Edward W. Fernandez and Nampeo R. McKenney, Bureau of the Census

INTRODUCTION

Prior to the 1970 census, the Census Bureau collected and published only limited information on the Spanish origin population in the United States. Specifically, from 1850 to 1960 Hispanic information was collected primarily through questions about birth and parentage (i.e., country of birth of the person and parents). In the 1970 census, the Census Bureau used four different identifiers to classify persons of Spanish cultural background in order to obtain a more complete description of the Spanish population. These identifiers were birth and parentage, Spanish language, Spanish surname, and Spanish origin. In addition, two composite identifiers were used: Spanish language or surname, and Spanish heritage. From the 1970 census the Census Bureau furnished, for the first time, a fairly comprehensive social and economic description of the Hispanic population in the United States. However, the use of different identifiers for the Hispanic population caused some confusion among data users regarding the interpretation of Spanish population counts and characteristics.

Persons of Spanish origin were also identified in the Current Population Survey (CPS) during the 1970's and detailed information on the Spanish population from this source became available on an annual basis. With the increased availability of Hispanic population data in this decade, there also grew the need for more specific information on Hispanic persons. Federal laws and increased private and governmental requirements portended the need for a single and unequivocal identifier of Hispanic persons in the 1980 census. And, in the 1980 census pretest and dress rehearsal programs, attention was directed towards developing a single subjective question to identify persons of Spanish origin or descent.

This paper summarily describes the results of the Census Bureau's experiences in developing an identifier for the Spanish origin population in the 1980 census.

TRAVIS COUNTY, TEXAS: 1976

As part of the 1980 census pretest program, a mail-out and mail-back procedure was used in the 1976 census of Travis County, Texas. Three questionnaire forms (i.e., questionnaire types) were sent to 133,653 households.

The form A questionnaires (short form) included a Spanish origin question (No. P7) that was almost a replica of the ethnic question used in the 5-percent sample questionnaires of the 1970 census. However, the parenthetical term "Spanish" was added to the Central or South American category to clarify that this category referred only to persons from Spanish-speaking countries (in 1970 some respondents

misinterpreted the category to mean Central or Southern United States).

Spanish Origin Question (P7)
(Form A)

7. Is this person's origin or descent— Fill one circle.	O Mexicon O Puerto Ricon	0	Central or South Amer. (Spanish)
This one (princ.	○ Cuban	0	Other Spanish
		0	No none of these

The form B questionnaires (short form) included an ethnic question similar to that in form A questionnaires, but the "Mexican" category included three terms to designate persons of Mexican origin, namely: Mexicano, Mexican-American, and Chicano. Current Population Survey (CPS) experience indicated that three categories provided a more complete count of Mexican origin persons (in tabulations, the three "Mexican" categories were always combined into the one category "Mexican origin").1

Spanish Origin Question (P7) (Form B)

7. Is this person's origin or descent —	O Mexican or O Cuban
	Mexicano O Central or South
Fill one circle.	○ Mexicon-Amer. Amer. (Sponish
	○ Chicano ○ Other Spanish
	O Puerto Ricon O No, none of these

Form C questionnaires (long form) included a more general type of ethnic question than in each of the other two forms: this question included the categories in the form B Spanish origin question and 14 additional ethnic categories.

Ethnic Origin Question (P12) (Form C)

○ French	i 0	Mexican or	0	Block, Afro-Amer.
○ German		Mexicono	0	Amer. Indian
⊖ Irish	0	Mexican-Amer.	0	Asian (Japanese,
O Italian	0	Chicano		Chinese,
○ Polish	İο	Puerto Rican		Filipino, etc.)
O Russian	0	Cuban	0	Pacific Islander
 Swedish, Danish, 	0	Central or South		(Polynesion,
Norwegian		Amer. (Spanish)		Hawaiian, etc.
 English, Welsh, Scottish 	0	Other Spanish	0	Other - Print origin
O Other European, non Spanish				

Results--Trace Sample Study.-A trace sample of the questionnaires was used to evaluate census editing procedures and to estimate level of nonresponse for specific questionnaire items at various stages of questionnaire processing.² Nonresponse was measured on the unedited questionnaires and after telephone or personal-visit followup of edited questionnaires.

Nonresponse rates for the Spanish origin

question on unedited mail returns for both forms A and B were relatively high (about 16 percent). The nonresponse rates on both forms followed the same pattern of decrease as the different stages of questionnaire processing were completed. The ethnic origin question in the unedited long-form questionnaires (form C) had a nonresponse rate similar to forms A and B; but the reduction in the rate, as the operational phase of questionnaire processing was completed, was not as marked as for the Spanish origin questions on forms A and B.

Furthermore, there was evidence that the total proportion of Mexican origin responses was slightly higher in form B (three Mexican categories) than in form A (one category).

CAMDEN, NEW JERSEY: 1976

The September 1976 census of Camden, New Jersey tested field procedures proposed for the 1980 census.

The Spanish and ethnic origin questions used in the Camden census were identical to those used in the Travis County census of April 1976.

A trace sample was selected from the unedited census questionnaires. Although no special tally or analysis was made of responses to the Spanish and ethnic origin questions, the overall non-response rate for the Spanish question was about 27 percent. This was substantially higher than for the Travis County Pretest.

NATIONAL CONTENT TEST: 1976

The National Content Test (NCT) of July 1976 included a national sample of retired CPS households. The test was designed to compare responses and measure nonresponse rates to alternative 1980 census questions. The NCT included a content reinterview which was designed to further evaluate responses and levels of reliability.

In the NCT, questionnaires were sent to about 28 thousand housing units divided into two panels of 14,000 housing units. Two forms (DG-1 and DG-2) with alternative versions of selected questions were used. The Spanish origin question (No. P7), which was the same for both sets of questionnaires, was identical to the question used in the form B questionnaire of the Travis County pretest.

A general ethnic origin question (P8) was also tested. This question appeared on both questionnaire forms and included: (1) selected ethnic groups such as English, French, Afro-American, Chinese, etc., (2) the Spanish origin groups: Cuban, Mexican-American, Chicano, and Puerto Rican, and (3) an open-ended "other" category. One of the concerns of the test was whether a complete count of the Spanish origin population could be derived from a general ethnic origin question.

Ethnic Origin Question (P8) (Form DG-1)

8. Wh	at is this person's	origi	n or descent? (Fill one circle)
0	Afro-American	0	Mexican-Amer., Chicano
0	American Indian	0	Polish
0	Chinese	0	Puerto Ricon
0	Cuban	0	Russian
0	English	0	Swedish
0	French	0	Other - Specify -
0	Germon		,
0	Hawaiian		
0	Irish	(For example, Scottish, Lithumian Colombian, Jamaican, Filipiso, Vietnamese, Samoan, Nigerian, et	
0	Italian		
0	Japanese	0	Don't know

Although the same ethnic question (P8) was used on both forms, the question on form DG-1 asked respondents to report a single origin. The question on form DG-2, however, allowed respondents to report multiple origins by adding the instruction: "if necessary, fill more than one circle" (the CPS has shown that a significant proportion of respondents report multiple ethnic origins).

Results.-The nonresponse rate for the Spanish origin item on unedited mail returns for both forms was lower (11 percent) than in the previous local area pretests. Also, as expected, differences between the forms in the reporting of Spanish origin were not statistically significant (both forms had the same Spanish origin question).

The reporting of Spanish origin was not, however, parallel between the Spanish origin (P7) and ethnic origin (P8) questions. From the edited questionnaires of form DG-1, there was some evidence that the proportion of persons reporting Spanish in the Spanish origin question was greater than in the ethnic origin question. In the DG-2 questionnaires, the proportion of persons reporting Spanish was markedly higher in the Spanish origin question. However, we should note that the ethnic question on form DG-2questionnaires allowed respondents to report multiple entries and some persons of part Spanish ancestry would have reported both their Spanish and non-Spanish origin and thus proportionally reduced the number of unique Spanish entries.

In the content reinterview, responses to the Spanish origin question (P7) in the original survey were analyzed through a series of reinterview questions on the origin of the person's parents and ancestors and through a question on ethnic self-perception. The results were not conclusive, however. But there was some evidence that the category "Central or South American (Spanish)" was being misinterpreted by some respondents.

OAKLAND, CALIFORNIA: 1977

In the pretests preceding the Oakland census, the Census Bureau had obtained information about the ethnic composition of the population by using two separate questions. One of the questions was primarily a Spanish origin question; the other a more general ethnic question. For the Oakland pretest census of April 1977, this

approach was reevaluated for several reasons.

First, the need for information on an expanded number of ethnic groups was becoming evident. To identify all, or most, ethnic groups for which data were needed would require listing (in a question) a very large number of specific ethnic categories. The recent pretest evidence and past CPS experiences indicated that even the 15 to 20 prelisted categories used were insufficient to produce adequate ethnic reporting. For instance, there was concern that a short list of ethnic categories generated some respondent reporting bias favoring the prelisted categories in the question.

Second, the available space on the questionnaire was not being utilized efficiently with two separate questions on essentially the same subject (i.e., a Spanish origin and an ethnic origin question).

Third, the nonresponse rate for the Spanish origin item had been persistently high in each of the major local pretests, and this suggested that some respondents were confused as to whether they were required to answer the Spanish origin item.

Fourth, an identifier of Spanish origin was needed on a 100-percent basis to provide required data on total Spanish origin population counts for small geographical areas such as blocks.

The Census Bureau attempted to overcome these difficulties by developing a question, for the Oakland pretest that amalgamated the reporting of both Spanish and other ethnicities. This approach was designed to--(1) improve questionnaire space efficiency by using a single question on a 100 percent basis in 1980; (2) eliminate ambiguous categories; and (3) provide required data on the Spanish and other ethnic groups.

Three questionnaire forms (i.e., A, B, and C) were used in the Oakland census. Forms A and B were short-form questionnaires, and form C was a long-form questionnaire (sample).

The new ethnic origin question was used in forms A and C. On form B, the Spanish origin question was almost identical to that used on the form B questionnaires of Travis County except that the category "No, none of these" was changed to "Not Spanish." This and other minor modifications in questionnaire format were aimed at reducing the nonresponse rate.

Ethnic Origin Question (P7)
(Forms A and C)

7. Is this person's origin or descent —	_ Afro-American
If "Spanish/Hispanic," specify, for example — Chicano, Cuban, Mexican, Mexican - American, Mexicano, Nicaraguan, Puerto Rican, Spaniard, Venezuelan, etc.	○ Spanish/ Hispanic →
If "European, exceot Spaniard," specify, for example – English, German, Hungarian, Irish, Italian, Lithuanian, Polish, Swedish, Ukrainian, etc.	European, except Sooniard
If "Other," specify, for example — Brazilian, Chinese, Jamaican, Korean, Lebanese, Niverian. Vietnamese, etc.	C Other

Results--The OEEIS.-The Oakland pretest included a special study called the "Oakland Early Ethnic and Income Study (OEEIS);" this study was designed to provide an early analysis of responses to alternative questions on race, ethnicity, and income. A sample, stratified by race and ethnicity, was used for the study.

Reporting in the ethnic and Spanish question was analyzed (1) to determine whether there were differences in reporting of Spanish origin, by type, between the ethnic and the Spanish origin questions; (2) to determine the proportion of "correct" respondent entries in the semi-openended type of ethnic question used on questionnaire forms A and C; and (3) to compare the nonresponse rates between the Spanish and ethnic questions. The study results showed the semi-open-ended type of ethnic question (used on forms A and C) contributed to substantial inconsistent or incomplete reporting of Spanish origin persons.³ For instance, on the unedited mail-returns about 53 percent of all Spanish persons answered the ethnic question either incompletely or inconsistently. And, even after editing and followup, about one-fourth of all Spanish origin persons had incomplete or inconsistent responses.

In addition, edited questionnaires showed that the proportion of persons reporting Spanish origin was higher for the Spanish origin question than for the new ethnic question--9.5 versus 7.3 percent, respectively. Similarly, the Spanish origin question was more effective by type of Spanish origin, particularly for persons of Mexican origin.

This early analysis from the OEEIS showed that Spanish origin questions in Oakland had provided more complete reporting of Spanish origin than had the general ethnic question. Because of the substantial incomplete and inconsistent reporting of Spanish in the semi-open-ended ethnic question, it was concluded that this type of question would not provide a complete identification of the Spanish origin population on a 100-percent basis. However, the Spanish origin question also had some weaknesses, specifically a high nonresponse rate and "suspected" misreporting in the "Central and South American (Spanish) category. Although differences in nonresponse rates between the Spanish and ethnic origin questions on the edited questionnaires were not statistically significant, the higher nonresponse rate for the Spanish origin question on the unedited mail-return questionnaires was not desirable. A high nonresponse rate for any question, especially a 100-percent question, requires a substantial followup and this increases the cost and personnel resources needed to complete the census operation. The Census Bureau concluded, however, that these difficulties could be overcome by modifying the Spanish origin question.

Further Analysis.-The results from the entire Census of Oakland became available only after information from the trace sample of the Richmond dress rehearsal was tabulated. This trace sample revealed misreporting in the Mexican-American category of the Spanish origin question; therefore, the Census Bureau then did an additional intensive review of the

Oakland census results (for a further discussion of the misreporting, see below under Richmond Virginia, 1978). A reexamination of the data and questionnaires in the OEEIS did not reveal any misreporting in the Mexican-American category of the Spanish origin item. However, final tabulations showing the distribution of Spanish origin by race for the entire city suggested some misreporting. A review of questionnaires indicated that some respondents had altered the Mexican-American category to emphasize the "American" part; this misreporting was more pronounced in certain census tracts of the city and among Black persons.

Because of these findings for Oakland (and those from the Richmond census), the Census Bureau decided not to publish data on the Spanish origin population collected in the Oakland census.

RICHMOND, VIRGINIA: 1978

The dress rehearsal census of Richmond, Virginia, of April 1978, included the counties of Chesterfield and Henrico, and the city of Richmond proper.

A Spanish origin question was included on both the short- and long-form questionnaires used in the Richmond census. Because of previous pretest experiences, the following changes were made in the Spanish origin question: (1) the term "Central or South American (Spanish)" was deleted to lessen the possibility of misreporting; and (2) the format was modified and the number of Mexicanorigin categories were reduced to make the "Not Spanish" category more obvious and, thereby, reduce the nonresponse rate.

Spanish Origin Question (P7)

(Short and Long Forms)

7. Is this person's origin or descent —	C Mexican-Amer, O Cuban
Fill one circle.	O Mexican or Chicano O Other Spanish
[O Puerto Rican
<u> </u>	O Not Spanish
<u> </u>	1

An open-ended question on ethnic origin (ancestry) requiring a write-in entry was included on the long-form (sample) questionnaires. This ancestry item, which represented a modification of the new ethnic origin question used in Oakland, was designed to provide information on a large number of ethnic groups.

Results.--A trace sample of about 3,700 unedited mail-return questionnaires was used to analyze reporting in the Spanish origin question. First, results showed a high non-response rate (30 percent) for the Spanish origin question; this rate varied by race-the nonresponse for the Spanish origin item was about 20 percent for White persons, 46 percent for Black and other races persons, and 80 percent for persons not reporting race. These results

indicated that the modifications in the format and categories of the question had not successfully reduced the high "nonresponse" rate.

Another problem also became apparent in Richmond. Spanish origin reporting was questioned because of: (1) the unexpectedly high proportion (about 4 percent) of Spanish persons, mainly Mexican-American, compared to the proportion of these persons enumerated in the 1970 census (1 percent); (2) the very high proportion of Spanish persons reported as of the Black race, and, (3) the large proportion of unsolicted alterations made in the Mexican-American category (about 42 percent of those persons reporting Spanish origin had either underlined or circled the term "American" in the "Mexican-Amer." category of the question, or had written the term "American" although there was no provision for a write-in entry).

A reinterview survey was designed and conducted to provide definitive information on the reason for the apparent "misreporting in the Mexican-Amer. category of the Spanish origin question. About 200 households from the Richmond census with at least one "affirmative" response in the Spanish origin question were interviewed by either personal visit or by telephone.

The reinterview responses showed that nearly all respondents who had originally reported as Spanish origin by marking the "Mexican-American" circle were not Spanish. And this occurred in both the personal visit and the telephone reinterviews. Moreover, misreporting of Spanish origin occurred for both Black and White persons. Reinterview responses to probing questions showed that misreporting in the "Mexican-American" category was due to respondents who wished to indicate their origin as "American."

The Richmond results showed that a different formatting approach for the Spanish origin item was required—an approach which would permit the population which is not Spanish to respond to the question without having to read through the various Spanish categories. Such an approach was considered the best way to reduce the high nonresponse and also the misreporting.

NATIONAL TEST ON SPANISH ORIGIN: 1978

The National Test on Spanish Origin (NTSO) was designed and conducted to compare reporting in two alternative versions of a Spanish origin question. One of the questions was new, and the other was a variant of the Spanish question used in the Richmond census.⁴

The new version of the Spanish origin question (called the "Lower Manhattan" version) was also used in the Lower Manhattan dress rehearsal census. The wording of this new question was especially chosen to emphasize the intent of the question. Also, the category: "No, not Spanish/Hispanic" was positioned first in the question so that non-Spanish persons could readily respond without reading all the Spanish categories. The main purpose of this reformatting was to reduce the nonresponse rate; it was expected that this change would also reduce the misreporting in the "Mexican-American" category.

Spanish Origin Question (P7) (Similar to Richmond Spanish origin question)

7. Is this person's origin or descent — Fill one circle.	O Mexican or Chicano O Mexican-Amer. O Cuban	O Puerto Rican O Other Spanish/ Hispanic
	○ Not Spenish /	Hispenic

Spanish Origin Question (P7)
(Similar to Lower Manhattan Spanish origin question)

7. Is this person of Spenish/Hispanic origin or descent?	O No, not Spanish/Hispanic
Fill one circle.	 Yes, Mexican, Mexican-Amer., Chicano
	C Yes, Cubers
	○ Yes, Puerto Rican
	 Yes, other Spanish/Hispanic

For this test, a sample of 6,455 housing units was selected from retired Current Population Survey housing units last interviewed in July 1974. About 3,200 housing units (HU's) received the Spanish origin question version almost identical to the one used in the Richmond census, and another 3,200 housing units received the new (i.e., Lower Manhattan) question version. To minimize respondent conditioning to ethnic and Spanish origin questions tested earlier, households in previous census pretest sites (e.g., Travis, Camden, Oakland, Richmond, etc.) were excluded from the sample.

The main objective of the NTSO was to measure nonresponses between the two versions of the Spanish origin question on mail-return questionnaires. Because the sample was selected to measure only differences in nonresponse rates, no clear-cut-inferences were possible about proportions of respondents reporting in the Spanish origin question.

Results.-National results showed that the nonresponse rate for the Spanish origin item was lower (15 percent) for the Lower Manhattan version than for the Richmond version (27 percent). In the South (excluding Texas), about one-fourth of respondents did not report in the Lower Manhattan question version compared to about one-third not responding in the Richmond question version. The same pattern was noted for the remainder of the Nation--with nonresponse rates of 12 percent for the Lower Manhattan version compared to 25 percent for the Richmond version. In general, the nonresponse rates for both question versions was substantially lower in the non-Southern areas of the country.

The proportion of the total population reporting Spanish origin was about the same for both versions of the Spanish origin question.

However, among the persons who responded to the Spanish origin item, a higher proportion reported Spanish (especially in the "Mexican-Amer." category) on the Richmond version than on the Lower Manhattan version. For instance, the proportion of persons who responded to the Spanish item and indicated their origin as Mexican was about 4.0 percent for the Richmond version compared to 1.8 percent for the Lower Manhattan version.

Because misreporting in the Spanish origin question had occurred in the Richmond census, the Census Bureau conducted a telephone reinterview of NTSO respondents who had reported Spanish origin. Of those persons contacted who originally reported Spanish origin in the Richmond question version, about 25 percent reported "not Spanish" in the telephone reinterview. By contrast, only 3 percent of persons who reported Spanish origin in the Lower Manhattan version said they were "not Spanish" in the telephone inquiry. In addition, virtually all persons reporting Spanish origin in the Richmond question version who changed to "not Spanish" in the telephone reinterview said they originally misinterpreted the question and had reported themselves as Mexican-American so as to identify as "American." There was consistency of reporting, however, between the original response of Spanish origin and the telephone reinterview for persons reporting in the other Spanish categories.

In summary, the NTSO clearly showed that the Lower Manhattan version of the Spanish origin question resulted in a lower nonresponse rate than did the Richmond version. And the telephone reinterview suggested that the Lower Manhattan version of the Spanish origin item would produce a more accurate identification of Spanish origin persons on mail-return questionnaires.

LOWER MANHATTAN, NEW YORK: 1978

The Lower Manhattan Census was taken in the fall of 1978. A trace sample, which consisted of a systematic selection of 5,070 households, was designed to test the two versions of the Spanish origin question: the Richmond and the Lower Manhattan question version (these questions were the same versions tested in the NTSO).

Results--Trace Sample Study.-Analysis of unedited early mail-return questionnaires in the trace sample showed a much lower nonresponse rate in the Lower Manhattan version of the Spanish origin question than for the Richmond version (12 and 24 percents, respectively). These results were consistent with those from the NTSO, and the intent of the Lower Manhattan version of the Spanish origin item seemed to be clearer to respondents.

In summary, the early mail returns in the trace sample clearly showed a significantly lower overall nonresponse rate for the Lower Manhattan version of the Spanish origin question compared to the Richmond version. Consequently, considering these results and those of the NTSO, the Census Bureau opted to use the Lower Manhattan version of the Spanish origin question in the 1980 census.

SUMMARY

During the 1980 census pretest program, several approaches were used to develop an efficient question to identify the Spanish origin population in the United States. Information on the total Spanish origin population from the 1980 census was required on a 100-percent basis for Federal and State programs.

From the beginning, one major criteria specified for the Spanish origin item was that the question should be based upon self-identification (i.e., respondent's self-perception about whether he or she was of Spanish origin). Of crucial concern was the level of response to the question (i.e., nonresponse rate) because this factor always had a major impact on overall census costs and final data quality. Other major concerns were that respondents unequivocally recognize and correctly interpret the question and its contents. Hence, the Spanish origin question finally used for the 1980 census evolved through the various census pretests and dress rehearsals with format and content changes designed to address these concerns.

The results of this 1980 census testing lead, therefore, to the decision to use the "Lower Manhattan" version of the Spanish origin question in the 1980 census.

Spanish Origin Question (P7)

(Long and Short Forms)

7. Is this person of Spanish/Hispanic origin or descent?	C No (not Spanish/Hispanic) Yes, Mexican, Mexican-Amer., Chicano
500	C Yes, Puerto Ricari
Fill one circle.	C Yes, Cuban
1	 Yes, other Spanish/Hispanic

NOTES

A small-scale study, based on ethnic reporting in the October 1972 CPS, showed that 54 percent of Mexican origin persons preferred the term "Mexican-American," 44 percent the term "Mexican," and 2 percent the term "Chicano."

- A trace sample is defined as a sample that can be examined at selected stages of an entire process. Field editing refers to a systematic review of questionnaires for inconsistent or incomplete response or nonresponses.
- A consistent and complete response of Spanish origin in the new ethnic origin item required a mark in the "Spanish/Hispanic" circle and a Spanish write-in entry.
- The Richmond "variant" question differed from the original Richmond question version mainly in that the category "Mexican-Amer." was shifted from first to second place to minimize the tendency of non-Spanish persons to report as "American."

REFERENCES

- U.S. Department of Commerce, Bureau of the Census, <u>Current Population Reports</u>, Series P-20, No. 264, "Persons of Spanish Origin in the United States: March 1973."
- L2] U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-28, No. 1551, "1976 Census of Travis County, Texas: April 20, 1976."
- L3] U.S. Department of Commerce, Bureau of the Census, <u>Current Population Reports</u>, Series P-28, No. 1563, "Special Census of Oakland California: April 26, 1977."
- L4] U.S. Department of Commerce, Bureau of the Census, <u>Current Population Reports</u>, Series P-28, No. 1565, "Special Census of the Richmond Virginia Area: April 4, 1978."
- L5] U.S. Department of Commerce, Bureau of the Census, <u>Current Population Reports</u>, Series P-28, No. 1567, "Special Census of Lower Manhattan, New York City, New York: September 26, 1978."