly contacted. With any sample, differences are likely to exist between its characteristics and the larger group from which it was chosen.

Chart 1. Estimates of the Unauthorized Immigrant Population in the Top 10 States: January 1990 and 2000 (ranked on January 2000 pop.)

January 1990: U.S. total = 3.5 million
January 2000: U.S. total = 7.0 million

Estimated pop., January 1990 →   ← Estimated pop., January 2000

State	1990	2000
CA	1,476	2,209
TX	438	1,041
NY	357	489
IL	194	432
FL	239	337
AZ	88	283
GA	34	228
NJ	95	221
NC	26	206
CO	31	144
Other	522	1,410

State or Area of Residence

(Thousands)

Many States that had relatively few unauthorized residents in 1990 experienced rapid growth of the unauthorized population in the decade. Three principal examples are Georgia, North Carolina, and Colorado. Each of these States had unauthorized resident populations in the 25,000 to 35,000 range in 1990. In January 2000, the estimated unauthorized resident population in Georgia was 228,000; North Carolina, 206,000, and Colorado, 144,000 (Table A). Seven States that had 10,000 or fewer unauthorized residents in 1990 also had rapidly growing unauthorized resident populations (1990 population listed first): Alabama, 5,000 to 24,000; Arkansas, 5,000 to 27,000; Iowa, 5,000 to 24,000; Nebraska, 6,000 to 24,000; South Carolina, 7,000 to 36,000; Tennessee, 9,000 to 46,000; and Wisconsin, 10,000 to 41,000 (Table 1).

The increase of the population of States that had relatively few unauthorized residents in 1990 was a significant trend in unauthorized population change for States in the 1990s. However, the rapid population growth of the 1990s bypassed the States with the *very* lowest numbers of unauthorized residents. Eight States had fewer than 2,500 estimated unauthorized residents in both 1990 and 2000.[9] The total unauthorized resident population living in these eight States *combined* was 7,000 in January 2000, unchanged from 1990.

Table A. Estimated Unauthorized Resident Population, Top 15 States: 1990 and 2000
(Numbers in thousands; parts might not add to totals because of rounding)

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[9] The eight States are: Maine, Montana, New Hampshire, North Dakota, South Dakota, Vermont, West Virginia, and Wyoming.

State of residence	Estimated unauthorized resident population					Total pop., 2000 census	
	Est. population		Growth, 1990-2000	Pct of unauth. pop.		State total	Percent unauth.
	2000	1990		2000	1990		
	(1)	*(2)*	*(3)=(1)-(2)*	*(4)*	*(5)*	*(6)*	*(7) = [(1)/ (6)] x 100*
All States	**7,000**	**3,500**	**3,500**	**100.0%**	**100.0%**	**281,422**	**2.5%**
California	2,209	1,476	732	31.6%	42.2%	33,872	6.5%
Texas	1,041	438	603	14.9%	12.5%	20,852	5.0%
New York	489	357	132	7.0%	10.2%	18,976	2.6%
Illinois	432	194	238	6.2%	5.5%	12,419	3.5%
Florida	337	239	98	4.8%	6.8%	15,982	2.1%
Arizona	283	88	195	4.0%	2.5%	5,131	5.5%
Georgia	228	34	194	3.3%	1.0%	8,186	2.8%
New Jersey	221	95	125	3.2%	2.7%	8,414	2.6%
North Carolina	206	26	180	2.9%	0.7%	8,049	2.6%
Colorado	144	31	113	2.1%	0.9%	4,301	3.3%
Washington	136	39	97	1.9%	1.1%	5,894	2.3%
Virginia	103	48	55	1.5%	1.4%	7,079	1.5%
Nevada	101	27	74	1.4%	0.8%	1,998	5.1%
Oregon	90	26	64	1.3%	0.8%	3,421	2.6%
Massachusetts	87	53	34	1.2%	1.5%	6,349	1.4%
Other States	892	328	565	12.7%	9.4%	120,497	0.7%

Table 1 shows estimates for all States (except for the eight States with very few unauthorized residents).

The estimated 7 million unauthorized immigrants living in the United States in 2000 constituted 2.5 percent of the total U.S population of just over 281 million (Table A). About 6.5 percent of California's total population of 33.9 million in 2000 were estimated to be unauthorized immigrants. The comparable figures for Arizona and Texas were 5.5 and 5.0 percent, respectively.

Estimates by Country of Origin

Table B shows estimates of the unauthorized resident population in 1990 and 2000 from the fifteen largest source countries. Mexico continued to be the leading source of unauthorized immigration to the United States in the 1990s. The estimated unauthorized resident population from Mexico increased from about 2.0 million in 1990 to 4.8 million in January 2000. Mexico accounted for nearly 69 percent of the total unauthorized resident population in January 2000; the top fifteen countries of origin, including Mexico, accounted for 89 percent of the total.

Table B. Estimated Unauthorized Resident Population, Top 15 Countries: 1990 and 2000
(Numbers in thousands; parts might not add to totals because of rounding)

Country of origin	Estimated population		Growth, 1990-2000	Percent of total population	
	2000	1990		2000	1990
	(1)	*(2)*	*(3)=(1)-(2)*	*(4)*	*(5)*
All countries	**7,000**	**3,500**	**3,500**	**100.0%**	**100.0%**
Mexico	4,808	2,040	2,768	68.7%	58.3%
El Salvador	189	298	-109	2.7%	8.5%
Guatemala	144	118	26	2.1%	3.4%
Colombia	141	51	91	2.0%	1.4%
Honduras[a]	138	42	96	2.0%	1.2%
China	115	70	45	1.6%	2.0%
Ecuador	108	37	71	1.5%	1.0%
Dominican Republic	91	46	45	1.3%	1.3%
Philippines	85	70	14	1.2%	2.0%
Brazil	77	20	58	1.1%	0.6%
Haiti	76	67	8	1.1%	1.9%
India	70	28	41	1.0%	0.8%
Peru	61	27	34	0.9%	0.8%
Korea	55	24	31	0.8%	0.7%
Canada	47	25	22	0.7%	0.7%
All other countries	795	537	259	11.4%	15.3%

[a] Includes 105,000 Hondurans granted temporary protected status in December 1998.

See Table 2 for estimates for each continent and for the remaining 60 countries.

The estimated unauthorized immigrant population from El Salvador dropped in the 1990s because many unauthorized immigrants from El Salvador were granted temporary protected status (TPS) early in the decade (Table B).[10] In 1997, many long-term illegal residents from Cuba, Guatemala, Nicaragua, El Salvador, and the former Soviet Union were allowed to stay and work in the United States under provisions of the Nicaraguan Adjustment and Central American Relief Act (NACARA).[11] Unauthorized residents from Central American and other countries

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[10] Temporary Protected Status is a legislative basis for allowing a group of persons temporary refuge in the United States. Removal proceedings are suspended against aliens while they are in Temporary Protected Status.

[11] See the 2000 Statistical Yearbook of the Immigration and Naturalization Service, Appendix 2, for the provisions of NACARA. The Act was estimated to cover 150,000 Nicaraguans; 5,000 Cubans; 200,000 Salvadorans; 50,000 Guatemalans; and certain aliens from the former Soviet Union at the time it was enacted.

were effectively shifted from unauthorized to lawfully resident by other legislative changes and judicial decisions in the latter part of the 1990s.

Three South American countries – Colombia, Ecuador, and Brazil -- had relatively large increases in estimated unauthorized residents in the United States from 1990 to 2000 (Table B). The estimated unauthorized resident population from Colombia increased from 51,000 to 141,000 in the 1990s; Ecuador, from 37,000 to 108,000; and Brazil, from 20,000 to 77,000.

Three countries accounted for much of the growth of the unauthorized resident population from Asia in the 1990s.[12] The estimated unauthorized resident population from China increased from 70,000 in 1990 to 115,000 in 2000 (Table B). For India, the estimated population increased from 28,000 to 70,000 in the 1990s; for Korea, the estimated population grew from 24,000 in 1990 to 55,000 in January 2000.

Population Trends

These estimates provide information on annual trends in the number who entered, as well as the number who departed from the unauthorized immigrant population, from 1990 to 2000 (Table C). They also show how external factors -- such as increases in removals or legislation that permitted additional changes to legal status -- affected the population trends.

Table C. Annual Estimates of Population and Net Change of the Unauthorized Immigrant Population Residing in the United States: 1990 to 2000
(In thousands. Parts might not add to totals because of rounding)

| | | | | | Estimated number who left the unauthorized resident population | | | | | | |
Year	Estimated unauth. resident population January 1	Unauth. pop. growth	Total *entered* unauth. pop.	Total *left* unauth. pop.	Emi-grated	Died	Re-moved by INS	Adjust-ed to legal status[a] in U.S.	Left briefly, return-ed as LPR	Left pop. and: Left the U.S.	Stay ed in U.S.
				4=sum, 5 to 9						*10=5 6+7*	*11= 8+9*
	(1)	(2)=3-4	(3)	(5)	(5)	(6)	(7)	(8)	(9)		
2000	7,000										
1999	6,488	512	968	456	183	27	63	152	31	272	184
1998	6,098	391	817	426	171	25	63	152	16	259	168
1997	5,862	236	654	417	164	24	57	161	11	245	172
1996	5,581	281	677	396	159	23	41	163	11	222	174
1995	5,146	435	772	338	150	21	35	107	25	206	132
1994	4,750	396	686	290	139	20	34	41	57	193	98
1993	4,492	258	564	306	131	18	32	62	62	182	124
1992	4,204	288	556	269	125	17	33	37	57	175	94
1991	4,025	180	617	438	123	17	28	229	41	168	270
1990	3,500	525	749	224	111	15	26	36	36	152	73

[a] Includes adjustments to lawful permanent residence and persons granted temporary lawful status. The estimate of 229,000 shown for 1991 includes a total of nearly 200,000 Salvadorans and Guatemalans granted TPS in that year.

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[12] A substantial percentage of all nonimmigrant residents come from Asian countries. Thus, errors in the estimates of nonimmigrant residents would have the largest effect on the estimates for these countries.

Annual Numbers Entering and Leaving the Total Unauthorized Resident Population

Estimates of the number who *entered* and the number who *left* the unauthorized immigrant population each year from 1990 to 1999 are shown in Table C, columns 3 and 4.[13] The number that entered, as used here, is defined as the number who moved to the United States in a year and still lived here in an unauthorized status at the end of the year.[14] As described below, unauthorized residents can leave the population in five ways.

Each year, hundreds of thousands of immigrants *leave* the unauthorized immigrant population. Some leave the United States voluntarily, several thousand die, and others are removed by the INS. More than 100,000 leave the unauthorized population each year but continue to reside in the United States; they either obtain legal residence by adjusting status,[15] or they depart briefly to be issued immigrant visas and return. The estimated number of unauthorized immigrants who left the population each year from 1990 to 1999, and annual estimates for each of the five ways of leaving the population, are shown in Table C.

For the total population, additions to the unauthorized immigrant population were relatively high at 749,000 in 1990 (Table C). Annual additions declined steadily to about 556,000 in 1992, then increased from 1992 to 1995, reaching a mid-decade peak of 772,000. The second half of the decade had a similar pattern, with reductions in 1996 and 1997 followed by sharp increases in 1998 and 1999. An estimated 968,000 unauthorized immigrants established residence in the United States in 1999.

Chart 2 shows estimates of the number of unauthorized immigrants who entered and the number who left the unauthorized resident population each year from 1990 to 1999. The Chart illustrates how these changing patterns of entry and departure contributed to net population change from one January to the next.

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[13] There is very little overlap between those who enter in a particular year and those who leave the unauthorized resident population in the same year. By definition, all of those added to the population in a year arrived in that year; well over 90 percent of those who leave the population in a year are persons who entered in prior years.

[14] In this context, the phrases "entered the population" and "additions to the population" are used interchangeably.

[15] Includes adjustments to lawful permanent residence and persons granted temporary lawful status.

Chart 2. Annual Estimates of the Number Entering and Leaving the Total Unauthorized Resident Population: 1990 to 1999
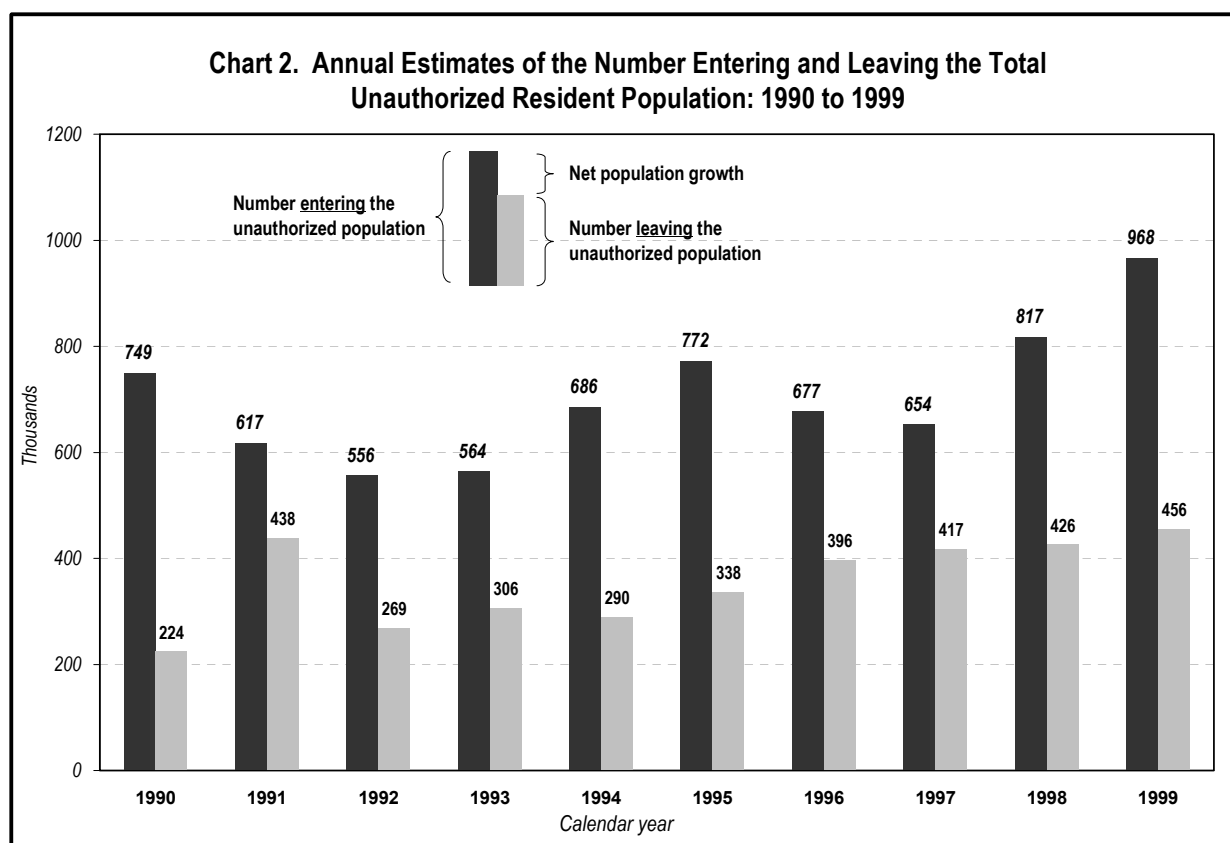
The estimated number leaving the total unauthorized immigrant population more than doubled in the 1990s, increasing from 224,000 in 1990 to 456,000 in 1999 (Chart 2). The generally upward trend in the number of unauthorized residents who left the population in the 1990 to 1999 period was the result of a variety of factors, including the initial size and additions to the population, legislative changes, and increases in INS resources for removing unauthorized residents.

Adjustments from unauthorized to legal status increased significantly in the 1995 to 1999 period as the result of legislation that permitted certain unauthorized immigrants to adjust to lawful resident status in the United States.[16] The number of aliens removed by the INS increased from an average of 31,000 in 1990-94 to 52,000 per year in 1995-99 (Table C).[17]

Trends in unauthorized immigration, 1990 to 2000

Chart 3 shows the patterns of unauthorized immigration to the United States in the 1990s from Mexico, Central America, and all other countries.[18] The patterns for Mexico and for all

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[16] In 1994, Congress added Section 245(i) to the Immigration and Nationality Act, which allowed aliens who were living in the United States without authorization, but who were eligible to acquire immigrant status, to apply directly with the INS. In former years, these aliens would have had to leave the United States and apply through the U.S. Department of State at a U.S. consulate abroad.

[17] This reflects an increase in INS budget resources devoted to removing unauthorized aliens, particularly criminals.

[18] Chart 3 is shown with a logarithmic vertical scale; a logarithmic scale was chosen because it shows percent change over time on a comparable basis.

other countries are comparable – declines in the early 1990s, increases to 1995, drops from 1995 to 1997, and, finally, an upturn in 1998 and 1999. As Chart 3 shows, the percent increases in 1998-1999 for Mexico and for all countries were about the same.

Chart 3. Annual Estimates of Unauthorized Immigration from Mexico, Central America, and All Other Countries: 1990 to 1999
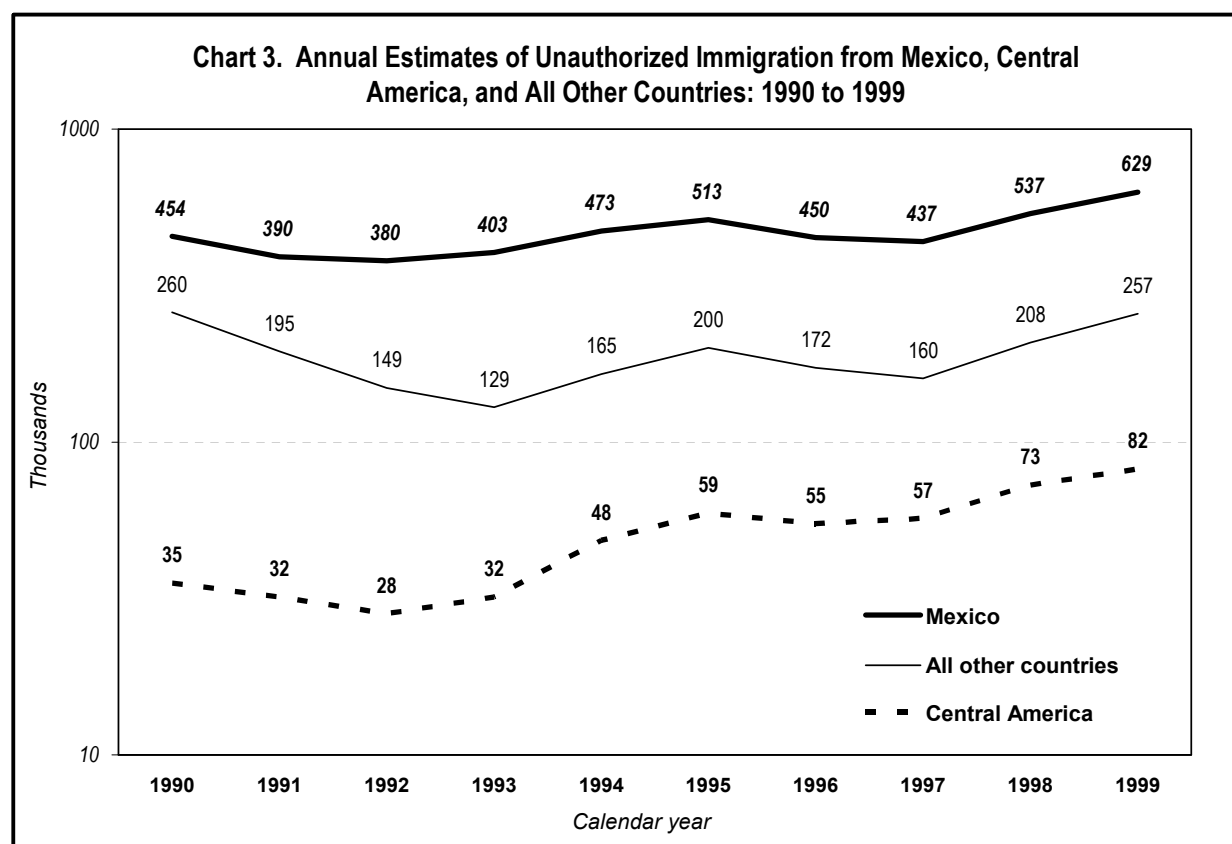
Comparison with recent estimates

Although the estimates presented here are higher than INS' previous estimates, they are lower than other estimates that were reported last year after the release of total U.S. population figures from the 2000 Census. A Washington Post article on March 18, 2001 reported a "growing consensus that the number could…range from 9 million to 11 million or higher."[19]

The estimates presented here provide strong evidence that even the 9 million figure probably was 2 million too high. The basis for that assertion can be summarized as follows:

- About 13.5 million foreign-born persons moved to the United States in the 1990 to 1999 period (2000 Census count + INS estimate of undercount);
- Based on INS data, 8.0 million of the 13.5 million were lawful residents;
- That leaves about 5.5 million unauthorized residents who entered in the 1990s;
- An estimated 1.5 million who lived here illegally in 1990 were still living here illegally in 2000;

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[19] *The Washington Post*, D'Vera Cohn, "Illegal Residents Exceed Estimates," March 18, 2001.

- Thus, an estimated 7.0 million unauthorized immigrants lived in the United States in January 2000. Increasing that number by as much as *one* million would require extreme and untenable assumptions.[20]

In 2001, the Census Bureau estimated that 8.7 million foreign-born persons were in the "residual population (including both unauthorized and *quasi-legal* migrants)…in 2000."[21] The Census Bureau's residual estimate of the foreign-born population is 1.7 million higher than INS' estimate of the total unauthorized resident population in January 2000. There are three primary reasons for the difference between INS' estimate and the Census Bureau's residual estimate of the foreign-born population:

- As noted in their report, the Census Bureau's estimate of the total legal foreign-born population did not include some categories of lawful migrants, such as refugees and asylees, who had not adjusted to LPR status;
- The Census Bureau's estimate of nonimmigrant residents was considerably underestimated, mostly because the latest information for this population was not available at the time their estimate was made; and,
- In the 1990-99 period, the Census Bureau did not fully take account of all the departures --adjustments to lawful status, removal by INS -- from the unauthorized population that resided in the United States in 1990 (see Table 3).

If the Census Bureau had been able to derive reliable estimates for each of these three data elements, their residual estimate of the foreign-born population would have been close to INS' estimate of 7.0 million unauthorized residents in January 2000.

The high-quality sets of data used to construct the new INS estimates – detailed data on the foreign-born population from the 2000 Census, along with INS' most reliable sets of data (lawful permanent residents, refugees admitted, adjustments of status, removals) – make it likely that the estimates presented here more accurately reflect the actual unauthorized resident population than the higher estimates reported last year.

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[20] **Example 1**: INS' total estimate for January 2000 would be increased from 7.0 million to 8.0 million if the assumed net census undercount rate for unauthorized residents (who entered in 1990-99) was raised from 10 percent to 24 percent [Note that the rate actually used, 10 percent, was the estimated undercount rate for Mexican-born unauthorized residents in Los Angeles in the 2000 Census]. The result would be untenable because it would imply that virtually *all* of the undercount in the *entire* 2000 Census occurred to foreign-born persons who moved to the United States in the 1990s. This can be illustrated with reference to the figures shown in Table 3, rows 5 to 8. In Table 3, total net undercount for the foreign-born population that arrived in the 1990s is estimated to be 861,000 (sum of rows 5 to 7). If the assumed undercount rate for unauthorized residents (row 7) was changed to 24 percent instead of 10 percent, then about 1 million would be added, yielding a total estimated net undercount of 1,861,000 for the foreign-born population that arrived in the 1990s. The Census Bureau's revised preliminary estimate of net undercount for the *total* U.S. population in the 2000 Census was about 0.6 percent, or 1,700,000 (Source: U.S. Census Bureau, "Revised A.C.E. Estimates Memorandum Series PP-2," April 4, 2002).
Example 2: Setting the assumed emigration rates of unauthorized residents to *zero*, clearly an extreme assumption, instead of a few percent each year (used to derive these estimates), would increase INS' total estimate of the unauthorized resident population by approximately 525,000, to 7.5 million.
[21] U.S. Bureau of the Census, Population Division Working Paper #61, "Evaluating Components of International Migration: The Residual Foreign Born, 1990 and 2000," Joe Costanzo, Cynthia Davis, Caribert Irazi, Daniel Goodkind, and Roberto Ramirez, 2001.

Table 1. Estimated Unauthorized Resident Population, by State of Residence: 1990 and 2000

(Numbers in thousands. Parts might not add to totals because of rounding)

State of residence	Estimated unauthorized resident pop., January 1		Change, 1990 to 2000	Percent of total unauthorized population	
	2000	1990		2000	1990
All States	**7,000**	**3,500**	**3,500**	**100.0%**	**100.0%**
Alabama	24	5	19	0.3%	0.1%
Alaska	5	3	2	0.1%	0.1%
Arizona	283	88	195	4.0%	2.5%
Arkansas	27	5	22	0.4%	0.1%
California	**2,209**	**1,476**	**732**	**31.6%**	**42.2%**
Colorado	144	31	113	2.1%	0.9%
Connecticut	39	19	20	0.6%	0.5%
Delaware	10	3	7	0.1%	0.1%
District of Colombia	7	16	-9	0.1%	0.5%
Florida	**337**	**239**	**98**	**4.8%**	**6.8%**
Georgia	228	34	194	3.3%	1.0%
Hawaii	2	6	-4	-	0.2%
Idaho	19	11	9	0.3%	0.3%
Illinois	**432**	**194**	**238**	**6.2%**	**5.5%**
Indiana	45	11	34	0.6%	0.3%
Iowa	24	5	18	0.3%	0.1%
Kansas	47	13	34	0.7%	0.4%
Kentucky	15	4	11	0.2%	0.1%
Louisiana	5	15	-10	0.1%	0.4%
Maryland	56	34	22	0.8%	1.0%
Massachusetts	87	53	34	1.2%	1.5%
Michigan	70	23	47	1.0%	0.7%
Minnesota	60	13	48	0.9%	0.4%
Mississippi	8	2	6	0.1%	0.1%
Missouri	22	8	14	0.3%	0.2%
Nebraska	24	6	18	0.3%	0.2%
Nevada	101	27	74	1.4%	0.8%
New Jersey	221	95	125	3.2%	2.7%
New Mexico	39	20	19	0.6%	0.6%
New York	**489**	**357**	**132**	**7.0%**	**10.2%**
North Carolina	206	26	180	2.9%	0.7%
Ohio	40	12	29	0.6%	0.3%
Oklahoma	46	16	30	0.7%	0.5%
Oregon	90	26	64	1.3%	0.7%
Pennsylvania	49	25	24	0.7%	0.7%
Rhode Island	16	8	8	0.2%	0.2%
South Carolina	36	7	29	0.5%	0.2%
Tennessee	46	9	37	0.7%	0.3%
Texas	**1,041**	**438**	**603**	**14.9%**	**12.5%**
Utah	65	15	50	0.9%	0.4%
Virginia	103	48	55	1.5%	1.4%
Washington	136	39	97	1.9%	1.1%
Wisconsin	41	10	31	0.6%	0.3%
Other States	7	7	1	0.1%	0.2%

Eight other States -- Maine, Montana, New Hampshire, North Dakota, South Dakota, Vermont, West Virginia, and Wyoming -- each had fewer than 2,500 estimated unauthorized residents in 1990 and 2000.

Table 2. Estimated Unauthorized Resident Population, by Country of Origin: 1990 and 2000

(In thousands. Parts might not add to totals because of rounding)

Country of origin	Estimated unauthorized population, January 1 2000	1990	Change, 1990 to 2000	Total foreign-born population, April 2000
All countries	**7,000**	**3,500**	**3,500**	**31,000**
Europe	**191**	**123**	**69**	**5,038**
Bulgaria	6	2	4	35
Fmr. Czechoslovakia	7	2	4	83
France	7	3	3	151
Greece	7	5	2	166
Hungary	3	2	1	92
Ireland	3	5	-2	156
Italy	10	4	6	473
Netherlands	3	1	2	95
Poland	47	43	4	467
Portugal	6	9	-3	202
Romania	8	4	4	136
Spain	7	3	4	83
U.K.	7	15	-8	678
Fmr. U.S.S.R.	46	5	41	839
Fmr. Yugoslavia	3	7	-4	278
Other Europe	21	11	10	1,104
Asia	**500**	**311**	**190**	**8,059**
Afghanistan	3	2	1	45
Bangladesh	17	5	12	95
China	115	70	45	1,519
India	70	28	41	1,023
Iran	15	33	-18	283
Israel	4	7	-3	110
Japan	14	6	8	348
Jordan	-	4	-4	47
Korea	55	24	31	864
Lebanon	2	8	-6	106
Malaysia	9	4	4	49
Pakistan	26	17	9	223
Philippines	85	70	14	1,369
Sri Lanka	3	2	1	25
Syria	2	4	-3	55
Turkey	6	3	3	78
Yemen	1	1	-	19
Other Asia	74	20	54	1,801
Africa	**131**	**82**	**48**	**824**
Cape Verde	4	2	1	27
Egypt	8	10	-2	113
Ethiopia	5	7	-3	70
Ghana	12	6	6	66
Kenya	15	3	12	41
Liberia	11	9	3	39

Continued   - zero or rounds to zero

Table 2. Estimated Unauthorized Resident Population, by Country of Origin: 1990 and 2000 (continued)

(In thousands. Parts might not add to totals because of rounding)

Country of origin	Estimated unauthorized population, January 1		Change, 1990 to 2000	Total foreign-born population, April 2000
	2000	1990		
Africa *(continued)*				
Morocco	6	4	2	35
Nigeria	32	16	16	135
Sierra Leone	6	5	1	21
South Africa	7	3	4	64
Sudan	1	2	-1	20
Other Africa	24	15	9	195
Oceania	**23**	**10**	**13**	**168**
Australia	1	1	-1	61
Fiji	4	2	2	31
New Zealand	-	1	-1	23
Micronesia, Federated States	2	-	1	3
Tonga	3	2	1	17
Samoa	5	2	3	16
Other Oceania	8	1	8	16
North America	**5,658**	**2,789**	**2,869**	**14,965**
Mexico	4,808	2,040	2,768	9,177
Canada	47	25	22	821
Barbados	5	4	2	52
Cuba	7	2	5	873
Dominica	4	3	1	16
Dominican Republic	91	46	45	688
Haiti	76	67	8	419
Jamaica	41	37	4	554
Trinidad & Tobago	34	23	10	197
Belize	8	10	-2	40
Costa Rica	17	5	12	72
El Salvador	189	298	-109	817
Guatemala	144	118	26	481
Honduras[a]	138	42	96	283
Nicaragua	21	50	-29	220
Panama	11	7	4	105
Other North America	18	13	6	149
South America	**497**	**185**	**312**	**1,920**
Argentina	15	7	8	125
Bolivia	13	8	5	53
Brazil	77	20	58	212
Chile	17	6	10	81
Colombia	141	51	91	510
Ecuador	108	37	71	299
Guyana	22	13	10	211
Peru	61	27	34	278
Uruguay	2	2	1	25
Venezuela	34	10	24	107
Other South America	6	5	1	18

[a] Includes 105,000 Hondurans who were granted temporary protected status in December 1998.

Source: INS Office of Policy and Planning.   - zero or rounds to zero

Table 3. Components of INS' Estimates of the Total Unauthorized Resident Population: January 1990 to January 2000

(In thousands, rounded independently; parts might not add to totals because of rounding)

Foreign-born population -- entered 1990-1999

1. Foreign-born population counted in the 2000 census	+	12,607
2. Adjustment of census data back to January 2000	+	112
3. Net adjustment due to negative individual country residuals	+	51
4. Adjustment for misreporting of year of entry by IRCA beneficiaries	-	175
5. Adjustment for undercount of nonimmigrant residents in census (10%)[a]	+	150
6. Adjustment for undercount of LPRs and other legal residents in census (2.5%)[a]	+	162
7. Adjustment for undercount of unauthorized residents in census (10%)[a]	+	549
8. Estimated total foreign-born population, January 2000	=	**13,456**

Legally resident foreign-born population -- entered 1990-1999

9. Legal permanent residents -- new arrivals + adjustments by year of entry	+	5,799
10. Estimated number in #9 above, misclassified as "new arrivals"	-	347
11. Of those in #10 above, entered 1990-1999	+	30
12. Refugees arrivals	+	932
13. SAWs moved to the United States in the 1990s	+	120
14. Deaths, sum for all 10 cohorts, from year of entry to January 1, 2000	-	156
15. Emigration, sum for all 10 cohorts, from year of entry to January 1, 2000	-	489
16. Nonimmigrants residing in U.S., January 2000	+	1,500
17. Unauthorized immigrants with pending I-485 forms -- LPR status not yet official by January 1, 2000	+	200
18. Asylees, parolees, TPS recipients with work authorization but not adjusted to LPR status by January 1, 2000	+	377
19. Estimated total legally resident foreign-born pop., January 2000	=	**7,967**

Unauthorized resident population -- entered 1990-1999

20. Resided in U.S. in January 2000, entered 1990-1999	20 = 8 – 19	=	**5,489**

Unauthorized resident population -- entered before 1990

21. INS estimate of unauthorized residents, January 1990	+	3,500
22. Left the unauthorized resident population, 1990 to 1999	-	1,989
23. Unauthorized, entered before 1990, resided here illegally in Jan. 2000	=	**1,511**

Total unauthorized population residing in U.S., January 2000

24. Entered 1990-1999, here in January 2000 + entered before 1990 and still here in January 2000	24 = 20 + 23	=	**7,000**
25. Average annual growth, January 1990 to January 2000…….	25 = [24-21]/10.0	=	**350**

Source: INS Office of Policy and Planning.　　　See text for definitions and data sources.

[a] Overall undercount of 10% for unauthorized residents is consistent with results reported in a paper by Enrico Marcelli, "2000 Census Coverage of Foreign-born Mexicans in Los Angeles County: Implications for Demographic Analysis," presented at the 2000 Annual Meeting of the Population Association of America, Atlanta GA. For lawful residents, as defined here, the rate of census net undercount was set at one fourth of the rate for unauthorized residents, or 2.5 percent. Nonimmigrant residents were assumed to be omitted from the census at the same rate as unauthorized residents because, on average, they arrived more recently than the permanent resident population and

because there could be some ambiguity about whether they should complete a census form because of their temporary resident status.