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Estimates of the Legal Permanent Resident Population and Population Eligible to Naturalize in 2002

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Introduction

This paper presents estimates of the legal permanent resident (LPR) population living in the United States and of the population eligible to naturalize in 2002 by year of admission for permanent residence, country of origin, and state of residence. The methodology used for the estimates relies primarily on a database created by the Office of Immigration Statistics (OIS) from administrative records of the former Immigration and Naturalization Service (INS) on LPRs admitted for permanent residence between 1973 and 2002.

The results are consistent with estimates derived by other researchers. For 2002, the OIS estimates of the LPR population and population eligible to naturalize are 11.4 million and 7.8 million, respectively compared with 12.2 million and 7.9 million, respectively, according to estimates by Jeffrey Passel (Fix, Passel and Sucher, 2003). For 2000, the OIS estimate of the LPR population for the 50 states and the District of Columbia was 10.8 million compared to an estimate of 10.2 million provided by Robert Warren based on the methodology employed for estimates of the unauthorized immigrant population in 2000 (Warren, 2003).

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; Hoefler, 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 1973-2002 (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 1973-2002

Data on LPRs admitted for permanent residence and on LPRs who naturalized between January, 1973 and September, 2002 were obtained from application based case tracking systems of the U.S. Citizenship and Immigration Services (USCIS), of the Department of Homeland Security. (USCIS was formerly part of the Immigration and Naturalization Service.) 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 matched records left a base population of records of LPRs admitted for permanent residence between 1973-2002 who had not naturalized as of the end of September, 2002. 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, 2002 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 citizen-

ship 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 2002 of LPRs who were under age 16 when admitted compared to LPRs who were older, regardless of the year of admission. For example, among LPRs admitted for permanent residence between 1973-88, the naturalization rate through 2002 for 16 year olds ranged between 55-65 percent but was no higher than 39 percent for LPRs ages 2-4 years old when admitted. For the present estimates, it was assumed that the cumulative "citizenship" rate (derivative citizenship plus naturalization) through 2002 for LPRs who were under age 16 when admitted was the same as the rate for LPRs admitted during the same year who were age 16. (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 2002 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 difficult. 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 1900-90, 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 had little numeric impact on either the overall estimate for 2002 or on the estimates of LPRs from countries from which many

refugees and asylees come (e.g., Cuba or Vietnam). Note that aliens who abandoned their LPR status are assumed to have emigrated.

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 2002 Current Population Survey (CPS). It was assumed that all noncitizens in 2002 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 year of admission for permanent residence since most LPRs admitted 30 or more years ago came directly from abroad.

The 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, about 206,000 LPRs from USCIS administrative records (adjusted for mortality and emigration to 2002) who reported entering the United States before 1973 were excluded 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 5-year residency requirement for naturalization. Spouses of U.S. citizens are eligible in three years. There are several other exceptions to the 5-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 4 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 2 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 3 years after approval of their application for adjustment.

Findings

Overview

The entries in Table 1 show the contribution of each data source and adjustment to the final estimated LPR population of 11.4 million in 2002. According to USCIS administrative records, 21.5 million LPRs were admitted to the United States between 1973-2002. By 2002, that number had been reduced by nearly one-half to an estimated 10.3 million. Naturalization accounted for the largest reduction. More than 7 million LPRs admitted between 1973-2002 (34 percent) had naturalized by 2002. An estimated .6 million (3 percent) had derived citizenship before becoming 18 years old and another 3.2 million (15 percent) had died or emigrated. An estimated 3.6 million LPRs in 2002 had not met the residency requirement for naturalization leaving 7.8 million eligible to naturalize.

Table 1. Components of Estimated LPR Population: 2002

Category	Millions	Percent	Percent
+ LPRs 1973-2002 (USCIS/INS)	21.5	100	
- Naturalization (N-400)	7.4	34	
- Derivative citizenship	.6	3	
- Emigration and mortality	3.2	15	
= LPRs 1973-2002 survived to 9/2002	10.3	48	90
+ LPRs Pre-1973 (CPS)	1.2		10
= Estimated LPR population 9/2002	11.4		100
- LPRs not eligible to naturalize 9/2002	3.6		
= Estimated LPR population eligible to naturalize 9/2002	7.8		

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 2002 LPR estimate (10.3 million or 90 percent of the total 11.4 million). A 25 percent error in either direction in the estimate of these components combined (.6 for derivative citizenship + 3.2 for emigration and mortality = 3.8 million) would increase/decrease the total estimated LPR population by 1 million.

The estimates derived from the March 2002 CPS (1.2 million or about 10 percent of the total 11.4 million) are subject to both sampling and nonsampling error. The estimated sampling error at the 90 percent confidence level for a 1.2 million estimate is plus or minus .2 million.¹ 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 nonsampling 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 2002 was admitted relatively recently for permanent residence. Two-thirds (67 percent) were admitted in 1990 or later (see Table 2). Close to one-half (46 percent) were admitted between 1995-2002. Only 16 percent were admitted before 1980. Examination of the naturalization rates of LPRs admitted for permanent residence during the 20 year period 1973-92 showed that 30-40 percent of LPRs naturalized within the first 10 years of admission.

Table 2. Year of Admission for Permanent Residence of Estimated LPR Population: 2002

Year admitted	All LPRs		LPRs eligible to naturalize	
	Thousands	Percent	Thousands	Percent
Total	11,451	100	7,842	100
Before 1960	268	2	268	3
1960-69	531	5	531	7
1970-79	983	9	983	13
1980-89	1,888	16	1,888	24
1990-94	2,441	21	2,441	31
1995-99	2,664	23	1,731	22
2000-02	2,676	23	-	-

- Represents zero.

Country of birth

Estimates of the LPR population by country of birth are displayed in Table 3 for countries with at least 50,000 LPRs. Mexico was the leading country of origin. An

¹ Calculated using technical documentation for the March 2002 Current Population Survey (U.S. Bureau of the Census, 2002).

estimated 3.1 million (27 percent) LPRs came from Mexico. Other leading countries of birth include the Philippines, India, People's Republic of China, the Dominican Republic, Vietnam, Canada, Korea, Cuba, and El Salvador. An estimated 56 percent of all LPRs in 2002 were born in these 10 countries. The 44 countries displayed in Table 3 represent 87 percent of the estimated LPR population.

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 2002 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 2002 was 55-60 percent, but close to 70 percent for LPRs from Asian countries and less than 45 percent for LPRs from Mexico and European countries.

The leading countries of origin of the LPR population eligible to naturalize are very similar. 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 grew rapidly since 1999 so that a disproportionate number of LPRs from these countries were not eligible to naturalize in 2002. India surpassed the People's Republic of China in 2001 as the second leading country of birth of legal immigrants behind Mexico (*2001 Statistical Yearbook of the Immigration and Naturalization Service*, 2002).

State of residence

The data in Table 4 show the estimated LPR population by state of residence in 2002 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 2002. An estimated 3.1 million (29 percent) lived in California and 1.6 million (14 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 2002. 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 will be updated annually by the Office of Immigration Statistics. The assumptions underlying the estimates will be re-evaluated and revised as appropriate. Methods for estimating the internal migration of LPRs will also be investigated.

Table 3. Top Countries of Birth by Estimated LPR Population: 2002
(Countries with estimated LPR population of 50,000 or more)

Country of birth	LPRs		LPRs eligible to naturalize	
	Number (000)	Percent	Number (000)	Percent
Total	11,451	100.0	7,842	100.0
Mexico	3,108	27.1	2,364	30.1
Philippines	511	4.5	329	4.2
India	441	3.9	217	2.8
China, People's Republic	408	3.6	201	2.6
Dominican Republic	405	3.5	322	4.1
Vietnam	368	3.2	259	3.3
Canada	323	2.8	257	3.3
Korea	301	2.6	227	2.9
Cuba	286	2.5	208	2.7
El Salvador	278	2.4	178	2.3
United Kingdom	263	2.3	209	2.7
Jamaica	228	2.0	164	2.1
Haiti	211	1.8	125	1.6
Germany	185	1.6	155	2.0
Colombia	165	1.4	105	1.3
Poland	163	1.4	118	1.5
Guatemala	127	1.1	80	1.0
Japan	122	1.1	94	1.2
Pakistan	114	1.0	53	.7
Iran	111	1.0	72	.9
Peru	109	1.0	67	.9
Russia	109	.9	40	.5
Ukraine	108	.9	46	.6
Italy	105	.9	96	1.2
Nicaragua	104	.9	44	.6
Ecuador	102	.9	66	.8
Taiwan	97	.8	57	.7
Guyana	81	.7	53	.7
Honduras	78	.7	53	.7
Bosnia-Herzegovina	76	.7	17	.2
Trinidad and Tobago	76	.7	52	.7
Laos	76	.7	72	.9
Thailand	74	.6	60	.8
Brazil	70	.6	41	.5
Hong Kong	69	.6	42	.5
Portugal	68	.6	62	.8
Ireland	67	.6	62	.8
Nigeria	64	.6	32	.4
Soviet Union, former ¹	62	.5	53	.7
Yugoslavia, former ¹	57	.5	37	.5
Cambodia	55	.5	47	.6
France	54	.5	40	.5
Bangladesh	52	.5	22	.3
Romania	51	.4	26	.3
Subtotal	9,982	87.2	6,925	88.3
Other	1,429	12.5	883	11.3
Unknown	41	.4	34	.4

¹ Country name when LPR admitted for permanent residence.

Table 4. Top States of Residence by Estimated LPR Population: 2002
 (States with estimated LPR population of 50,000 or more)

State of residence	LPRs		LPRs eligible to naturalize	
	Number (000)	Percent	Number (000)	Percent
Total	11,451	100.0	7,842	100.0
California	3,315	29.0	2,355	30.0
New York	1,556	13.6	1,118	14.3
Texas	1,087	9.5	800	10.2
Florida	928	8.1	593	7.6
New Jersey	545	4.8	350	4.5
Illinois	518	4.5	348	4.4
Massachusetts	289	2.5	190	2.4
Virginia	222	1.9	133	1.7
Washington	210	1.8	132	1.7
Pennsylvania	197	1.7	126	1.6
Maryland	194	1.7	114	1.4
Michigan	187	1.6	114	1.5
Arizona	186	1.6	133	1.7
Georgia	146	1.3	82	1.0
Connecticut	136	1.2	93	1.2
Ohio	121	1.1	76	1.0
Colorado	105	.9	67	.9
Minnesota	100	.9	62	.8
Oregon	97	.8	62	.8
North Carolina	94	.8	53	.7
Hawaii	90	.8	67	.9
Nevada	84	.7	51	.6
New Mexico	64	.6	49	.6
Wisconsin	59	.5	37	.5
Missouri	57	.5	32	.4
Subtotal	10,589	92.5	7,236	92.3
Other	791	6.9	535	6.8
Unknown	71	.6	71	.9

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