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ABSTRACT

Drawing on the 1982 English Language Proficiency Survey, where the English skills of students from language-minority households were compared with the skills of students from homes where only English was spoken, and on special tabulations of the 1980 census, this report presents estimates of national and state levels of the English proficiency of children from families where a language other than English is spoken. Approximately one-third of the school age children from homes where another language is used some of the time are distinctly limited in English. The numbers of limited-English-proficient (LEP) children vary substantially among states and across language groups. Variables generating model-based predictions of language-minority students' English proficiency included household education level, family income, nativity and recency of immigration, and parental judgement of children's abilities. Estimates based on the model indicated that there were significantly more LEP children in the United States than were estimated or identified by state education agencles. (JL)



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NUMBERS OF LIMITED ENGLISH PROFICIENT CHILDREN: NATIONAL, STATE, AND LANGUAGE-SPECIFIC ESTIMATES

Based on the 1982 English Language Proficiency Survey and Special Tabulations of the 1980 Census

U.S. Department of Education Office of Planning, Budget and Evaluation

April 1987

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I. INTRODUCTION

Overview

Drawing on the 1982 English Language Proficiency Survey (ELPS) and special tabulations of the 1980 Census, this report presents estimates of numbers and proportions of children from families where a non-English language is spoken (language minority families) and who are limited English proficient (LEP). The report provides estimates at the national and State levels and for selected languages.

About one-third of all school-age children from homes where some use is made of a non-English language are distinctly limited in English proficiency. Proportions of limited English proficient children vary substantially across language groups and among States, and limited English proficient children tend to be concentrated in just a few States, although the specific pattern of concentration is different for some language groups.

The data presented represent estimates as of 1980. While most of the patterns revealed in these estimates are likely to still be valid in 1987, there are important exceptions to bear in mind. For example, most children from homes where an Indo-Asian language is spoken (Vietnamese, Laotian, Cambodian and Thai) were recent immigrants in 1980, and this factor contributes heavily to the estimate of a 70 percent LEP rate for that group in 1980. Seven years later, the rate is likely to be substantially lower.

Another important factor is growth in the school-age language-minority population. Between April 1980 (the Census reference date) and October 1982 (ELPS), we estimate this population increased by a little over 7 percent, or from roughly 5 million to 5.3 million. Estimates of net growth from 1980 to 1987 are a matter of speculation since they depend largely on assumptions about the net migration of population from Mexico.

Methodologica? Concerns

How the Estimates were Generated. The 1982 English Language Proficiency Survey administered English language proficiency tests to 8,800 school-age children, 4,000 in language-minority households and the remaining 4,800 in homes where only English is spoken. Based on score distributions for English-only children, English proficiency cutoffs were estimated for each single year of age, 5 through 17. By means of multiple regression analysis of the data from language-minority children, models were then developed for predicting differential probabilities of scoring below these proficiency cutoffs, based on characteristics available in the 1980 Census.

Special tabulations of the 1980 Census data were then obtained which "profiled" each of the State and language-specific groups on the independent variables of the predictive models. By applying the models to these data-profiles, synthetic estimates were obtained of the numbers and proportions of language-minority children whose proficiency in English could be expected to fall below the specified percentile cutoffs.



4

The ELPS Sample. The ELPS sample was drawn from 1980 Census household records, and the sample was apportioned (or stratified) with a view to estimating specific language differences accurately. As a group, language-minority households were over-sampled by a factor of about 5, but within this group Spanish language households were undersampled in order to develop reliable estimates for each of the other 12 languages. Because of this allocation of the sample, it is possible to estimate language-specific differences in LEP rates. Since the primary purpose of ELPS was to identify a broad range of factors predictive of actual English language proficiency, the resulting loss of precision in direct estimates based on the ELPS data was judged to be acceptable.

Test of English Proficiency Used in ELPS.—The Language Measurement and Assessment Inventory (LM&AI) used in ELPS was developed earlier for the 1978 Children's English and Services Study. The LM&AI included a test for each age level from age 5 through 14 (ten in all). In ELPS, the test for 14 year-olds was also given to youths ages 15 through 17.

Census interviewers administered the 20-25 minute tests in the home at the same time that information on the household was obtained. For younger children, most of the test was orally administered, using pictures and flash cards to assess recognition and English vocabulary. At older ages, the test was exclusively written, with items designed to evaluate comprehension, punctuation, understanding of idioms, and mastery of syntax.

The Standard of English Proficiency Used in Developing Estimates. The Department believes bilingual education services should be targeted on children from homes where a non-English language is usually spoken and whose English is sufficiently limited that they could not be expected to make normal progress in school without special help. For native English speaking children, performance below the 20th percentile on tests of reading or math is often considered by educators to be indicative of the need for compensatory education. In fact, substantial numbers of language-minority children participate in compensatory education programs such re Chapter 1. The Department considers it appropriate to apply the same star d of English proficiency in determining need for special bilingual education services among children genuinely dependent on a non-English language.

Factors that Predict Performance on the Test. In developing the model for estimating performance on the test (and thus numbers of children by State and language), the following variables are the principal ones used. These variables generated model-based predictions of whether a language-minority child was likely to score below the specified standard of English proficiency:

- o Education of household or family head.
- o Family income.
- o Child's relative progress in school——a comparison of the child's age with the grade in which the child was enrolled at the time of the survey.
- o Nativity and recency of immigration.



- o Origin of Spanish language households--whether native U.S. or Cuban, Puerto Rican, Mexican, or other foreign origin.
- o Household respondent's judgments of how well the child and the household head speak English--"very well" and "well" versus "less than well," including "not at all."
- o <u>Membership in specific language groups</u>—selected language groups, including American Indian, which exhibit significantly above or below-average LEP rates when controlling for other variables in the predictive equation.

Why the Estimates of LEP Children Must be Described as Synthetic. Numbers of language-minority children are directly available from published tabulations of the 1980 Census data, but our estimates of LEP children are synthetic because they are generated by applying findings from tested children in ELPS to children represented in the 1980 Census who were never tested. In this respect our estimates may be understood as an answer to the following hypothetical question:

Assuming that the factors found to be predictive of limited English proficiency within the 1982 ELPS data were uniformly operative in 1980, how would the language-minority children in each of the 714 combinations of 51 States (including D.C.) and 14 home languages have performed on the same tests?

Detailed synthetic estimates are vulnerable to two types of errors: some of the factors that influence the characteristic being estimated may not have been identified (errors of omission in the predictive model), and certain of the identified factors may operate differently within particular subgroups (errors attributable to the heterogeneity of the population being estimated).

For example, the model predicts low score rates in cases where the household respondent (usually a parent) expressed the judgment that the child speaks English "not well." Some parents judge their children by relatively lenient standards while other parents are more exacting. If there were large differences in this respect among State and language-specific subg oups -- differences not systematically correlated with other predictive variables in our model (such as the parents' educational attainment) -- our estimates of LEP rates would be correspondingly distorted. In fact, however, much of the variance in severity of parental judgment is captured by other variables in our model, including specific language differences and, for Spanish speakers, the Spanish origin variable.

II. ESTIMATES OF THE NUMBERS OF LIMITED ENGLISH PROFICIENT CHILDREN BY HOME LANGUAGE

Table 1 provides direct estimates from the 1980 Census of the number of language-minority children in each language group.

As the table shows, children from Spanish-language homes outnumber the next largest group (French) by a factor of 14. This means that the accuracy of our estimates of total LEP children for individual States is largely determined by the success of our model in predicting the performance of Spanish-language children. Of interest in this connection is the Spanish origin variable (Mexican/Puerto Rican/Cuban/Other) in our predictive model. Relatively large and highly significant differences were observed in ELPS among tested Spanish-language children by type of origin, and these differences contribute to the probable accuracy of the State-specific estimates.

Number of School-Age Language-Minority Children
by Language Group, U.S., 1980

Language	Number	Percent of Total
Spanish	3,113,100	62.8%
French	222,600	4.5%
Italian	215,000	4.3%
German	184,700	3.7%
Chinese	133,600	2.7%
Filipino	130,700	2.6%
Greek	78,400	1.6%
Portugese	75,700	1.5%
Korean	66,000	1.3%
Polish	61,600	1.2%
Japanese	44,100	.9%
Amer.Indian languages	109,000	2.2%
Indo-Asian languages	91,300	1.8%
Other	429,100	8.7%
Total, all languages	4,955,000	100%

SOURCE: Special tabulation of the 1980 Census (15 percent sample data).

Note: Children ages 5-17 are counted as language-minority if the Census reference person (generally the household head) and one other household member (not necessarily the child in question) are reported to speak a non-English language.

Practical Limitations On the Amount of Detail. The U.S. Census Bureau recognizes about 400 different languages, and Census publications provide data for up to 70 language groups. In this report, we present estimates for the 11 largest language groups, plus two composite categories and a residual. Considering the tendency for language groups to cluster in particular States, even 14 language categories is probably excessive. For example, the smallest of our specific language groups (Japanese) is represented by just 44,000 school-age children, and 60 percent of these children are located in just three states -- California, Hawaii, and New York. This means the average number of Japanese children represented in the Census Bureau's sample in each of the remaining states is about 50, a perilously small sample for applying a complex model to estimate the number of these children who might have tested out as limited in English.

State coordinators of bilingual education programs might desire greater detail. For example, Arabic, Turkish, and other Middle-Eastern and African languages are included in the large "all other" residual category. In some States, the residual is estimated to account for more than a quarter of all LEP children. The Indo-Asian category poses similar problems, since it embraces four or five distinct languages and accounts for significant fractions of the LEP population in ten States (see Appendix Table 5). Some 200 languages are subsumed under the American Indian category. Finally, one of the "specific" languages included in our analysis -- Filipino -- is arguably a collection of discrete tribal languages. Given statistical constraints, however, such detailed estimates cannot be provided.

Dependence on a Non-English Language for Language Minority Children. A common mistake among casual readers of reports on language minority children is to assume that all such children make use of the non-English "home" language (i.e., that they commonly speak and are spoken to at home in that language.) As a result of a series of specific language questions in the ELPS survey, we know that this is not true, and the detail is sufficient to construct an approximate scale of dependence on the child's "home" language. We put home in quotes here because by ordinary standards, the child's home language is the one usually spoken. As Table 2 shows, however, for 40 percent of language-minority children, the usual language spoken at home is English (Line 4: 100% - 60.1% = 39.9%).

Relative to the 11 indicators in Table 2, the questions of particular interest in assessing non-English language dependency are these:

- o Does the child speak the non-English language at home? As line 2 shows, 19 percent do not.
- o <u>Is the non-English language the one usually spoken at home?</u> As already noted (line 4), for 40 percent of language-minority children, only secondary use is made of the non-English language.

Table 2

Eleven Non-English Language Indicators, Their Prevalence Among Language-Minority Children, and LEP Rates under the 20th Percentile Associated with Each of these Indicators

(English Language Proficiency Survey, 1982)

Non	-English Language Indicators	Percent of all language minority children	Percent scoring under the 20th percentile
	The non-English language (N.E.L.) is the usual or second-often spoken household language		45%
2.	Child speaks N.E.L. at home	81.1%	49%
3.	N.E.L. is the mother tongue (age 14-17) or N.E.L. is the usual household language (5-13)	64.6%	52%
4.	N.E.L. is usual household language (all ages, 5-17)	60,1%	53% -
5.	Household head speaks N.E.L. with children in the household	59.3%	54%
6.	Child born outside U.S	25.2%	_57%
7.	English not a household language	15.8%	72%
8.	Child speaks N.E.L. with friend	13.8%	70%
9.	Child entered U.S. in last 5 years	11.5%	69%
10.	Cnild judged to speak English "not well" (by household respondent)	~ 5.7%	94%
11.	Child judged to speak English "not at all" (by household responden	t)7%	98%

SOURCE: Special tabulation of the English Language Proficiency Survey file, OPBE/PES/PTAD, November, 1985



o <u>Is English not often used in the home?</u> This is the case for just 16 percent of the language-minority children (line 7). Thus, for 84 percent of the children, English is at least a second often-spoken household language.

Just 6 percent of all language-minority children are judged by the household respondent -- usually a parent -- to speak English "less than well" (Line 10).

Developing Estimates by State and for Language Groups. The 1980 Census did not include questions about usual and secondary languages, but only whether each individual member spoke a language other than English at home (as opposed to only speaking English). In consequence, when developing the estimates by State and language, which use 1980 Census data, we have had to employ a different definition of language minority. In place of detailed information on language dependency, we relied on ELPS for estimates of the proportions of language-minority children who are both limited in English (using the 20 percentile standard already discussed) and genuinely dependent on the non-English home language). In both cases, we have striven for equivalence of results. Specifically:

- o <u>Definition of Language Minority</u>. Our 1980 Census definition of language minority (children in households where the head and at least one other member is reported to make use of a non-English language) yields approximately the same population estimates as would have been obtained if information on usual or second household had been available. Direct evidence on this point comes from ELPS, since both types of questions were asked in that survey.
- Limited Proficiency in English and Dependence on a Non-English Language. The Department believes that bilingual education services should be targeted on children with a significant degree of dependence on a non-English language defined as at least five non-English language indicators as set forth in Table 2 above. As the table shows, 59.3 percent of all language minority children meet this standard of dependence, and 54 percent of these children are LEP under the recommended 20th percentile standard of English proficiency.

As applied to the population of all language-minority children, this yields a net LEP rate of 32 percent (54 percent of 59.3 percent). Our detailed LEP estimates for the 714 combinations of 14 languages and 51 States yield a national total of 1,752,000 children. This amounts to 35 percent of the Census-estimated language-minority population, or slightly over the benchmark figure of 32 percent estimated from ELPS.

Estimated Numbers and Proportions of Limited-English-Proficient Children by Home Language. Table 3 displays synthetic estimates based on the application of our predictive model from ELPS to special tabulations of the 1980 Census. Note that expected LEP rates vary widely across the 14 language groups, from a low of 14 percent to a high of 70 (Italian versus Indo-Asian). In addition to language-specific effects observed in the ELPS data (and incorporated into our predictive model), these rates reflect differences in the statistical "profiles" of the various groups on the other Census variables in our model, such as nativity and recency of immigration.

Tab?e 3

Numbers and Proportions of Language Minority Children
Who Are Limited in English by Home Language

	Total Language Minority	Limited English Proficient	LEP as Proportion of Total
Spanish	3,113,000	1,271,000	.41
French	223,000	51,000	.23
Italian	215,000	30,000	.14
German	185,000	37,000	•20
Chinese	134,000	38,000	.28
Filipino	131,000	35,000	•27
Greek	78,000	14,000	.18
Portugese	76,000	24,000	•32
Korean	66,000	17,000	.26
Polish	62,000	- 11,000	.17
Japanese	44,000	8,000	.19
Amer.Indian languages	109,000	57,000	•52
Indo-Asian languages	91,000	64,000	•70
Other	429,000	96,000	.22
All	4,955,000	1,752,000	•35

SOURCE: U.S. Department of Education -- estimates based on the application of a model (derived from results of the 1982 English Language Proficiency study) to special tabulations of the 1980 Census data.



III. GEOGRAPHIC DISTRIBUTION OF LIMITED-ENGLISH-PROFICIENT CHILDREN

Evidence of Concentration. Table 4 shows that the distribution of LEP children by State is strongly skewed: at the high end three States account for 61 percent of all LEP children, while the 31 States with the fewest contribute only 7 percent to the national total.

Table 4 Geographic Concentration of Limited-English Proficient Children U.S., 1980

State Share of national total	Number of States	Percent share	Number of LEP children
10 percent of more	3 <u>1</u> /	61%	1,078,000
2 to 5 percent	6 <u>2</u> /	20%	354,000
1/2 to 1.9 percent	11 <u>3</u> /	12%	202,000
Under 1/2 percent	31 .	7%	118,000

SOURCE: U.S. Department of Education - estimate based on the application of a model (derived from results of the 1982 English Language Proficiency study) to special tabulations of the 1980 Census data.

1/ California, New York, and Texas Z/ Arizona, Florida, Illinois, Massachusetts, New Jersey and New Mexico

3/ Colorado, Connecticut, Hawaii, Indiana, Louisiana, Michigan, Ohio,

Pennsylvania, Virginia, and Wisconsin.

The reader may note that there is a dissing interval in the "State shares" categories; no State has a share amounting to from 5 to 10 percent of the national total. Illinois, ranks fourth with 4.6 percent, and New York, the third ranking State has 12.4 percent, preceded by Texas with 21.6 and California with 27.5 percent at the top of the list. Totals for all the States are presented in Appendix Table 2.



Language Composition of LEP Children in the Nine Largest States. The Spanish Fanguage group accounts for 72.6 percent of all LEP children. In Table 5, we see that the Spanish group is predominant within all nine of the largest States.

Table 5

Estimated Language Composition of Limited English Proficient Children for States with 2 percent or more of the National Total, 1980

	AZ	CA	FL	<u>IL</u>	MA	NJ	NM	NY	TX
Spa ni sh	64%	81%	80%	74%	42%	72%	68%	_73%	95%
French	æ in		5	1	9 {	1		3	
Italian			1	2	6	6		5	
German		1	2	2	1	2		1	
Chinese		3	1	2	3	1	<u></u>	4	
Filipino		4	1	2		2		1	
Greek			1	2	3	2	-	2	
Portuguese		1			25	4	-	1.	
Korean		1		1	1	1		1	
Polish				3	1	2		1	
Japanese		1				1			
Amer. Indian	33						30		
Indo-Asian	1	4	3	3	2	1	1	1	2
<u>Other</u>	1	4	4	7	5	6_		8	1
All languages	100%	100%	100%	100%	100%	100%	100%	100%	100%
Numbers of LEP children (in 000s)	63	482	55	81	37	69	49	217	379

SOURCE: U.S. Department of Education -- estimates based on the application of a model (derived from results of the 1982 English Language Proficiency study) to special tabulations of the 1980 Census data.

Texas ranks first in this respect with 95 percent of all LEP children in the State belonging to the Spanish language group. Arizona and New Mexico are distinguished by substantial fractions of American Indian children (33 and 30 percent, respectively) and Massachusetts is distinguished by Portugese children who amount to one quarter of all LEP children in the State. For detail on other States, see Appendix Table 4.

Patterns of Geographic Concentration by Language. Table 6 extends the list of States to include an additional five with appreciable shares of particular languages, and expresses the LEP children in each State as a percent of the total U.S. language group. Thus, for example, Table 6 tell us that the Portuguese children who comprise 25 percent of all LEP children in Massachusetts (from table 5 above) amount to 39 percent of all Portugese LEPs in the country.

California is clearly the standout State in this table with a predominant share of 7 of our 14 language categories. Nine States are distinguished by ten different languages within their LEP populations. Along with California, New York, Illinois, and New Jersey are especially notable in this respect. Systematic detail for ail States is presented in Appendix, Yable 5.



Geographic Distribution of Limited-English Proficient
Children by Home Language: U.S., 1980

Percent of Specified Language Groups

-	States with 10 percent of more of a language group or with at least 35,000 LEP Children (2 percent of the													ATT	
Language														Other States	
Spanish	3	31	4		5		1	4	3	12	1	1		28	. 7
French		4	6		1	34	7	2		13	1	1	2	2	27
Italian		5	2		6		7	14		39	3	7	1	1	15
German	1	7	3		5	1	1	3		7	10	7		5	50
Chinese	1	42	2	2	3		3	2		21	1	2		4	17
Filipino		48	2	19	6			3		4	1	1		2	15
Greek	1	6	3		13		8	7		30	4	5		2	21
Portugese		16	1				39	13		6		1	14		10
Korean	1	34	ĩ	4	7		1	4		9	1	4		4	30
Polish	1	2	1		21		5	11		18	4	6	1	3	27
Japanese		36	1	13	4		1	5		12	1	1		4	22
Amer. Indian	36	2							26	1				1	34
Indo-Asian	1	31	3	1	4	4	1	1	1	2	1	3		11	36
<u>Other</u>		21	2	2	6	1	2	5		18	5	7		3	28
<u>A11</u>	4	27	3	1	5	1	2	4	3	12	1	2	0	22	13

SOURCE: U.S. Department of Education -- estimates based on the application of a model (derived from results of the 1982 English Language Proficiency study) to special tabulations of the 1980 Census data.



VI. PRELIMINARY EVALUATION OF THESE ESTIMATES

Comparison with the Judgments of Language-Minority Parents. From our analysis of the ELPS data, we know that parental judgments of how well the child speaks English make a significant contribution to predicting the child's actual performance on a test of English proficiency. Nevertheless, this is merely one of many variables that figures in our predictive model, so it is a matter of some interest to compare simple tabulations of this 1980 Census question with the much more complex estimates of LEP children derived from our model. Table 7 offers such a comparison just with respect to State shares of English-limited children, and only for the nine largest States. In this connection, the first thing to observe is that the same nine States have the largest shares on both measures.

Table 7

State Shares of National Totals of Children Limited in English under Two Different Definitions: U.S., 1980

		national totals	Rank on	
	Parent's	Model-based	Parent's	Rank on
	Judgment*	LEP estimates	_Judgment*	Mode1
Arizona	2.5%	3.6%	7	6
California	31.1%	27.5%	1	1 7
Florida	3.5%	3.2%	6	7
Illinois	6.0%	- 4.6%	4	4
Massachusetts	1.8%	2.1%	8	9
New Jersey	3.8%	3.9%	5	5
New Mexico	1.6%	2.8%	9	4 9 5 8 3 2
New York	11.7%	12.4%	3	3
Texas	20.3%	21.6%	2	2
Subtotal	82.2%	81.7%		
Remainder	17.8%	18.3%		•
Total U.S.	100.0%	100.0%		
10001 000	100,0%	100,0%		
Number of				
children	653,600	1,752,400		

SOURCE: 1980 Census of Population, Vol. 1, Chapter C, and Appendix, Table 2.



^{*} Children reported in the 1980 Census to speak English *less than well, as judged by the household respondent.

At reast for the larger States, it appears from Table 7 that parents' judgments of how well the child speaks English, as reported in the 1980 Census, provide a relatively good indicator of relative shares of the LEP population. State ranks on the two measures never differ by more than one step, although the numbers from the model-based LEP estimates are two-and-a-half time higher than the numbers of children judged by parents to speak English "less than well."

Comparisons with LEP Children Identified by State Education Agencies.

Table 8 provides a comparison of the numbers of limited English proficient children reported to the U.S. Department of Education by State educational agencies with estimates by State derived from the ELPS model.

Table 8

Comparison of Numbers of Limited English-Proficient Children Identified by State Education Agencies and Estimated by Model

State	SEA reports*	Hodel-based estimates
Arizona	568,000 38,000 54,000 25,000 37,000 51,000	62,000 482,000 55,000 81,000 37,000 69,000 49,000 217,000 379,000
Top 9 States Total (Average of top 9)	1,220,000 (135,000)	1,432,000 (159,100)
Next 11 Model States** (Average of next 11)	124,000 (11,300)	202,000 (18,400)
Remaining SEA States (Average of other 22)	84,000 (3,800)	94,000 (4,300)
9 non-SEA States*** (Average of 9)	(-)	24,000 2,700)
Total, U.S.	1,428,000	1,752,000

SOURCE: U.S. Department of Education, Office of Bilingual Education and Minority Languages Affairs (compilation of State reports) and Appendix Table 2.

^{*} Latest reports available as of March, 1987. These were predominantly for the 1984-85 school year, with some for 1985-86 and a few for 1983-84.

^{**} These States are identified in the note accompanying Table 4 on page 12.

^{***} Alabama, Arkansas, Delaware, Maine, New Hampshire, North Dakota, South Carolina, Utah, and West Virginia.

There are at least two reasons why we should expect smaller numbers of LEP children from State Education Agencies: only children enrolled in public school are covered by these estimates, and very small language groups may escape notice at the school level. In contrast, our model-based estimates cover the entire age-group 5-17 without regard to school enrollment, and include even the smallest numbers of children wherever they are found in the 1980 Census.

State Education Agency estimates of LEP children are not available from every State, but none of the nine missing States is estimated by our model to have a significant number of LEP children. Once again, the same nine large States appear at the top of both lists.

With respect to estimates from large States, California is the main exception to our hypothesis that SEA-reported figures would be lower. In all other respects, however, the comparisons accord with this hypothesis: both distributions are strongly skewed, with sharply descending averages for the four groups of States on the two measures. As a group, the nine States not reporting LEP enrollments account for just 1.4 percent of the total estimated by our model.



APPENDIX



SCHOOL-AGE LANGUAGE-MINORITY CHILDREN BY STATE AND LANGUAGE

					•		*******	VODEAN	UST ING	TUDOASTA	PORTUGESE	GREEK	AMERICAN INDIAN	OTHER	TOTAL
STATE	CHINESE	SPANISH	FILIPINO	FRENCH	GERMAN	ITALIAN	JAPANESE	KUKEAN		111000011	PORTUGESE		77	1060	6575
	222	_ 1734	112	777	1272	237	129	186	49 30	489 72	36 5	204 62	9276	541	12484
AL AK	37	802	374	178	392	118 986	228 16 8	369 451	390	645	140	434	36681	2268	153394 - 4017
AZ	914	107340	413 · 47	853 330	1711 487	73	20	93	84	651	0	43 6218	63 2675	684 8 2275	1253486
AR	207 54827	1235 918430	61272	10951	19784	14162	17427	21156	1513 250	28755 1528	14041 · 46	438	841	3044	67339
. CA CO	574	53576	180	1049	3669	672 13066	704 130	768 343	3616	746	5271	2024	297	6530 1152	79086 · 5152
CT	768	33184	477 - 243	9854 113	2730 386	483	58	103	191	82	32 43	227 124	24 0	550	4118
DE DC	187 267	1871 2000	116	546	221	119	53	28 787	15 697	36 2485	847	2439	514	9761	200100
FL	1855	157773	2485	9620	5218 2247	5100 292		1036	80	697	127	488	57 13	3245 8271	16861 46334
GA	905 *207	5690 1629		1363 297	324	57	8824	2029	17	1248 177	87 78	16 87	689	777	10047
HI	3293 72	7084	24	185	600	52	111 1588	97 4977	14 12646	3411	244	10263	453	30064	246096
ĪĹ	5097	139951	9008	3407 729	11316 7591	13671 514		492	1066	909	101	1001	72 208	6600 2122	35107 10597
in	. 648 338	14622 3000		227	2226	167	118	164			26 41	315 122	139	1477	17232
IA KS	514	9204	256	392	2949	75 187		423 346	<u>i</u>	601	37	111	73	1484 2618	6443 85251
KY	168	1551		454 66506	1114 847	548		256	35		103 86	287 228		496	20950
LA	559 61	9221 337		18756	258	161	20	39 3424		92 1207	667	2465	196	9262	41051
. HE MD	2688	9195	2145	3001	3491	1989 14602		3626 844			27170	6591		10568 25646	121190 86276
HA	4240			17075 2421	2429 6982		565	1631	6750		276 43	3012 252		6329	23353
ir Mn	1973 677		341	820	5654	267		541 108	_		48	81	1273	812	5*60
MS	264	1168	215	687		190 1072		418		1031	38	473		3641 465	18±02 5499
MO	857			636 138			73	19	36		1:3 28	52 132		1402	8618
MT NE	44 71		65	168	1254	243		211 344			79	67	486	942	12307 13778
HŸ	487	784		162 40600				33	170	12	111	644 5882		704 25 620	223137
NH	127 4678			4475		29006	1555	2803	6773		9278 24	140	27743	748	141537
HH MH	20!	5 110587	7 96	304				56 6833	10788		4785	2000		78924 · 2754	. 664208 13967
NY	26869			27227 1237	, 17200 , 1745			533	79	779	45 12	916	336 897	1314	9853
HC HD	· 649			163	6645	; 18	8 8	456			314	358	315	21908	75825
OH	174	4 1917	1 1595	2141	13092 1186			1562 315	5 !	5 1494	0	9.	5 5292	1803 3405	19480 20636
OK	46			474 462	•	14	9 446	687	7 5			163 385		25460	104449
OR PA	1111 282			219	10450	1464		2666 15			A	30	9 27	1334	23588 8609
RÏ	21	9 335	4 139	5139 1188				23	3 5	9 318		3 0°		1418 589	10093
, SC	27 6		3 880 5 23	8	7 3216	5 1	8 36	20	•	3 101 2 732		15	1 36	1955	3650
, SD , TN	61		1 221	73				32 224	• . : :		407	123		14511 3029	866308 20491
ļ TX	443			593 57				10	5 1	0 992		45° 2°		297	4410
UT VT	. 59				5 35	7 15	7 2	_ 5			' <u></u>	117	5 224	6787	37067
! VA	180	6 931	8 3926	287	6 330				= :=	1 3687	197	42		6400 1043	
' HA	304		17 3675 15 333			•	8 45	3	0 .9	0 91		17 55	• <u>-: -</u>	4849	31078
HV \	17 66			67	7 652	2 127				7 1263 9 '32	0	5	0 464	196	
· HY	11	3 337	6 0		8 45 3 18467		53 54 57 44069					7841	9 109014	429134	4954983
C TOTA	NL 13357	3 311307	3 130724	66604	J IOTO!	7 61707				·		•	_	_	_

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STATE	·CHTHESE	SPANISÄ	FILIPINO	FRENCH	GERMAN	ITALIAN	JAPANESE	KOREAN	POLISH	INDOASIA	PORTUGESE	GREEK	AMERICAN INDIAN	OTHER	TOTAL
31716				169	. 255	30	41	31	11	329	4	17	28	209	1634
AL AK	96 10	394 166	20 120	24	53	Ğ	66	129	6	27	1 25	99	4966 20329	115 387	5696 62528
AZ	268	40108	151	123	305 154	112 12	23	142 26	55 13	401 495	0	8	37	198	1519
AR CA	60 16006	414 387942	. 20 16872	79 1944	2748	1423	2965	5731	162	19635	3868	860	1126 399	20204 692	481486 21846
CO	200	17841	60	227	694	88	113 39	252 47	38 700	1161 551	16 1615	65 324	111	1113	24431
· CT	109	15438	110 31	1969 19	397 115	1908 86	13	29	27	37	12	38	13	287	1473
DE DC	13 105	753 573	28	76	50	12	10	8	1	32	9 175	32 454	0 238	135 2170	1071 55416
FL	589	44515	597	2969	955 503	668 32	93 112	232 314	113 18	1648 421	30	70	23	788	4303
GA HI	319 906	1 353 360	71 6706	249 76	44	6	1095	634	1	844	19	0	6 367	2290 125	12982 3950
ΪĎ	25	3097	7	28	101	4	11	29 1177	2 2271	135 2348	6 40	18 1751	185	5840	81347
ĪL	1237	59934	1973 ¹	663 120		1828 57	360 50	110	197	673	20	226	32	1860	11764
ih Ia	112 117	5411 1088	26	54	700	30	26	46	13	1194 1202	16 8	52 13	91 70	470 - 314	3923 6076
KS	156	3310	57	92		12 11	30 16	119 100	7 10		7	19	40	367	1845
ky	16 111	444 2357	36 58	93 17095	- : -	78	26	70	. 6	2695	22	43 23	70 143	617 82	· 23441 4909
LA HE	. ''š	79	11	4425	47	12	2 102	5 908	5 88		10 194	367	65	1558	8310
MD	622	1958	431 69	543 3504			60	202	547	681	9429	1162	100	2018	37386 21865
MA : MI	1291 503	15851 8577	366	407	1288	848	124	297	1908	1111	57 5	429 41	309 533	6284 1245	751&
. WN	275	1079		176		24 22	50 5	124 15		374	13	12	655	239	2023
MS MD	47 329	316 1444		181 100		159	75	92	48		13	96 10	66 1298	989 100	5085 2174
MT	3	219	16	29	283	7	8 41	5 43		• • •	0 9	30	188	279	2682
NE	30	1401		23 24			15	116		172	_ 6 .	11	233	236	4079 2825
HV H	. 146	2789 167		2217	79	14	4	.11	30		34 3018	117 1034	13 246	95 4426	68789
NJ	7 76	49232		899		4251 15	39 <u>3</u>	612 11	1189		4	21	14751	124	48960
NM NY	57 8060	33384 157370		43 6434			977	1611			1379	4113 187	656 160	17493 493	217028 3494
NC	185	987	74	260			107	154 5			5 1	107		311.	2750
ND	, 18	160 700		. 369			122	251		739	7 <u>0</u>	598		5208	20178 ` 8007
OK	389 98	325		112	249	5	15	83			0 9	16 37		477 1009	7555
OR	380	301		114			86 88	175 639			32 5	720	33	6299	31221
PA RI	835 33	. 1474! 142		357 1008			9	27	84		3248	55 42	10 27	298 308	6905 1966
ŠĈ	56	53	229	283	177		' 21 7	72	. 6		22 0	72	2925	141	4470
SD	22 121	8: 37		1! 178			52	74	, ,	529	14	16		568 3201	2471 378741
TN TX	1347	36144		1267	7 1859	194	331	717		3 669 8 1 761	74 8	223 44		655	6696
ÜT	295	259		113 758			51 8	3! 20		_	Ō	3	4	60	977
VT VA	0 465	5 194	•	750 501			92	751	21		72	194	-	1508	
AH	942	808		17	4 69	1 76	225	, 63		5 2753 9 32	42 1	71 21		1321 152	• • • • • •
HV	20	11					12 26	7			21	7.	3 231	961	9000
IH YH	151 38	431 106				• • • • •	18	1	6	6 . 9	0	1387	5 226 4 57073	47 96366	1522 175242 5
C TOTA		127056		5082	6 3745	8 29763	8220	1704	3 1060	9 63694	23971	130/	7 21013	,,,,,,,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

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			FILIPINO	EDENCH	RERMAN	ITALIAN	JAPANESE	KOREAN	POLISH	INDOASIA	PORTUGESE	GREEK	AMERICAN INDIAN	OTHER	TOTAL
STATE			18	22	20	13	34	17	22	67	11 20	8	36 54	20 21	25 46
AL AK	43 27	23 21 37	32	13 14	14 18 .	11	29 14	35 31	20 14	38 62	18	23 19	55 59	17 29	41
AZ AR	29 29	34	37 43	24	32 14	16 10	15 17	28 27	15 11	76 68	0 28	14	42	25	38 38 32
CA CD	29 35	42 33	28 33	18 22	19	13	16 22	33 14	15 19	76 74	35 31	15 16	47 37	23 17	31
CT DE	14 7	47 40	23 13	20 17	15 30	15 18	22 19	28 29	14	45 89	38 21	17 26	54 0	25 25	29 26
DC FL	39 32	29 28	24 24	14 31	23 18	10 13	18	29 30	16 23	66 60	21 24	19 14	46 40	22 24	28 26 28
GA	35	24 22	28 33	18 26	22 14	11 11	29 12	31	6 14	68 76	16 8	0 21	46 53	28 16	28 39 33
HI ID	28 35 24	44	29 22	15 19	17 15	8 13	10 23	25 24	18	69 . 74	16 20	17 23	41 44	19 ¹ 28	34
IL In	17 35	37 36	22 18	16 24	36 31	11 18	23 26 22 32	22 28	18 21	. 81 80	62 20	17 11	44 50	22 21 25	37 35
IA KS	30	36	22 18	23 20	23	16 6	32 24	28 29	16 21	62 72	19	17 15	55 51	24	29 27 23
KY LA	10 20 8	29 26	25 19	26 24	28 23 18	14 7	24 20 10	27 13	17 12	65	21 12	10 15	45 33	17 17	20
ME MD	23	23 21	20 · 17	18 21	17 14	10 15	22 17	25 24	13 17	57 77	29 35 21	18	45 41	19	31
MA MI	30 25 41	49 35	18 26	17 21	18 22	11	22 21	18 23	15 21	73 79	12 27	16 15	47 51	25 20 29,	25 32 35
MN MS	18	33 27	21	26 16	21 26	12 15	26 27	14 22	33 28	70 66	34	20 19	47 49	27	28 - 40
MO HT	38 7	27 27 29	21 47	21 14	29 19	12 14	11 37	26 20	25 18	96 66	0 32	23 16	50 48	27 22 20 25 13 17	31 33
NE NV	42 30	36 36	22 38	15	18 15	13	21 36	34 33	18 18	65 67	8 <u>31</u>	18	34 40	13	20 31
н н Нј	16 17	28 42	23 21	21 20	14	15	25 10	22 20	18 5	59 81	33 17	18 15	53 41	17	35 33
NM NY	28 30	30 41	17 21	14 24	16 16	15 11	26 30	24 29	18 15	64 63	29 10	21 20	48	22 18	25 28
NC ND	29 29 22	25 33	29 16	21 31	19 26	11 14	· 38 24	19 16	28 17	69 70	8 22 0	0 17	46 44	24 24 26	27 · 41
OK	22 21	37 41	21 32	17 24 25	28 21	6	19 19	26 25	16	70 72	14	17 23	49 49	30	37
OR PA	34 30	37 44	30 20	16	16 24	7 14	25 17	26 25 24 17	15 19	69 82	33 36	19 18	37	25 22 22 24 29 22 22 20 22	29 27
RÎ Sử	15 21	42 22	29 26	20 24	18 16	13	24	· 31	10	54 72	27 0	14 8	53	24	44 20
SD TN	32 1 20 30	26 20	26 35 28	17 24	37 30	50 9	19 28	23 32	19 20	72 69	22 18	11 18	49	, 22	23 44 29 44 33 22 24
TX TU	30 49	45 29	28 26	21 20	20 16	12 9	29 16	33 36	10	. 77 38	7	10 11	57	20	33 22
VT	26	27 21	0 25	20 23 17	16 16		0 23	26	14	60	23 21	17 17	50	'21	36
HA	` "11"	43	29 18	19 26	17 21	10 16	16 27	30 7	10	75 35	25 30	14	33	15 20	18 29
HY	12 23	19 38 31	19	18	20 16	11	27 22 33	20 48	15	83 28	30 0 32	10	49	24 22	30
HY	34	41	27.	23	20	14	19	26	17	; 70	JE	, ,	,		

ESTIMATED LANCUAGE COMPOSITION OF LIMITED-ENGLISH-PROFICIENT CHILDREN BY STATE (Percent of State Total)

****		654H76H	FT1 TOTUO	EDENCY			Percent O			TNRNASTA	PORTUGESE	GREEK	AMERICAN INDIAN	OTHER	TOTAL
*****				10	16	2'	3		1	20	0	1		13	100
AL AK	6 0	24 3	1 2	0	1	0	1 :0	2 2 0	Ö O	0	Ŏ O	Ò	2 87 33	2	100 100
AZ AR	0 4	64 27	0 1	0 5	0 10	0 1	Ŏ	2	Ĭ	33	Ŏ	1	2	13 4	100 100
CA CO	3	81 82	4 0	0 1	1 3	0	1	1	0	4 5	0	Ö	2	3	100
CT	Ŏ,	63 51	0 2	8	2 8	8 6	0	0 2	3 2	2 3	7	1 3	1	5 19	100 100
DE DC	10	54	3	ż	5 2	Ĭ	į	. <u>1</u>	Ö	3 3	1	3 1	0	13	100 100
FL GA	7	80 31	1 2	6	12	i	3	7	Ŏ	10 7	1	Ž	1 0	18	100
HI ID	7	3 78	52 0	1	0 3	0 0	8 0	1	Ŏ	3	0	ŏ	9	3 7	100
IL IH	Ž	74 46	2	1	2 24	2 0	0	1	3 2	3 6	Ü	2 2	0	16	100
IA	3	28	į	į	18 11	1 9	1	1 2	Q O	30 20	0	1 0	2 1	12 5	100 100
i KS KY	3 1	54 24	ż	2 5	17	Ĭ	i	5 0	1	20 11	Ō	1	2 0	20 3	100 100
. HE	0	10 2	0 0	ر. 73 90	1	ō O	Ŏ	Ō	. 0	1	Ŏ	Ŏ	3	2 19	100 100
- MD MA	· 7	24 42	5	7 9	7	2 6	1 0	11	1	8 2	2 25	3	ģ	5	100
MI MH	2	39 14	2	2 2 9	6 17	4 0	1	1 2	5 2	6 33	0	2 1	7	29 17	100 100
MS	2 6	16	2	9 2	. 5 17	1	Ŏ 1	1 2	0	18 13	1 0	1 2	32 1	12 19	100 100
MO MT	0	28 10	3 1	1	13	Ŏ	ġ	Ō	Ò	12	Ö	0	60 7	10	100 100
NE NV	1	52 68	1 3	1	9 3	1 2 .	. 2	3	Õ	4	0	Ò	Ġ	6	100 100
HH NJ	: [6 72	0 2	79 1	3 2	0 6	0 1	0 1	1 2	0 1	4	4 2	0	6	100
NM	0 4	68 73	Ō	Ó 3	0	0 5	0	0	0 1	1	0 1	0 2	30 0	0 8	100 100
NY . NC	5	28	2	7	10	1	Š	4 .	Ò	14 2	Ö.	5 0	5 15	14 11	100 100
ND 1 OH	1 2	6 35	0 2	2 2	62 18	0 4	1	1	ż	4	Ŏ	3	1 32	26 6	100 100
OK OR	1 5	41 40	1 2	1 2	3 5	0	0 1	1 2	0	13 ,27	Ŏ	Ŏ	2	13	100
PA RI	3	47 21	1	1 15	8 1	7 5	0	2 0	2 1	5	1 47	2 1	0	20 4	100
SC	3	27	12 0	14	26	1 0	1 0	4 በ	Ն 0	9 2	1 0	2 0	1 65	16 3	100 100
SD TN	0 5	2 15	2	7	18	Ĭ	ž 0	ž	1	2 <u>1</u> 2	. 1	1	1 0	23 1	100 100
TX	0 4	95 39	0 0	0 2	8 5	. 0	į	1	Ŏ	11	Ö	.0	27 0	10 6	100 100
VT VA	0 5	5 22	0 11	78 6	6 &	1	0 1	2 8	1 6	0 18	. 1	2	1	17	100
AH	6	49	6	1	4	0 11	1 .	4	0	17 5	0	0	2 4	8 23	100 100
HY	3 2 2	17 48	9	8 1	13 15	2	0	Ĭ	4 0	12	Ö	1	3 15	11	100 100
HY TOTA		70 73	0 2	1 3	5 2	0 2	1	1	1	; 4	1	1	•3	5	100
	×								•	•				•	

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GEOGRAPHIC DISTRIBUTION OF LEP CHILDREN BY LANGUAGE (Percent of Totals)