VII. ESTIMATES

This section presents estimates of the number of persons who leave the United States to take up residence elsewhere, as well as the number and characteristics of persons residing in this country illegally, and describes INS' efforts to develop reliable information on the total number of persons who enter the United States each year.

Although a considerable amount of detailed information is available about immigrants, temporary visitors, and other categories of international migrants to the United States, significant gaps remain in our knowledge about immigration to the United States. In some areas these deficiencies persist because of the inherent difficulty in estimating the numbers, as is the case for emigration and illegal immigration. As a result, no detailed tables on these two categories are included in the *Statistical Yearbook*.

Emigration

The collection of statistics on emigration from the United States was discontinued in 1957; no direct measure of emigration has been available since then. Estimates compiled in this country and statistics collected in other countries indicate that emigration from the United States has increased steadily since the 1950s, exceeding 100,000 per year from 1970 to 1990, and surpassing 200,000 in the 1990s. These figures are consistent with U.S. historical experience; between 1900 and 1990, approximately 38

million immigrants were admitted, and an estimated 12 million foreign-born persons emigrated. That is, for every 100 immigrants admitted, roughly 30 returned home (see Table O).

The U.S. Bureau of the Census currently uses an annual emigration figure of 222,000, which includes both citizens and aliens, for computing national population estimates. Statistics (shown above) on U.S. residents migrating to other countries published by the United Nations and the Economic Commission for Europe indicate that emigration from the United States could be substantially above 200,000 annually.

Accurate, detailed, and timely estimates of emigration are needed to develop and evaluate U.S. immigration policy, to derive accurate national and local population estimates (including estimates of illegal immigration), and to

Table O
Immigration and Emigration by Decade: 1901-90

Period	Immigrants to the U.S. (Thousands)	Emigrants from the U.S. (Thousands)	Net Immigration (Thousands)	Ratio: Emigration/ Immigration
Total,1901-90	37,869	11,882	25,987	.31
1981-90	7,338	1,600	5,738	.22
1971-80	4,493	1,176	3,317	.26
1961-70	3,322	900	2,422	.27
1951-60	2,515	425	2,090	.17
1941-50	1,035	281	754	.27
1931-40	528	649	-121	1.23
1921-30	4,107	1,685	2,422	.41
1911-20	5,736	2,157	3,579	.38
1901-10	8,795	3,008	5,787	.34

Source: 1992 Statistical Yearbook, Table 1; Warren, Robert and Ellen Percy Kraly, 1985, The Elusive Exodus: Emigration from the United States, Population Trends and Public Policy Occasional Paper No. 8, March, Population Reference Bureau: Washington, D.C.

¹ Warren, Robert and Ellen Percy Kraly, 1985, *The Elusive Exodus: Emigration from the United States*, Population Trends and Public Policy Occasional Paper No. 8, March, Population Reference Bureau: Washington, D.C.

Emigration from the United States to Top Ten Countries of Destination: Selected Years, 1980s

All countries	241,000
1. Mexico	55,000
2. United Kingdom	31,000
3. Germany	29,000
4. Canada	20,000
5. Japan	19,000
6. Philippines	19,000
7. Guatemala	13,000
8. Indonesia	9,000
9. Australia	8,000
10. Italy	4,000

Source: 1989 U.N. *Demographic Yearbook*, Table 28; Economic Commission for Europe, CES/710/Corr.

measure coverage of the decennial censuses. The sketchy data that are available indicate that emigration is a large and growing component of U.S. population change. However, partly because of inherent methodological difficulties, data on emigration from the United States are not being collected.

Illegal Immigrants ²

In 1994 the INS released detailed estimates of the undocumented immigrant population residing in the United States as of October 1992.³ Those estimates were useful for a variety of purposes, including planning and policy development at the national and state level, evaluating the effects of proposed legislation, and assessing the fiscal impacts of undocumented immigration.

Over the past 2 years, the INS has revised those estimates and updated them to October 1996. The estimates presented here incorporate new data on the foreign-born population collected by the Census Bureau, improvements in the methodology recommended by the General Accounting Office (GAO), suggestions provided by outside reviewers, and further analyses of INS' data sources and estimation procedures. Revised and updated

² The estimated illegal immigrant population from the Dominican Republic shown in Table P was revised from 50,000 (shown in the 1995 *Yearbook*) to 75,000 following a review of the estimates for Dominica and the Dominican Republic.

estimates of the undocumented population have been computed for each state of residence and for nearly 100 countries of origin.

Data Overview

About 5.0 million undocumented immigrants were residing in the United States in October 1996, with a range of about 4.6 to 5.4 million. The population was estimated to be growing by about 275,000 each year, which is about 25,000 lower than the annual level of growth estimated by the INS in 1994.

California is the leading state of residence, with 2.0 million, or 40 percent of the undocumented population. The 7 states with the largest estimated numbers of undocumented immigrants—California (2.0 million), Texas (700,000), New York (540,000), Florida (350,000), Illinois (290,000), New Jersey (135,000), and Arizona (115,000)—accounted for 83 percent of the total population in October 1996.

The 5.0 million undocumented immigrants made up about 1.9 percent of the total U.S. population, with the highest percentages in California, the District of Columbia, and Texas. In the majority of states, undocumented residents comprise less than 1 percent of the population.

An estimated 5 million undocumented immigrants were residing in the United States in October 1996.

Mexico is the leading country of origin, with 2.7 million, or 54 percent, of the population. The Mexican undocumented population has grown at an average annual level of just over 150,000 since 1988. The 15 countries with 50,000 or more undocumented immigrants in 1996 accounted for 82 percent of the total population. The large majority, over 80 percent, of all undocumented immigrants are from countries in the Western Hemisphere.

About 2.1 million, or 41 percent, of the total undocumented population in 1996 are nonimmigrant overstays. That is, they entered legally on a temporary basis and failed to depart. The proportion of the undocumented population who are overstays varies considerably by country of origin. About 16 percent of the Mexican undocumented population are nonimmigrant overstays, compared to 26 percent of those from Central America, and 91 percent from all other countries.

³ Warren, Robert, 1994, Estimates of the Unauthorized Immigrant Population Residing in the United States, by Country of Origin and State of Residence: October 1992, Unpublished paper, U.S. Immigration and Naturalization Service.

National Estimates

The total number of undocumented immigrants residing in the United States in October 1996 is estimated to be 5.0 million (Table P), with a range of about 4.6 to 5.4 million. The estimate for October 1996 is about 1.1 million higher than the revised estimate of 3.9 million for October 1992; this implies that the population grew by about 275,000 annually during the 1992-96 period, about the same as the annual growth of 281,000 estimated for the previous period. The original INS estimates for October 1992 and October 1988, released in 1994, showed average annual growth of 300,000.

The undocumented population grows at varying levels from year to year, but the data available to make these estimates do not permit the derivation of annual figures to measure year-to-year changes. However, the similar levels of growth for the 1988-92 and 1992-96 periods, 281,000 and 275,000, respectively, suggest that the overall level of growth has been fairly constant over the past decade. This

also indicates that the rate of growth of the undocumented resident population has declined since 1988.

State of Residence

The estimates for states reflect the well-established pattern of geographic concentration of undocumented immigrants in the United States. As expected, California was the leading state of residence, with 2.0 million, or 40 percent, of the total number of undocumented residents in October 1996. Seven states—California (2.0 million), Texas (700,000), New York (540,000), Florida (350,000), Illinois (290,000), New Jersey (135,000), and Arizona (115,000)—accounted for 83 percent of the population in October 1996 (Table P).

The estimated undocumented population of California has grown by an average of about 100,000 annually since the end of the IRCA legalization program in 1988. More than 83 percent of total growth of the undocumented population since 1988 has occurred in the top seven states. With the

Table P
Estimated Illegal Immigrant Population for Top Twenty Countries of Origin and Top Twenty States of Residence: October 1996

Country of origin Population State of r		State of residence	Population	
All countries	5,000,000	All states	5,000,000	
1.Mexico	2,700,000	1.California	2,000,000	
2.El Salvador	335,000	2.Texas	700,000	
3.Guatemala	165,000	3.New York	540,000	
4.Canada	120,000	4.Florida	350,000	
5.Haiti	105,000	5.Illinois	290,000	
6.Philippines	95,000	6.New Jersey	135,000	
7.Honduras	90,000	7.Arizona	115,000	
8.Dominican Republic 1	75,000	8. Massachusetts	85,000	
9.Nicaragua	70,000	9.Virginia	55,000	
10. Poland	70,000	10.Washington	52,000	
11.Bahamas, The	70,000	11.Colorado	45,000	
12.Colombia	65,000	12.Maryland	44,000	
13.Ecuador	55,000	13.Michigan	37,000	
14.Trinidad & Tobago	50,000	14.Pennsylvania	37,000	
15.Jamaica	50,000	15.New Mexico	37,000	
16.Pakistan	41,000	16.Oregon	33,000	
17.India	33,000	17.Georgia	32,000	
18.Ireland	30,000	18.District of Columbia	30,000	
19.Korea	30,000	19.Connecticut	29,000	
20.Peru	30,000	20.Nevada	24,000	
Other	721,000	Other	330,000	

¹ The estimated illegal immigrant population from the Dominican Republic was revised from 50,000 (shown in the 1995 *Yearbook*) to 75,000 following a review of the estimates for Dominica and the Dominican Republic.

exception of Massachusetts (6,000), none of the remaining 43 states grew by more than 3,000 undocumented residents annually. In 27 states, the undocumented population grew by an average of 1,000 or less each year.

Country of Origin

Mexico is the leading source country of undocumented immigration to the United States. In October 1996 an estimated 2.7 million undocumented immigrants from Mexico had established residence here (Table P). Mexican undocumented immigrants constituted about 54 percent of the total undocumented population. The estimated population from Mexico increased by just over 150,000 annually in both the 1988-92 and 1992-96 periods.

The estimated number of Mexican undocumented immigrants who arrived between 1990 and 1996 is based on data on country of birth and year of immigration collected by the Census Bureau in the March 1994, 1995, and 1996 Current Population Surveys (CPS). Demographic analysis of the CPS data indicates that approximately 230,000 undocumented Mexican immigrants established residence annually between 1990 and 1996. This is the net annual addition of undocumented Mexicans who arrived during the period. Note, however, that it does not reflect the average annual growth of the Mexican undocumented population. To compute average annual growth it is necessary to subtract the number of undocumented Mexicans who lived here in January 1990 and who emigrated, died, or adjusted to legal permanent resident status during the 1990-96 period. This last step produces the estimate cited above of just over 150,000 annual growth of the Mexican undocumented population since 1988.

In October 1996, 15 countries were each the source of 50,000 or more undocumented immigrants (Table P). The top five countries are geographically close to the United states—Mexico, El Salvador, Guatemala, Canada, and Haiti. Of the top 15 countries, only the Philippines and Poland are outside the Western Hemisphere. The estimated undocumented population from Poland has declined by more than 25 percent, from 95,000 to 70,000, since 1988, possibly reflecting changed conditions in that country over the last several years.

Although undocumented immigrants come to the United States from all countries of the world, relatively few countries add substantially to the population. The annual growth of the undocumented population can be grouped into four disparate categories: 1) Mexico, with more than half of the annual growth, adds just over 150,000 undocumented residents each year; 2) six countries—El Salvador, Guatemala, Canada, Haiti, Honduras, and the Dominican Republic—each add between 6,000 and 12,000

annually; 3) thirteen countries each add about 2,000 to 4,000 annually; and 4) the remaining approximately 200 other countries add a total of about 30,000 undocumented residents each year (Table P). A large majority of the additions each year, more than 80 percent, are from countries in the Western Hemisphere.

Estimation Procedure

Methodology

The estimates were constructed by combining detailed statistics, by year of entry, for each component of change that contributes to the undocumented immigrant population residing in the United States. For most countries of the world, the typical way of entering the undocumented population in the United States is to arrive as a nonimmigrant and stay beyond the specified period of admission. This segment of the population, referred to here as "nonimmigrant overstays", constitutes roughly 40 percent of the undocumented immigrant population residing in the United States. The rest of the population, more widely publicized, enter surreptitiously across land borders, usually between official ports of entry. This part of the population, often referred to as EWIs (entry without inspection), includes persons from nearly every country, but a large majority of them are from Mexico; most of the rest are natives of Central American countries.

Primary Sets of Data

The figures presented here were constructed from five primary sets of data. Each set of data was compiled separately for 99 countries and each continent of origin.

- 1) Entered before 1982—estimates (as of October 1988) of the undocumented immigrant population who established residence in the United States before 1982 and did not legalize under the Immigration Reform and Control Act (IRCA) of 1986. The assumption used to estimate this part of the population is based on estimates developed by the Census Bureau using data from the June 1988 Current Population Survey (CPS).
- 2) Net overstays—estimates for 1982 to 1996 of the net number of nonimmigrant overstays, for 99 countries of origin, derived from INS data bases. Estimates were derived by: a) matching INS I-94 arrival/departure records; b) adjusting for the incomplete collection of departure forms; and c) subtracting the number of nonimmigrant overstays who subsequently either departed or adjusted to legal resident status.
- 3) *Net EWIs*—estimates of the number from each country who entered without inspection (EWI) and established residence here between 1982 and 1996. A very large majority of all EWIs are from Mexico. Average annual estimates of Mexican EWIs were derived by: a) adjusting

the CPS count of the Mexican-born population for underenumeration; b) subtracting the estimated legally resident population counted in the CPS; and c) subtracting the estimated number of net overstays.

- 4) Mortality—estimates of the annual number of deaths to the resident undocumented immigrant population. The estimates were derived using an annual crude death rate of 3.9 per 1,000, which was computed using a modified age distribution of IRCA applicants and age-specific death rates of the foreign-born population.
- 5) *Emigration*—estimates of the number of undocumented immigrants who resided here at the beginning of a period (either October 1988 or October 1992), and who emigrated from the United States in the following 4-year period. Estimates of emigration are based on statistics published by the Census Bureau in *Technical Paper No. 9*.

Construction of the Estimates

Estimates of the undocumented immigrant population were derived for October 1988, October 1992, and October 1996 for 99 individual countries and for each continent of origin. The calculations were carried out separately for overstays and EWIs.

Estimates by State of Residence

In the earlier estimates for October 1992, the state distribution of the undocumented population was based on the U.S. residence pattern of each country's applicants for legalization under IRCA; the results were summed to obtain state totals. This assumed that, for each country of origin, undocumented immigrants who resided in the United States in October 1992 had the same U.S. residence pattern as IRCA applicants from that country. The revised and updated estimates presented here incorporate the same assumption for the October 1988 undocumented population. However, it was necessary to develop new methods of deriving state estimates for October 1992 and 1996 that would reflect more recent patterns of geographic settlement.

As noted, the estimates of the undocumented population were constructed separately for overstays and EWIs. This permitted the distribution of the overstay and EWI populations to states using data most appropriate for the type of population. For overstays, the cohorts that arrived in the 1988-92 and 1992-96 periods were distributed to state of residence based on annual estimates of overstays by state of destination for 1986 to 1989. For EWIs who entered during these periods, the totals were distributed to state of residence using INS statistics for the early 1990s on the destination of the beneficiaries of aliens who legalized under IRCA.

Limitations of Data

Estimating the size of a hidden population is inherently difficult. Overall, the figures presented here generally reflect the size, origin, and geographic distribution of the undocumented immigrant population residing in the United States during the mid-1990s. The estimates probably reduce the range of error for the total population to a few hundred thousand rather than a few million, which was the error range during the late 1970s and into the 1980s. The estimates for most countries should be fairly precise because they were constructed primarily from data on nonimmigrant arrivals, departures, and adjustments of status that have relatively small margins of error.

Although the estimates are based on the most reliable information available, they clearly have limitations. For example, the estimates make no allowance for students or other long-term nonimmigrants, and the estimates for some countries could be underestimated because of special circumstances (*e.g.*, Dominicans entering illegally via Puerto Rico; ships arriving undetected from China).

The figures for some countries overstate the actual undocumented population. In general, the net nonimmigrant overstay figures are more likely to be overestimates than underestimates because the collection of departure forms for long-term overstays who depart probably is less complete than for those who depart within the first year.

The estimates include a large number of persons who have not been admitted for lawful permanent residence but are permitted to remain in the United States pending the determination of their status or until conditions improve in their country of origin. This category includes many of the undocumented immigrants from El Salvador, aliens from other countries in a status referred to as "deferred enforced departure", and IRCA applicants whose cases have not been finally resolved.

In a few cases, the estimates appear to be too high, but we have no basis for making downward adjustments. For example, the estimates for the Bahamas appear to be much too large because they imply that a relatively large proportion of the population is residing illegally in the United States, whereas large-scale undocumented immigration from the Bahamas has not been observed previously. In addition, the estimates shown in the 1995 *Yearbook* for Dominica were considerably higher than would be expected based on the number of IRCA applicants from Dominica. This overstatement could have occurred because of processing problems with I-94 arrival/departure documents, with the result that overstays

from Dominica are overestimated and those from the Dominican Republic underestimated. The figures shown in this edition of the *Yearbook* have been adjusted to account for this anomily in the data used to estimate overstays.

The number of EWIs is the most difficult component to estimate with precision, and errors in this component have the largest effect on the estimated undocumented population from Mexico. In particular, the shortage of information about two components—emigration of legally resident immigrants and undercount in the CPS—makes it difficult to derive acceptable residual estimates of the number of undocumented immigrants counted in the CPS.

The estimates presented here are based on the most extensive array of figures ever compiled for the purpose; nevertheless, they should be used with caution because of the inherent limitations in the data available for estimating the undocumented immigrant population.

Inspections

The text and table on the estimated number of aliens and citizens admitted by state and port of entry are omitted from this edition of the *Statistical Yearbook*. The largest component of the admissions is the number of persons who enter at land border ports. Information developed from survey data indicates that the estimation procedures used during the past few years at some land ports have resulted in an overstatement of the total number of entries into the United States. The methodology used to derive estimates of the number of passengers per vehicle and the proportion of aliens and U.S. citizens is being evaluated and revised. Publication of this data series is expected to resume in future years.

VIII. PUBLIC USE FILES

Information on aliens granted permanent resident (immigrant) status may be purchased on magnetic tapes or cartridges from the National Technical Information Service (NTIS). These files, which contain information on immigrants admitted from fiscal years 1972-96, are on 12 tapes, each generally covering a 3-year span. The variables included on the files are:

- Port of entry
- ◆ Month of admission
- ♦ Year of admission
- Class of admission
- ◆ Age
- Country of birth
- ◆ Marital status
- ♦ Sex
- ◆ Nationality
- ◆ Occupation

- Country of chargeability
- Country of last permanent residence
- Nonimmigrant class of entry
- Nonimmigrant year of entry
- INS district of intended residence
- State and Zip code of intended residence

The tapes are formatted in EBCDIC or ASCII character set and are available in 9-track 1,600 bpi or 6,250 bpi. Additionally, data are available upon request on IBM 3480 cartridges. Documentation is included for each year and may be sold separately.

The *Statistical Yearbook* may also be purchased from NTIS in paper copy or microfiche form beginning with fiscal year 1965. Prior to 1978, INS statistical data were included in the *Annual Report of the Immigration and Naturalization Service*. Those reports contain descriptions of INS' activities and accomplishments in addition to the statistical tables.

To order the *Yearbook* or the Public Use Files, call NTIS at (703) 487-4650; FAX: (703) 321-8547.