

## Estimates of the Legal Permanent Resident Population and Population Eligible to Naturalize in 2003

Nancy F. Rytina

January 2005

This paper presents estimates of the legal permanent resident (LPR) population living in the United States and of the population eligible to naturalize updated to 2003 by year of admission for permanent residence, country of birth, and state of residence. The estimates are based primarily on a database created by the Office of Immigration Statistics (OIS) from administrative records of U.S. Citizenship and Immigration Services (USCIS) of the Department of Homeland Security. (Both OIS and USCIS were part of the former Immigration and Naturalization Service (INS).) The methodology used for the 2002 estimates (Rytina, 2004) was also used for the 2003 estimates.

### BACKGROUND

Data on the size and characteristics of various components of the foreign-born population are needed to assess the impact of immigration and assimilation of immigrants into U.S. society. The decennial census and monthly household surveys of the Census Bureau include questions on place of birth, citizenship, and year of entry into the United States. These data provide a wealth of information on the total foreign-born population, naturalized citizens, and non-citizens.

However, information on the major subcategories of non-citizens, including LPRs, students, temporary workers, and the unauthorized immigrant population is not readily available and must be estimated. The legal status of non-citizens is not routinely ascertained in censuses or surveys with sample sizes sufficient for making accurate national population estimates. An alien registration program at INS, requiring all legally resident aliens to report their status annually, was discontinued by Congress in 1981.

Data collected by the former INS measure administrative events such as the number of aliens granted lawful permanent residence or the number approved for asylum, but not the population of legal permanent residents or the population of asylees living in the United States at a point in time.

Recent estimates of the LPR population have been derived primarily from Census and INS data. The general approach has consisted of estimating a base population as of a certain date and then adding components of population change since that date (see Passel and Clark, 1998; Hoefer, 1996). The LPR estimates presented here represent a variant of this same basic approach.

### METHODOLOGY

Estimates were developed separately for LPRs admitted for permanent residence between 1973-2003 (post 1973) and LPRs admitted before 1973 (pre-1973). Since INS administrative records were not automated until 1973, Census data were used to estimate LPRs admitted in earlier years. The two sets of estimates were added together to produce the final estimates.

### LPR Population Admitted Between 1973 and 2003

Data on LPRs admitted for permanent residence and on LPRs who naturalized between January, 1973 and September, 2003 were obtained from application based case tracking systems of USCIS. For LPR admissions, the Application for Immigrant Visa and Alien Registration (DS-230) of the U.S. Department of State is used by aliens living abroad; the Application to Adjust Status to Permanent Residence (I-485) is used by aliens already living in the United States. The Application for Naturalization (N-400) is used primarily by LPRs ages 18 and over to apply for citizenship. The case tracking systems store basic demographic and administrative information on applicants including name, alien identification number (A-number), date of birth, country of birth, gender, marital status, occupation, U.S. address, date of permanent residence and class of admission (for LPRs), and date of naturalization (for LPRs becoming new citizens).

OIS matched the records of LPRs admitted for permanent residence with the records of LPRs who naturalized by A-number. Exclusion of the matched records



**Homeland  
Security**

**Office of  
Immigration Statistics**  
Management Directorate

left a base population of records of LPRs admitted for permanent residence between 1973-2003 who had not naturalized as of the end of September 2003. The base population was then reduced because it included LPR children who had derived citizenship. The resulting population was then further reduced for estimated mortality and emigration between the date of admission for permanent residence and September, 2003 as described below.

**Derivative Citizenship.** Most LPRs become citizens either by applying for naturalization when they are at least 18 years old (through the standard naturalization application, the N-400) or, if they are under 18, by deriving citizenship upon the naturalization of their parents (one parent beginning in February, 2001). Aliens who derive citizenship are not required to apply for a certificate of citizenship reflecting their citizenship status. As a result, a complete count of LPRs who derive citizenship does not exist.

Evidence of derivative citizenship is suggested by the lower naturalization rates through 2003 of LPRs who were under age 16 when admitted compared to LPRs who were older, regardless of the year of admission. For these population estimates, it was assumed that the cumulative "citizenship" rate (derivative citizenship plus naturalization) through 2003 of LPRs who were under age 16 when admitted was the same as the rate for LPRs who were age 16 when admitted. (Substituting age 15 or age 17 as the standard had little effect on the final LPR estimates.) The derivative citizenship rate implied by this assumption is probably conservative. Compared to older children, young LPR children have more years of exposure to the U.S. educational system, peers, culture, and other factors that predispose immigrants to U.S. citizenship.

**Mortality.** LPRs were survived from year of admission for permanent residence to 2003 by age at admission and gender using mortality rates by age and sex from 1989-91 life tables (National Center for Health Statistics, 1997). The period 1989-91 was considered representative of the year of admission of the base LPR population. Since the average age of LPRs at

immigration is about 28 years, mortality has little effect on the estimates for recent LPRs. The effect on earlier LPRs, especially those admitted during the 1970s, is much larger.

**Emigration.** Estimating emigration accurately is challenging because the U.S. government has not collected official statistics since 1957. Most observers agree that emigration of the LPR population from the U.S. is substantial. Between 1900 and 1990, an estimated one-quarter to one-third of LPRs emigrated from the U.S. (see Warren and Kraly, 1985; Ahmed and Robinson, 1994; Mulder, et al., 2002). This analysis uses emigration rates developed for the 1980-90 period by Ahmed and Robinson (1994) that were modified by Robert Warren (2003a) for the legally resident population. Warren's modification uses an emigration rate of 3.26 percent for the first year and decreases each subsequent year's rate by 5 percent. LPRs admitted as refugees and asylees were assumed to emigrate at 50 percent the rate of other LPRs each year. Substituting 25 percent for 50 percent has little numeric impact on either the overall estimates or on the estimates of LPRs from countries from which many refugees and asylees come (e.g., Cuba or Vietnam).

After adjusting for derivative citizenship, mortality, and emigration, the data were tabulated by year of admission to permanent residence, country of birth, and state of residence. The use of state of residence provided on the application for permanent residence ignores subsequent internal migration and affects the state-level estimates to the extent that migration to and from each state is not the same.

#### **LPR Population Admitted Before 1973**

An estimate of this population was obtained from the March 2003 Current Population Survey (CPS). It was assumed that all noncitizens in 2003 who entered the United States before 1973 were LPRs. Under the registry provisions of immigration law, aliens of good moral character who are not deportable or removable and have lived in the United States continuously since January 1, 1972 are eligible for LPR status. Year of

entry was assumed to represent the year of admission for permanent residence since most LPRs admitted before 1973 came directly from abroad.

The CPS data were tabulated by country of birth, state of residence, and year of entry. Since CPS micro data on year of entry are aggregated for the years 1970-74, 60 percent of entrants during that period were assumed to have come between 1970-72. Country of birth and state of residence for 1970-72 entrants were assumed the same as those of 1970-74 entrants. CPS data are not available for countries where estimates are based on small numbers of observations, but this omission should have little effect on the estimates for the top countries based on INS administrative data. In addition, LPRs who reported entering the United States before 1973 were excluded from the USCIS administrative data in order to avoid double counting of the pre-1973 population.

#### **LPR Population Eligible to Naturalize**

The estimated LPR population eligible to naturalize was calculated based on year of admission for permanent residence and class of admission. Most LPRs are required to meet a five-year residency requirement for naturalization. Spouses of U.S. citizens are eligible in three years. There are several other exceptions to the five-year residency requirement, most of which affect small numbers of immigrants. However, immigrants eligible under these other provisions of immigration law cannot be identified until they naturalize.

It was therefore assumed that all LPRs are required to meet a five-year residency requirement except for those admitted for permanent residence as spouses of U.S. citizens. Certain categories of immigrants receive credit for the period prior to the actual grant of lawful permanent resident status. The credited time or earlier dates are not included in the LPR records used for this analysis and must be estimated. Asylees are credited one year in asylum status toward their lawful permanent resident status. Asylees were therefore assumed eligible to naturalize four years after approval of their adjustment application.

Refugees, Lautenberg parolees, and cancellation of removal immigrants also receive credit for residence in the United States prior to the actual grant of lawful permanent residence based, respectively, on the date of entry into the United States as a refugee, the date of parole, and the date of cancellation of removal. It was assumed that two years elapse between these earlier dates and the date of approval of the application for permanent residence so that these LPRs are eligible for naturalization approximately three years after approval of their application for adjustment.

## FINDINGS

### Overview

In September 2003, the estimated LPR population was 11.5 million and an estimated 7.9 million LPRs were eligible to naturalize (see Table 1). These estimates are essentially the same as the 2002 estimates (11.4 million and 7.8 million, respectively) and are consistent with estimates derived by other researchers. Jeffrey Passel estimated the LPR population in 2002 at 12.2 million and the LPR population eligible to naturalize at 7.9 million (Fix, Passel and Sucher, 2003). OIS estimated the LPR population for the 50 states and the District of Columbia in 2000 at 10.8 million compared to an estimate of 10.2 million by Robert Warren based on the methodology used for estimates of the unauthorized immigrant population in 2000 (Warren, 2003).

Table 1.  
**Estimated Size of the Legal Permanent Residence Population by Eligibility to Naturalize: 2002 to 2003**  
(in millions)

Legal permanent residents	2002	2003
Total	11.4	11.5
Eligible to naturalize	7.8	7.9
Not eligible to naturalize	3.6	3.6

U.S. Department of Homeland Security, Office of Immigration Statistics

The entries in Table 2 show the contribution of each data source and adjustment to the final estimated LPR population in 2003. According to USCIS administrative records, 22.2 million LPRs were admitted

Table 2.

### Components of the Estimated Legal Permanent Resident Population: 2003

Category	Number (in millions)
Legal permanent residents admitted between 1973-2003	22.2
<i>minus</i> Naturalizations (N-400) 1973-2003	7.9
<i>minus</i> Derivative citizenship 1973-2003	0.6
<i>minus</i> Emigration and mortality 1973-2003	3.3
<i>equals</i> Legal permanent residents survived to 9/2003	10.3
<i>plus</i> Legal permanent residents admitted before 1973 (CPS)	1.1
<i>equals</i> Estimated legal permanent resident population as of 9/2003	11.5
<i>minus</i> Legal permanent residents not eligible to naturalize as of 9/2003	3.6
<i>equals</i> Estimated legal permanent resident population eligible to naturalize as of 9/2003	7.9

Source: U.S. Department of Homeland Security, Office of Immigration Statistics

to the United States between 1973-2003. By 2003, that number had been reduced by nearly one-half. Naturalizations accounted for 7.9 million (35 percent). An estimated 0.6 million (3 percent) had derived citizenship before becoming 18 years old and another 3.3 million (15 percent) had died or emigrated. An estimated 3.6 million LPRs in 2003 had not met the residency requirement for naturalization leaving 7.9 million LPRs eligible to naturalize.

The LPR populations were virtually unchanged between 2002 and 2003 because the increase in new LPRs (0.7 million) was nearly offset by the increase in naturalizations (0.5 million) and the other components were close in magnitude (see Table 1 in Rytina, 2004).

The major sources of methodological error in these estimates are the assumptions made about emigration, mortality, and derivative citizenship. Errors in the estimate of these components affect the USCIS/INS-based portion of the 2003 LPR estimate (10.3 million or 90 percent of the total 11.5 million). A 25 percent error in either direction in the estimate of these components combined (0.6 for derivative citizenship + 3.3 for emigration and mortality = 3.9 million) would increase/decrease the total estimated LPR population by 1 million.

The estimates derived from the March 2003 CPS (1.1 million or about 10 percent of the total 11.5 million) are subject to both sampling and nonsampling error.

Table 3.

### Year of Admission for Permanent Residence of the Estimated Legal Permanent Resident Population: 2003

Year admitted	All legal permanent residents		Legal permanent residents eligible to naturalize	
	Number (in millions)	Percent	Number (in millions)	Percent
Total	11.5	100.0	7.9	100.0
Before 1960	0.3	2.2	0.3	3.2
1960 to 1969	0.5	4.6	0.5	6.6
1970 to 1979	0.9	8.3	0.9	12.0
1980 to 1989	1.8	15.7	1.8	22.8
1990 to 1994	2.3	19.9	2.3	28.9
1995 to 1999	2.4	20.8	1.9	24.0
2000 to 2002	2.7	23.8	0.2	2.4
2003	0.5	4.7	-	-

Note: Column entries may not sum to total due to rounding. - Represents zero.  
Source: U.S. Department of Homeland Security, Office of Immigration Statistics

The estimated sampling error at the 90 percent confidence level for a 1.1 million estimate is plus or minus 0.2 million.<sup>1</sup> Estimates by country of birth and state of residence are based on smaller numbers of observations and are affected more by sampling error. Major sources of non-sampling error include the possibility of misreporting of citizenship status and year of entry by CPS respondents.

#### Year of Admission for Permanent Residence

The LPR population in 2003 consisted of relatively recent admissions. Two-thirds (69 percent) became LPRs in 1990 or later (see Table 3). One-half (49 percent) gained permanent residence between 1995-2003. Only 15 percent were admitted before 1980.

#### Country of Birth

Estimates of the LPR population by country of birth are displayed in Table 4 for countries with at least 50,000 LPRs. Mexico was the leading country of origin. An estimated 3.1 million, or 27 percent, of LPRs came from Mexico. Other leading countries of birth include the Philippines, India, People's Republic of China, the Dominican Republic, Vietnam, Canada, El Salvador, Korea, and Cuba. An estimated 56 percent of all LPRs in 2003 were born in these 10 countries. The 43 countries displayed in Table 4 represented 86 percent of the estimated LPR population in 2003.

In general, the size of the LPR population from a given country is affected by the level of immigration from that country as well as the propensity of LPRs from that country to naturalize. Mexico was the leading country of birth of the LPR population in 2003 because legal immigration from Mexico greatly exceeds that of any other sending country and Mexicans have historically been among the least likely LPRs to naturalize. Among LPRs admitted between 1973-85, the overall naturalization rate through 2003 was 60 percent, but 70 percent for LPRs from Asian countries and 40 percent for LPRs from

Table 4.  
**Country of Birth of Estimated Legal Permanent Resident Population: 2003**

Country of birth <sup>1</sup>	All legal permanent residents		Legal permanent residents eligible to naturalize	
	Number (in millions)	Percent	Number (in millions)	Percent
Total	11.5	100.0	7.9	100.0
Mexico	3.1	27.0	2.4	30.2
Philippines	0.5	4.5	0.3	4.1
India	0.4	3.9	0.2	2.7
China	0.4	3.7	0.2	2.7
Dominican Republic	0.4	3.6	0.3	4.1
Vietnam	0.4	3.1	0.2	3.1
Canada	0.3	2.7	0.2	3.1
El Salvador	0.3	2.6	0.2	2.4
Korea	0.3	2.5	0.2	2.7
Cuba	0.3	2.5	0.2	2.7
United Kingdom	0.3	2.2	0.2	2.6
Jamaica	0.2	2.1	0.2	2.2
Haiti	0.2	1.8	0.1	1.6
Germany	0.2	1.8	0.2	2.2
Colombia	0.2	1.4	0.1	1.3
Poland	0.2	1.4	0.1	1.5
Guatemala	0.1	1.2	0.1	1.0
Japan	0.1	1.1	0.1	1.2
Pakistan	0.1	1.0	0.1	0.7
Russia	0.1	1.0	-	0.6
Peru	0.1	1.0	0.1	0.9
Ukraine	0.1	1.0	-	0.6
Iran	0.1	0.9	0.1	0.8
Nicaragua	0.1	0.9	-	0.6
Ecuador	0.1	0.9	0.1	0.8
Taiwan	0.1	0.8	0.1	0.7
Italy	0.1	0.8	0.1	1.0
Guyana	0.1	0.7	0.1	0.7
Ireland	0.1	0.7	0.1	0.9
Bosnia and Herzegovina	0.1	0.7	-	0.3
Honduras	0.1	0.6	0.1	0.6
Trinidad and Tobago	0.1	0.6	-	0.6
Laos	0.1	0.6	0.1	0.9
Thailand	0.1	0.6	0.1	0.7
Portugal	0.1	0.6	0.1	0.8
Hong Kong	0.1	0.6	-	0.5
Brazil	0.1	0.6	-	0.5
Nigeria	0.1	0.6	-	0.4
Soviet Union (former)	0.1	0.5	0.1	0.6
Cambodia	0.1	0.5	-	0.6
Bangladesh	0.1	0.4	-	0.3
Other	1.6	0.1	1.0	0.1
Unknown	-	0.4	-	0.4

Note: Column entries may not sum to total due to rounding. - Value of figure is less than 50,000.

<sup>1</sup>Countries with estimated legal permanent resident population of 50,000 or more.

Source: U.S. Department of Homeland Security, Office of Immigration Statistics

<sup>1</sup> Calculated using technical documentation for the March 2003 Current Population Survey (U.S. Bureau of the Census, 2003).

Mexico and European countries (Office of Immigration Statistics, unpublished tabulations, 2004).

The leading countries of origin of the LPR population eligible to naturalize are very similar to the total LPR population. The rankings for India and the People's Republic of China are somewhat lower among the LPR population eligible to naturalize. Legal immigration among both the Chinese and Indians increased substantially in recent years so that a disproportionate number of LPRs from these countries were not eligible to naturalize in 2003. India surpassed the People's Republic of China in 2001 as the second leading country of birth of legal immigrants behind Mexico (2003 Yearbook of Immigration Statistics, 2004).

### State of Residence

The data in Table 5 show the estimated LPR population by state of residence in 2003 for states with an estimated 50,000 or more LPRs. Because the data for most of the population are based on residence when admitted for permanent residence, the relative rankings for most states are probably more accurate than the actual LPR estimates by state.

California and New York were the leading states of residence of the estimated LPR population in 2003. An estimated 3.3 million (29 percent) lived in California and 1.5 million (13 percent) lived in New York. Other leading states of residence of LPRs included Texas, Florida, New Jersey, and Illinois. These six states represented 69 percent of the total LPR population in 2003. The top 10 states, which also include Massachusetts, Virginia, Washington, and Pennsylvania, accounted for 77 percent of the LPR population. The top states of residence of the estimated LPR population and population eligible to naturalize were generally the same.

### NEXT STEPS

Estimates of the LPR population and the LPR population eligible to naturalize are updated annually by the Office of Immigration Statistics. The assumptions underlying the estimates will be re-evaluated and revised as appropriate.

Table 5.

**State of Residence of Estimated Legal Permanent Resident Population: 2003**

State of residence <sup>1</sup>	All legal permanent residents		Legal permanent residents eligible to naturalize	
	Number (in millions)	Percent	Number (in millions)	Percent
Total	11.5	100.0	7.9	100.0
California	3.3	28.6	2.3	29.7
New York	1.5	13.1	1.1	13.7
Texas	1.1	9.5	0.8	10.2
Florida	1.0	8.5	0.6	8.2
New Jersey	0.5	4.8	0.4	4.4
Illinois	0.5	4.6	0.4	4.6
Massachusetts	0.3	2.5	0.2	2.3
Washington	0.2	2.0	0.2	1.9
Virginia	0.2	1.9	0.1	1.6
Pennsylvania	0.2	1.7	0.1	1.6
Michigan	0.2	1.7	0.1	1.6
Maryland	0.2	1.7	0.1	1.4
Arizona	0.2	1.6	0.1	1.7
Georgia	0.1	1.3	0.1	1.1
Connecticut	0.1	1.1	0.1	1.1
Ohio	0.1	1.1	0.1	1.0
Colorado	0.1	1.0	0.1	0.9
Minnesota	0.1	0.9	0.1	0.8
North Carolina	0.1	0.9	0.1	0.7
Oregon	0.1	0.9	0.1	0.8
Hawaii	0.1	0.8	0.1	0.9
Nevada	0.1	0.7	-	0.6
Puerto Rico	0.1	0.6	0.1	0.8
Wisconsin	0.1	0.6	-	0.6
New Mexico	0.1	0.5	-	0.6
Missouri	0.1	0.5	-	0.4
Indiana	0.1	0.4	-	0.4
Other	0.7	5.8	0.4	5.6
Unknown	0.1	0.6	0.1	0.9

Note: Column entries may not sum to total due to rounding. - Value of figure is less than 50,000.

<sup>1</sup>States with estimated legal permanent resident population of 50,000 or more.

Source: U.S. Department of Homeland Security, Office of Immigration Statistics



### REFERENCES

Ahmed, Bashir and J. Gregory Robinson, 1994. "Estimates of Emigration of the Foreign-Born Population: 1980-1990." Technical Working Paper No. 9, U.S. Bureau of the Census, Washington, DC.

Fix, Michael, Jeffrey S. Passel and Kenneth Sucher, 2003. "Trends in Naturalization." Immigrant Families and Workers Brief No. 3, Urban Institute, Washington, DC.

Hoefler, Michael D., 1996. "State Population Estimates: Legal Permanent

Residents and Aliens Eligible to Apply for Naturalization", U.S. Immigration and Naturalization Service, Washington, DC, [uscis.gov/graphics/shared/aboutus/statistics/lprest.htm](http://uscis.gov/graphics/shared/aboutus/statistics/lprest.htm).

Mulder, Tammany J., Betsy Guzmán, and Angela Brittingham, 2002. "Evaluating Components of International Migration: Foreign Born Emigrants." Population Division Working Paper No. 62, U.S. Bureau of the Census, Washington, DC.

National Center for Health Statistics, 1997. U.S. Decennial Life Tables for 1989-91, Vol. 1, No. 1. Hyattsville, Maryland, U.S. Government Printing Office.

---

Passel, Jeffrey S. and Rebecca L. Clark, 1998. "Immigrants in New York: Their Legal Status, Income and Taxes." Urban Institute, Washington, DC.

Rytina, Nancy, 2004. "Estimates of the Legal Permanent Resident Population and Population Eligible to Naturalize in 2002." Office of Immigration Statistics, U.S. Department of Homeland Security, [uscis.gov/graphics/shared/aboutus/statistics/prest2002.pdf](http://uscis.gov/graphics/shared/aboutus/statistics/prest2002.pdf).

U.S. Bureau of the Census. 2002. "Source and Accuracy of the Data for the March 2002 Current Population Survey, Appendix G, Technical Documentation." U.S. Bureau of the Census, Washington, DC.

Warren, Robert, 2003. "Estimates of the Unauthorized Immigrant Population Residing in the United States: 1990-2000." Office of Immigration Statistics, U.S. Department of Homeland Security, [uscis.gov/graphics/shared/aboutus/statistics/illegals.htm](http://uscis.gov/graphics/shared/aboutus/statistics/illegals.htm).

\_\_\_\_\_. 2003a. "Detailed Methodology for Annual Estimates of the Unauthorized Immigrant Population Residing in the United States: 1990 to 2000", Office of Immigration Statistics, U.S. Department of Homeland Security, unpublished manuscript.

Warren, Robert and Ellen P. Kraly, 1985. "The Elusive Exodus: Emigration from the United States," *Population Trends and Public Policy*, Number 8, Population Reference Bureau, Washington, DC.

Office of Immigration Statistics, 2004. *2003 Yearbook of Immigration Statistics*, Office of Immigration Statistics, U.S. Department of Homeland Security, [uscis.gov/graphics/shared/aboutus/statistics/ybpage.htm](http://uscis.gov/graphics/shared/aboutus/statistics/ybpage.htm)



#### **FOR MORE INFORMATION**

Visit the Office of Immigration Statistics Web page at [uscis.gov/graphics/shared/aboutus/statistics/index.htm](http://uscis.gov/graphics/shared/aboutus/statistics/index.htm).