

# Use of Non-English Questionnaires and Guides in the Census 2000 Language Program

## FINAL REPORT

This evaluation study reports the results of research and analysis undertaken by the U.S. Census Bureau. It is part of a broad program, the Census 2000 Testing, Experimentation, and Evaluation (TXE) Program, designed to assess Census 2000 and to inform 2010 Census planning. Findings from the Census 2000 TXE Program reports are integrated into topic reports that provide context and background for broader interpretation of results.

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## EXECUTIVE SUMMARY

This paper documents the use of Non-English questionnaires and guides in the Census 2000 Language Program. For Census 2000, households were mailed an advance letter in mailback areas. Mailback areas were those enumeration areas where census respondents mailed back their census questionnaires, that is, advance letters were mailed to addresses in mailout/mailback, update leave and urban update leave areas. The advance letters provided households an opportunity to request an alternative language questionnaire in one of five different languages. Short and long form questionnaires were available upon request in Spanish, Chinese, Tagalog, Vietnamese, and Korean languages. Respondents were asked to return their advance letter indicating which language questionnaire they would prefer in an enclosed prepaid envelope. This approach spearheaded the effort to encourage respondents in linguistically isolated households<sup>1</sup> to complete a census questionnaire.

The Census 2000 Language Program also made available language guides in forty-nine different languages. The language guides were user-friendly visual aides that assisted respondents in completing the Census 2000 questionnaires for both long and short forms. The language guides were made available through the Questionnaire Assistance Centers, Local and Regional Census Offices, and community groups and organizations. Another aspect of the Census 2000 Language Program was the Telephone Questionnaire Assistance program (see Chesnut, 2002). This program answered questions about foreign language questionnaires, and allowed potential census respondents to request a language guide by mail.

This study provides results of non-English forms requested from households who were mailed advance letters. These results are compared to the number of Language Assistance Guides provided by Questionnaire Assistance Centers (see Jones and Barrett, 2003) and to the number of Language Assistance Guides requests received by the Telephone Questionnaire Assistance program.

The key findings of this study are as follows:

- **There were over 2.2 million requests for non-English census questionnaires.** Households that received an advance letter were offered the option of requesting a non-English census questionnaire in one of five languages. The languages offered were Spanish, Chinese, Tagalog, Vietnamese, and Korean.

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<sup>1</sup> Linguistically isolated households are those households where the primary language spoken is not English and where no one over the age of fourteen speaks English very well.

- **Most (83.7 percent) of the households that requested alternative language questionnaires requested them in Spanish.** Next were requests for questionnaires in Chinese (6.8 percent), followed by Korean questionnaires (4.5 percent).
- **About 39.4 percent of the households that requested alternate language questionnaires were in census tracts designated as Hard-to-Enumerate.** Nationwide, about 10.5 percent of all households were located in HTE tracts (see Methods section).
- **Less than half (45.1 percent) of the households requesting an alternate language form returned these forms by mail which were subsequently checked-in and data captured.**
- **Although there were requests for non-English questionnaires from households in all states, most of these requests were from households in four states.** The four states, California (784,071 requests), Texas (294,035 requests), New York (269,871 requests) and Florida (231,162 requests) had over 200,000 requests for non-English language forms. These four states accounted for about 70.6 percent of the requests nationwide while covering areas that were mailed only 28.4 percent of the advance letters.
- **About 1.3 percent of the requested non-English questionnaires were returned as Undeliverable As Addressed.** This was about 8 percentage points lower than the national percent. Nationwide, about 9.1 percent of all forms (English and non-English) were returned as Undeliverable As Addressed.
- While over 2.2 million (2,235,435) households requested a non-English questionnaire on their advance letter, the number of respondents requesting language assistance guides was substantially lower. **At least 93,672 respondents requested language assistance guides from Questionnaire Assistance Centers. Another 77,191 respondents requested language assistance guides through the Telephone Questionnaire Assistance program.**
- **Respondents requested language assistance guides in languages other than Spanish, Chinese, Korean, Tagalog, or Vietnamese.** About 34.3 percent of the language assistance guides requested at Questionnaire Assistance Centers and 18.9 percent of the language assistance guides requested through the Telephone Questionnaire Assistance program were in languages other than Spanish, Chinese, Korean, Tagalog, or Vietnamese.

## **Recommendation**

**To accommodate the needs of the increasingly diverse United States population, and to meet the objectives of improving response rates and data accuracy, the Census Bureau should continue to take initiatives to help respondents overcome language barriers in completing census forms.** These initiatives should include providing an opportunity for households to make requests for non-English questionnaires via the advance letters, providing guides and questionnaires at assistance centers, and providing alternate language telephone assistance.

**One suggestion is to allow households the opportunity to request language assistance guides in addition to non-English questionnaires on the advance letter.** Although over 2.2 million households requested a non-English questionnaire, these questionnaires were available in only five languages. The language assistance guides were available in 49 languages. Data from the Telephone Questionnaire Assistance program and the Questionnaire Assistance Centers show that respondents requested guides in many of the available languages. However, the relatively low demand for guides from respondents as reported from the Telephone Questionnaire Assistance program (77,191 requests) and the Questionnaire Assistance Centers (93,672 requests) suggests that many households with language barriers did not obtain language assistance guides. There exists more effective ways to inform the public of their availability.

One potentially effective way is to give respondents the opportunity to request language assistance guides on the advance letter. Doing this would inform millions of households of their availability, and hopefully raise the demand for the guides by households with language barriers in languages other than the five alternate languages offered for a non-English questionnaire. Increasing the availability of the guides could encourage more households with language barriers to complete their census forms. Prior research done by the Census Bureau suggests that offering more than one language questionnaire to households in linguistically isolated areas significantly increases the questionnaire completion rate (see Corteville, 1994 pg 10). Similarly, it is likely that offering language guides in the many available languages via the advance letter would increase the completion rate of census questionnaires in linguistically isolated households. **It is plausible that making language assistance guides more widely available by making them an option on the advance letter will increase the overall response to future censuses.**

# 1. BACKGROUND

Some of the main objectives of the Census 2000 were to raise the response rates, improve the data accuracy, and conduct a cost-effective decennial census. Census Bureau research indicated that the inability to speak or read English was a barrier to a successful enumeration. The purpose of the Census 2000 Language Program was to support the census objectives by providing census information and assistance in languages other than English, so that linguistically isolated households speaking a language other than English could respond to the census.

In the 1990 Census, Spanish language forms and language assistance guides in thirty-two languages<sup>2</sup> were produced and used to assist in bridging the language barriers in the United States. The “Were You Counted?” (WYC) program placed WYC forms in English and seven other languages in newspapers and other printed media, which respondents could photocopy and mail to the Census Bureau.

For the Census 2000 Dress Rehearsal (DR), an attempt was made to target linguistically-isolated households. Targeted areas with high rates of linguistically isolated households were mailed both a questionnaire in English and a questionnaire in either Spanish or Chinese. That operation proved to be not feasible for Census 2000. For Census 2000, the language program was revamped in an attempt to accommodate the shortcomings of the dual language mailing conducted during DR.

For the Census 2000 Language Program, the Census Bureau offered all households in mailback areas the opportunity to request a specific non-English questionnaire. Mailback areas were those enumeration areas where census respondents mailed back their census questionnaires, that is areas that used the mailout/mailback, update leave and urban update leave enumeration methodology. The opportunity to request a non-English questionnaire was extended to those households that received an addressed advance letter. Households could request a census form in one of five different languages by marking their preference on the advance letter and returning it to the Census Bureau. Short and long form questionnaires were available in Spanish, Chinese, Tagalog, Vietnamese, and Korean languages. According to the Census Bureau, these language groups were among the largest linguistically-isolated household populations speaking a language other than English. A prepaid envelope was provided for the return of the request. Once the

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<sup>2</sup> The languages for the questionnaire assistance guides available in 1990 were Arabic, Armenian, Cambodian, Chinese, Creole, Croatian, Czech, Farsi, French, German, Greek, Hindi, Hungarian, Italian, Japanese, Korean, Lao, Latvian, Lithuanian, Polish, Portuguese, Romanian, Russian, Samoan, Serbo-Croatian, Slovak, Slovene, Tagalog, Thai, Ukrainian, Vietnamese, and Yiddish.

requested non-English forms were mailed to the households, one of the following occurred:

- The non-English language form was returned to the Census Bureau by the Postal Service as undeliverable as addressed (UAA). These were forms that the United States Postal Service could not deliver to the designated address because of missing or erroneous address information.
- The non-English form was mailed to the respondent and never returned to the Census Bureau. Instead, respondents may have neglected to complete their form or elected to complete their form in other ways such as filling out and mailing in Be Counted forms or completing their form over the Internet.
- The non-English form was returned to the Census Bureau by the respondent and the form was checked-in and data captured.

In addition to providing households with the opportunity to request a non-English questionnaire on the advance letter, the Census 2000 Language Program made available language assistance guides (LAGs) in forty-nine languages<sup>3</sup>. The language guides were user-friendly visual aides that assisted respondents in understanding the Census 2000 questionnaires for both long and short forms. They were made available from the Questionnaire Assistance Centers (QACs), Local and Regional Census Offices, community groups and organizations, and the Telephone Questionnaire Assistance (TQA) program.

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<sup>3</sup> Language Assistance Guides were available in the following languages: Albanian, Amharic, Arabic, Armenian, Bengali, Burmese, Cambodian, Chamarro, Chinese, Creole (Haitian), Croatian, Czech, Dari, Dinka, Dutch, Farsi, French, German, Greek, Hebrew, Hindi, Hmong, Hungarian, Ilocano, Italian, Japanese, Korean, Kurdish, Laotian, Polish, Portuguese, Roma, Romanian, Russian, Samoan, Serbian, Slovak, Somali, Spanish, Swahili, Tagalog, Thai, Tibetan, Tigrean, Tongan, Ukrainian, Urdu, Vietnamese, and Yiddish.

## 2. METHODS

We used data from the Decennial Master Address File (DMAF) as the source or as one of the sources of the following:

- Number of non-English questionnaires requested by language form.
- Number of non-English questionnaires returned to the National Processing Center (NPC) as UAA
- Number of non-English questionnaires requested by census region, by form type (short or long form), and by Regional Census Center (RCC).

Variables on the DMAF also allowed us to produce data on the number of non-English questionnaires by Regional Census Center and by language form.

The total number of advance letters shown in **Table 1** (111,366,780) was obtained from state level data files containing the number of mailable addresses in each state. The number of mailable addresses in each state resulted from applying postal update software to census address files. These state level files allowed us to compute both the number of advance letters mailed by state shown in the **Appendix**, and the number of advance letters mailed to each census region shown in **Table 2**. The Census Bureau was billed for 116,024,977 addresses that it provided to the vendor who in turn printed the letters and provided them to the postal service for mailing. We believe the different counts resulted because the Postal Service was also asked to deliver a blanket advance letter to those addresses determined to be invalid.

**Table 4** provides data on Hard-to-Enumerate (HTE) census tracts. Census tracts are designated as HTE when they have characteristics that positively correlate with a high rate of census nonresponse, a high rate of mail nonreturn, and a high census undercount. Census tracts with a relatively high percentage of the following characteristics are most likely to receive the HTE designation:

- Vacant housing units
- Two or more housing units per structure
- Renter occupied units
- Occupied units with more than one person per room
- Households that are not husband and wife families
- Occupied units with no telephone
- Persons over 25 years of age and who are not high school graduates
- Persons below the poverty level

- Households with public assistance income
- Unemployed persons
- Linguistically isolated households
- Occupied units where the household recently moved in

Each census tract was assigned a Hard to Count (HTC) score, based upon the aforementioned characteristics. Tracts that had a HTC score greater than 70 were said to be HTE. The HTC scores for each census tract were on the 1990 Data for Census 2000 Planning Database (PDB) which is based upon 1990 census data and geographical boundaries. Although the HTC scores were based upon 1990 Census data, they were proven to be an effective predictor of census nonreturn rates and net undercount rates in the 1995 test census and the Census 2000 Dress Rehearsal. They were expected to be a reliable predictor of these rates in Census 2000. For our tabulations we merged data from the PDB with the data from the DMAF.

The check in data shown in **Table 5** was produced from the mail check in, mail check in source, and source of data capture variables on the DMAF. Our universe was the 2,235,435 non-English questionnaire requests. Specifically, we counted the number of questionnaires checked in from March 26, 2000 to December 31, 2000 whose mail check in source was mailback and that were data captured from paper questionnaires.

We also used data from the Record of Contact Form (D-399) of the Questionnaire Assistance Centers (see Jones and Barrett, 2003) completed by center staff to document the reasons for visits to the centers. Questionnaire Assistance Centers were targeted locations designed to assist individuals with questions about census questionnaires and individuals with language barriers to completing census forms. The LAGs were publications in forty-nine foreign languages designed to aid respondents in completion of the short and long form questionnaires. Their purpose was to help respondents experiencing language barriers complete their English form. The respondent read the guide in the appropriate language and then filled in the corresponding response on his or her English language form. The guides were not designed to be completed and returned as census questionnaires.

In addition, we used data from the TQA program (see Chesnut, 2003) for our analyses. The TQA program provided the following services by phone to potential census respondents:

- Answered questions about the census and census questionnaires
- Allowed respondents to request a language guide by mail
- Allowed some callers to respond to the census by phone interview

### 3. LIMITS

- We compared the distribution of requests for non-English forms with the distribution of requests for LAGs at QACs by language. However, complete data on the number and type of LAGs requested by potential census respondents are unavailable (see Jones and Barrett 2003).
- Respondents requesting non-English questionnaires could have elected to complete and mail in a Be Counted form or elected to complete their questionnaire over the Internet. The mail check in percentage computed in Table 5 does not include these respondents. It only includes those respondents who completed and mailed in a non-English paper questionnaire which was later data captured.
- The results in this report do not include forms requested in Puerto Rico. Households in Puerto Rico were mailed Spanish forms but were offered the option of requesting the English version of the census questionnaire. The results in this paper reflect stateside only non-English census form requests.

## 4. RESULTS

### 4.1 How many households were mailed an advance letter and how many households requested a non-English questionnaire?

**Table 1** gives the distribution of non-English questionnaire requests for households mailed advance letters.

- There were a total of 2,235,435 non-English questionnaires requested. This is 2.0 percent of the 111,366,780 households mailed advance letters.

**Table 1: Distribution of Non-English Questionnaire Requests for Households Mailed Advance Letters**

	Number	Percent
Households Mailed Advance Letters	111,366,780*	100.0
Non-English Forms Requested	2,235,435	2.0
No Alternative Language Forms Requested	109,131,345	98.0

\* Obtained from state level data files containing the number of mailable addresses

Households mailed an advance letter were offered the opportunity to request a non-English questionnaire in five alternate languages: Spanish, Chinese, Korean, Tagalog, and Vietnamese. **Table 1a** shows the distribution of non-English questionnaires requested by language.

- The most frequently requested language form was Spanish. About 83.7 percent of the requests (approximately 1.9 million households) were for Spanish questionnaires.
- There were 151,752 requests for Chinese forms, which represented 6.8 percent of the non-English form requests; 101,653 requests for Korean forms, which represented 4.5 percent of the non-English form requests; and 91,765 requests for Vietnamese forms, which represented 4.1 percent of the non-English form requests.
- Less than one percent of the non-English form requests were for the Tagalog language (19,200 requests).

**Table 1a: Distribution of Non-English Questionnaires Requested By Language**

<b>Non-English Form Requested</b>	<b>Number of Non-English Forms Requested</b>	<b>Percent of Non-English Forms Requested</b>
Spanish	1,871,065	83.7
Chinese	151,752	6.8
Korean	101,653	4.5
Vietnamese	91,765	4.1
Tagalog	19,200	0.9
Total	2,235,435	100.0

## 4.2 How were the non-English questionnaire requests distributed geographically?

We examined the distribution of non-English questionnaires by state, census region, and Regional Census Center.

### 4.2.1 How were the non-English questionnaire requests distributed by state?

The **Appendix** gives the distribution of non-English questionnaire requests by state. It also gives the distribution of advance letters by state.

- Four states: California (784,071 requests), Texas (294,035 requests), New York (269,871 requests) and Florida (231,162 requests) had over 200,000 requests for non-English language forms. These four states accounted for about 70.6 percent of the requests for these forms nationwide while covering areas that were mailed only 28.4 percent of the advance letters

### 4.2.2 How were the non-English questionnaire requests distributed by region?

**Table 2** presents the distribution of non-English questionnaire requests by census region. It also gives the distribution of advance letters by region.

- The West had the highest number of requests (953,028). It contains California, which had the highest number of non-English questionnaire requests (784,701). The South had the second highest number of requests (664,837). It contains Texas (294,035 requests) and Florida (231,162 requests) which were two of the four states with over 200,000 non-English questionnaire requests.

**Table 2: Distribution of Non-English Questionnaire Requests by Census Region**

Region	Number of Questionnaire Requests	Number of Advance Letters	Percent of Advance Letters that generated Requests	Percent of Non-English Questionnaire Requests
West	953,028	24,451,582	3.9	42.6
South	664,837	37,150,813	1.8	29.8
Northeast	453,943	22,351,267	2.0	20.3
Midwest	163,627	27,413,118	0.6	7.3
Total	2,235,435	111,366,780	2.0	100.0

**Table 2a** presents the distribution of non-English questionnaire requests by language form within census region.

- The most requested non-English language forms in each region were the Spanish language forms. In the south about 90.0 percent of the requested non-English forms were Spanish. In the west, the percentage was about 80.2 percent.
- The next most requested language form in three of the four regions were the Chinese language forms. In the south, Vietnamese was the next most requested language form.
- In each region, the least requested non-English questionnaire was Tagalog.

**Table 2a: Distribution of Non-English Questionnaire Requests by Language Form within Census Region**

Form	West		South		Northeast		Midwest	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Spanish	764,150	80.2	598,253	90.0	375,180	82.7	133,482	81.6
Chinese	76,582	8.0	19,340	2.9	45,008	9.9	10,822	6.6
Korean	51,954	5.4	17,411	2.6	23,486	5.2	8,902	5.4
Vietnamese	48,453	5.1	26,694	4.0	7,900	1.7	8,718	5.3
Tagalog	11,889	1.3	3,139	0.5	2,369	0.5	1,803	1.1
Total	953,028	100.0	664,837	100.0	453,943	100.0	163,627	100.0

4.2.3 How were the non-English questionnaire requests distributed by Regional Census Center?

**Table 2b** presents the distribution of non-English questionnaire requests by regional census center (RCC).

- The Los Angeles RCC had the highest percentage (28.6 percent) of non-English forms requested among the twelve RCCs, while the New York and Dallas RCCs had the second and third highest percentages (15.4 percent and 13.5 percent respectively) of non-English forms requested. Together these three RCCs received over half (57.5 percent) of the Non-English form requests.

**Table 2b. Distribution of Non-English Questionnaire Requests by Regional Census Centers (RCC)**

Regional Census Center	Number of Non-English Questionnaire Requests	Percent of Non- English Questionnaire Requests
Los Angeles	639,649	28.6
New York	344,763	15.4
Dallas	301,953	13.5
Atlanta	263,741	11.8
Seattle	197,743	8.9
Denver	120,921	5.4
Chicago	112,114	5.0
Boston	70,713	3.2
Philadelphia	65,519	2.9
Charlotte	59,400	2.7
Kansas City	38,627	1.7
Detroit	20,292	0.9
<b>Total</b>	<b>2,235,435</b>	<b>100.0</b>

### 4.3 How many non-English questionnaires were returned as undeliverable as addressed (UAA)?

**Table 3** presents the distribution of households that requested a non-English questionnaire, but were returned to the NPC as UAA. Advance letters were returned to NPC by the Postal Service when they could not be delivered to the designated address because of missing or erroneous address information.

- Of those non-English questionnaires requested, 1.3 percent were returned to NPC as undeliverable as addressed. This percentage was about 8 percentage points lower than the national rate. About 9.1 percent of all (English and non-English) forms were returned as UAA, nationwide (see Kohn, 2003, pg.10). One possible reason that some non-English questionnaires were UAA was that the addresses represented vacant housing units.
- Although Spanish forms were the most requested among the five languages, only about 1.2 percent of the Spanish questionnaires requested were returned to NPC as UAA. About 2.3 percent of the requested Korean questionnaires were returned as UAA.

**Table 3. Distribution of Non-English Questionnaire Requests Returned as Undeliverable as Addressed**

<b>Non-English Form Requested</b>	<b>Number of Non-English Forms Requested</b>	<b>Number of Non-English Forms Returned UAA</b>	<b>Percent of Non-English Forms Returned UAA (Within Language)</b>	<b>Percent of Non-English Forms Returned UAA (Over all UAAs)</b>
Spanish	1,871,065	23,021	1.2	80.5
Chinese	151,752	1,989	1.3	7.0
Korean	101,653	2,365	2.3	8.3
Vietnamese	91,765	936	1.0	3.3
Tagalog	19,200	293	1.5	1.0
<b>Total</b>	<b>2,235,435</b>	<b>28,604</b>	<b>1.3</b>	<b>100.1*</b>

\* Percentages may not add to 100 percent due to rounding error.

Advance letters were mailed to households in mailback areas. Mailback areas were those enumeration areas where census respondents mailed back their census questionnaires, that is mailout/mailback, update leave and urban update leave areas. **Table 3a** provides the number and percentage of all Non-English forms requested that were returned as UAA, by type of enumeration area (TEA). The percentage is of the specific non-English questionnaire requests in the TEA.

- Overall, about 1.3 percent of the alternate language forms requested in mailback areas were returned as UAA. About 1.8 percent of the alternate language forms requested in update leave areas were returned as UAA.
- Each alternate language form had a smaller percentage of forms returned as UAA in mailout/mailback areas than in update leave areas.

**Table 3a: Number and Percentage of Non-English Questionnaire Requests Returned as UAA by Type of Enumeration Area**

Non-English Form Requested	Mailout/Mailback Areas		Update Leave Areas		Urban Update Leave Areas and Other TEAs*		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Spanish	22,121	1.2	853	1.7	47	0.8	23,021	1.2
Korean	2,335	2.3	26	2.4	4	0.9	2,365	2.3
Chinese	1,966	1.3	21	1.7	2	0.3	1,989	1.3
Vietnamese	916	1.0	17	1.8	3	2.6	936	1.0
Tagalog	280	1.5	12	2.2	1	1.9	293	1.5
Total Non- English Forms	27,618	1.3	929	1.8	57	0.8	28,604	1.3

\*This category includes military update leave areas

#### 4.4 Were the non-English questionnaire requests in Hard-to-Enumerate (HTE) tracts?

**Table 4** presents the non-English questionnaire requests by HTE tracts. An HTE tract was defined to be a tract likely to have a high nonresponse rate. Each census tract was assigned a score that was based upon variables known to have a strong positive correlation with the census nonreturn rate. The higher the score, the greater the likelihood that the tract would have a high nonreturn rate. Hard-to-Enumerate tracts were said to be those with scores exceeding 70. According to the Planning Database (PDB), about 12.6 percent of all census tracts are classified as HTE.

- About 39.4 percent of the total number of non-English questionnaires were requested by households located in HTE tracts. Nationwide, about 10.1 percent of households were located in HTE tracts (see Methods section).
- About 43.1 percent of the Spanish forms were requested from households in HTE census tracts. Only 17.3 percent of the Korean forms were requested from households in HTE census tracts.

**Table 4. Distribution of Non-English Questionnaire Requests in Hard-To-Enumerate Tracts**

<b>Non-English Forms Requested</b>	<b>Number of Non-English Forms Requested in HTE Tracts</b>	<b>Total Number of Non-English Forms Requested</b>	<b>Percent of Non-English Forms Requested in HTE Tracts</b>
Spanish	805,610	1,871,065	43.1
Chinese	35,696	151,752	23.5
Vietnamese	17,948	91,765	19.6
Korean	17,561	101,653	17.3
Tagalog	3,831	19,200	20.0
<b>Total</b>	<b>880,646</b>	<b>2,235,435</b>	<b>39.4</b>

#### **4.5 How many of the requested non-English forms were checked-in and data captured by the Census Bureau? What was the relative frequency of checked-in and data captured non-English forms for the different form types?**

In March 2000, advance letters were mailed to households. Households could request a census form in one of five non-English languages by marking their preference on the advance letter and returning it to the Census Bureau. The Census Bureau then mailed a questionnaire printed in the requested language to the household. A total of 2,235,435 households requested a non-English form in this manner (see Table 1). Once the requested non-English forms were mailed to households, one (or more) of the following occurred:

- The non-English language form was returned to the Census Bureau as undeliverable as addressed. These were forms that the United States Postal Service could not deliver to the designated address.
- The non-English form was mailed to the respondent and never returned by mail to the Census Bureau. Instead, respondents may have neglected to complete their form or elected to complete their form in other ways such as filling out and mailing a Be Counted form or completing their form over the Internet.
- The non-English form was returned by mail to the Census Bureau by the respondent and the form was checked-in and data captured.

**Table 5** provides the distribution of non-English forms that were checked in and data captured. It gives the number of non-English questionnaire requests, and the number and percentage of paper non-English questionnaires returned by mail to the Census Bureau and subsequently data captured.

- Overall, about 45.1 percent of the non-English forms requested were checked in and data captured by the Census Bureau.
- Only 28.1 percent of the requested Tagalog questionnaires were checked in and data captured. For each of the other languages, at least 42.5 percent of the questionnaires were checked in and data captured.

**Table 5. Distribution of Requested Non-English Questionnaires Checked-in and Data Captured**

<b>Non-English Form Requested</b>	<b>Number of Forms Requested</b>	<b>Number of Forms Checked-in and Data Captured</b>	<b>Percent of Forms Checked-in and Data Captured</b>
Spanish	1,871,065	842,568	45.0
Chinese	151,752	72,516	47.8
Korean	101,653	49,734	48.9
Vietnamese	91,765	38,987	42.5
Tagalog	19,200	5,399	28.1
<b>Total</b>	<b>2,235,435</b>	<b>1,009,204</b>	<b>45.1</b>

**Table 5a** presents the percentage of non-English forms received and data captured that were short and long forms.

- About 85.9 percent of the total number of non-English forms received by NPC were short forms. About 14.1 percent of the total number of non-English forms received and data captured were long forms.

**Table 5a: Percentage of Checked-in and Data Captured Non-English Questionnaires by Form Type**

<b>Non-English Form Requested</b>	<b>Number of Forms Received</b>	<b>Percentage of Forms Received that were Short Forms</b>	<b>Percentage of Forms Received that were Long Forms</b>
Spanish	842,568	86.1	13.9
Chinese	72,516	85.6	14.4
Korean	49,734	85.2	14.8
Vietnamese	38,987	83.9	16.1
Tagalog	5,399	82.3	17.7
<b>Total</b>	<b>1,009,204</b>	<b>85.9</b>	<b>14.1</b>

#### **4.6 How did the number and percent of non-English questionnaires requested compare to the number and percent of language assistance guides requested?**

In addition to census questionnaires in Spanish, Chinese, Korean, Vietnamese, and Tagalog, LAGs in 49 foreign languages were available to potential census respondents with language barriers. The purpose of the LAGs was to help census respondents interpret their English language census forms. Potential census respondents read the census questions in their respective language on the LAG and made the appropriate response on their English language form. Respondents to the TQA program could call a separate toll free number corresponding to each of the language forms: English, Spanish, Chinese, Korean, Tagalog, or Vietnamese. The TQA program also assisted callers by answering questions about the census and census questionnaires as well as allow callers who met specific criteria to respond to the census by phone. The TQA program also allowed respondents to request a LAG in any of the 49 languages.

**Table 6** compares the distribution of requests for non-English forms to the distribution of requests for LAGs at QACs and to the distribution of requests for LAGs through the TQA program for the languages in which non-English questionnaires were available.

- The Spanish language questionnaire or guide received the most attention. The next most requested guide or questionnaire among the five alternate languages was Chinese. The least requested language form or guide was Tagalog.
- For each source, the Korean language and the Vietnamese language had similar percentages. They had nearly the same percentage of requested alternate language questionnaires (4.5 percent and 4.1 percent), of LAGs requested at QACs (5.2 percent and 4.9 percent), and of LAGs requested through the TQA program (2.0 percent and 2.2 percent).

**Table 6: Comparison of Requests for Non-English Questionnaires to Requests for Language Assistance Guides at QACs and through the TQA Program for Languages in which Alternate Language Forms were Available**

Alternate Language Offered	Non- English Forms Requested		LAGs Requested at QACs*		LAGs Requested through the TQA program**	
	Number	Percent	Number	Percent	Number	Percent
Spanish	1,871,035	83.7	50,158	81.4	57,563	92.0
Chinese	151,752	6.8	4,848	7.9	2,326	3.7
Korean	101,653	4.5	3,218	5.2	1,244	2.0
Vietnamese	91,765	4.1	3,068	5.0	1,394	2.2
Tagalog	19,200	0.9	300	0.5	63	0.1
Total	2,235,435	100.0	61,592	100.0	62,590	100.0

\*See Jones and Barrett, 2003, Appendix B.

\*\*See Chesnut, 2003, Appendix G.

**Table 6a** compares the requests for LAGs at QACs to the requests for LAGs through the TQA program for all available languages.

- While over 2.2 million (2,235,435) households requested a non-English questionnaire on their advance letter, not as many households requested language assistance guides from the QACs or through the TQA program. About 93,672 respondents requested language assistance guides from QACs (see Jones and Barrett, 2003). About 77,191 respondents requested language assistance guides through the TQA program (see Chesnut, 2003). Each source had requests for these guides in the majority of the 49 available languages.
- The Spanish language guide was the most requested guide from each source. The next most requested language guide among the 49 available languages from QACs was Russian (see Jones and Barrett, 2003, Appendix B). The next most requested language guide from the TQA program was Albanian (see Chesnut, 2003, Appendix G).
- There were a higher percentage of LAGs in other languages requested at QACs (34.3 percent) than through the TQA program (18.9 percent).

**Table 6a: Comparison of Requests for LAGs at QACs to Requests for LAGs through the TQA program for all Available Languages**

Alternate Language Offered	LAGs Requested at QACs*		LAGs Requested through the TQA program**	
	Number	Percent	Number	Percent
Spanish	50,158	53.5	57,563	74.6
Chinese	4,848	5.2	2,326	3.0
Korean	3,218	3.4	1,244	1.6
Vietnamese	3,068	3.3	1,394	1.8
Tagalog	300	0.3	63	0.1
Other Languages***	32,080	34.3	14,601	18.9
Total	93,672	100.0	77,191	100.0

\*See Jones and Barrett, 2003, Appendix B. Data is available for 37 specific languages and Large Print English. The total does **not** include Large Print English.

\*\*See Chesnut, 2003, Appendix G. Data is available for all 49 available languages and Large Print English. The total does **not** include Large Print English.

\*\*\*See Section 1, Background, pg 2 for a list of all of the languages in which assistance guides were available

## 5. CONCLUSIONS AND RECOMMENDATIONS

The objective of this study is to provide results of non-English forms requested from households who received advance letters during Census 2000. These results will help determine the extent to which these questionnaires and guides help non-English speaking census respondents. These results can also help provide a rationale for the enhancement of the Language Program for future censuses.

**Major conclusions are as follows:**

- **There were over 2.2 million requests for non-English census questionnaires.** Households that received an advance letter were offered the option of requesting a non-English census questionnaire in one of five languages. The languages offered were Spanish, Chinese, Tagalog, Vietnamese, and Korean.
- **Most (83.7 percent) of the households that requested alternative language questionnaires requested them in Spanish.** Next were requests for questionnaires in Chinese (6.8 percent), followed by Korean questionnaires (4.5 percent).
- **Less than half (45.1 percent) of the households requesting an alternate language form returned these forms by mail which were subsequently checked-in and data captured.**
- **About 39.4 percent of the households that requested alternate language questionnaires were in census tracts designated as Hard-to-Enumerate.** Nationwide, about 10.5 percent of all households were located in HTE tracts (see Methods section).
- **Although there were requests for non-English questionnaires from households in all states, most of these requests were from households in four states.** Four states, California (784,071 requests), Texas (294,035 requests), New York (269,871 requests) and Florida (231,162 requests) had the most requests for non-English language forms. These four states accounted for about 70.6 percent of the requests nationwide while covering areas that were mailed only 28.4 percent of the advance letters.
- While over 2.2 million (2,235,435) households requested a non-English questionnaire on their advance letter, the number of respondents requesting language assistance guides was substantially lower. **At least 93,672 respondents requested language assistance guides from Questionnaire Assistance Centers.**

**Another 77,191 respondents requested language assistance guides through the Telephone Questionnaire Assistance program.**

- **Respondents requested language assistance guides in languages other than Spanish, Chinese, Korean, Tagalog, or Vietnamese.** About 34.3 percent of the LAGs requested at QACs and 18.9 percent of the LAGs requested through the TQA program were in languages other than Spanish, Chinese, Korean, Tagalog, or Vietnamese.

## **Recommendation**

**To meet the objectives of improving response rates and data accuracy, the Census Bureau should continue to take initiatives to help respondents overcome language barriers to completing census forms.** These initiatives should include providing an opportunity for households to make requests for non-English questionnaires via the advance letters, providing guides and questionnaires at assistance centers, and providing alternate language telephone assistance.

**One suggestion is to allow households the opportunity to request language assistance guides in addition to non-English questionnaires on the advance letter.** Although over 2.2 million households requested a non-English questionnaire, these questionnaires were available in only five languages. The LAGs were available in 49 languages. Data from the TQA program and the QACs show that respondents requested guides in many of the 49 available languages. However, the relatively low demand for guides from respondents as reported from the TQA program (77,191 requests) and the QACs (93,672 requests) suggests that many households with language barriers did not obtain LAGs.

There exists more effective ways to inform the public of their availability. One potentially effective way is to give respondents the opportunity to request LAGs on the advance letter. Doing this would inform millions of households of their availability, and hopefully raise the demand for the guides by households with language barriers in languages other than the five alternate languages offered for a non-English questionnaire. Increasing the availability of the guides could encourage more households with language barriers to complete their census forms. Prior research done by the Census Bureau suggests that offering more than one language questionnaire to households in linguistically isolated areas significantly increases the questionnaire completion rate. Similarly, it is likely that offering language guides in the many available languages via the advance letter would increase the completion rate of census questionnaires in linguistically isolated households. **It is plausible that making language assistance guides more widely available by making them an option on the advance letter will increase the overall response to future censuses.**

## 6. REFERENCES

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## APPENDIX

### Distribution of Non-English Questionnaire Requests by State

State	Number of Non-English Questionnaire Requests	Number of Advance Letters	Percentage of Advance Letters that generated Requests	Percentage of Requests
California	784,071	12,572,647	6.23	35.07
Texas	294,035	3,744,980	7.85	13.15
New York	269,871	7,898,607	3.42	12.07
Florida	231,162	7,450,522	3.10	10.34
New Jersey	98,691	3,450,355	2.86	4.41
Illinois	95,039	5,294,241	1.80	4.25
Arizona	49,846	2,131,198	2.33	2.23
Massachusetts	32,488	2,669,034	1.21	1.45
Georgia	29,155	3,313,257	0.88	1.30
Washington	26,566	2,521,778	1.05	1.19
Virginia	25,486	2,787,283	0.91	1.14
Pennsylvania	24,566	5,265,599	0.47	1.10
Colorado	23,253	1,789,013	1.30	1.04
Nevada	22,309	775,295	2.88	1.00
Maryland	20,516	2,209,773	0.93	0.92
North Carolina	20,427	3,317,583	0.62	0.91
Connecticut	20,222	1,452,519	1.39	0.90
Oregon	15,077	1,489,587	1.01	0.67
New Mexico	11,686	686,481	1.70	0.52
Michigan	11,611	4,296,913	0.27	0.52
Indiana	8,667	2,635,602	0.33	0.39
Kansas	8,640	1,118,576	0.77	0.39
Wisconsin	8,408	2,308,379	0.36	0.38
Ohio	8,360	4,892,363	0.17	0.37
Minnesota	8,335	2,009,551	0.41	0.37
<b>Utah</b>	8,126	755,905	1.07	0.36

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## Distribution of Non-English Questionnaire Requests by State- cont'd

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State	Number of Non-English Questionnaire Requests	Number of Advance Letters	Percentage of Advance Letters that generated Requests	Percentage of Requests
Oklahoma	7,916	1,394,442	0.57	0.35
Hawaii	7,626	502,523	1.52	0.34
Rhode Island	6,553	462,112	1.42	0.29
Tennessee	6,292	2,393,502	0.26	0.28
Louisiana	6,275	1,834,359	0.34	0.28
Missouri	5,791	2,369,920	0.24	0.26
Nebraska	4,723	699,832	0.67	0.21
District of Columbia	4,671	290,069	1.61	0.21
<b>South Carolina</b>	4,490	1,692,247	0.27	0.20
Arkansas	4,454	1,094,729	0.41	0.20
Iowa	3,491	1,246,394	0.28	0.16
Alabama	3,424	1,865,712	0.18	0.15
Idaho	2,975	499,182	0.60	0.13
Kentucky	2,705	1,645,731	0.16	0.12
Delaware	1,865	340,517	0.54	0.08
Mississippi	1,643	1,083,420	0.15	0.07
New Hampshire	1,142	478,345	2.39	0.05
Alaska	1,077	208,555	0.52	0.05
<b>South Dakota</b>	382	282,658	0.13	0.02
West Virginia	321	692,687	0.05	0.01
Maine	285	472,693	0.06	0.01
Wyoming	262	177,752	0.15	0.01
North Dakota	180	258,689	0.07	0.01
Montana	154	341,666	0.04	0.01
Vermont	125	202,003	0.06	0.01
<b>TOTAL</b>	<b>2,235,435</b>	<b>111,366,780</b>	<b>2.00</b>	<b>100.0</b>

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