ITEM NONRESPONSE, ALLOCATION, AND DATA EDITING OF THE QUESTION ON HISPANIC ORIGIN IN THE AMERICAN COMMUNITY SURVEY (ACS): 2000 TO 2007

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1. Introduction

The question on Hispanic origin was first introduced in the 1970 Census and subsequently has been included in every census and major national household survey questionnaire since then (i.e., Current Population Survey (CPS), American Community Survey (ACS), and Survey of Income and Program Participation (SIPP)).[1,2] Over the last 35 years the question on Hispanic origin has undergone numerous changes and modifications all with the aim to improve the quality of Hispanic origin data in the United States and surrounding territories (Alberti 2006, Martin et al. 2004, 2002, Cresce and Ramirez 2003, Cresce et al. 2001). Modifications made to the Hispanic origin question for the 2010 Census include reinstating the term "origin" and targeting the Hispanic origin write-in line; and providing detailed Hispanic origin groups, such as Dominicans and Colombians, as examples of "Other Hispanic or Latino." Results from research studies conducted by the Census Bureau in the last three decades show that the question on Hispanic origin has performed relatively well in the last four population censuses (1970, 1980, 1990, and 2000) as measured by low item nonresponse and allocation rates; although this is not to say the question itself is free of problems (Ramirez 2005, Martin 2002, Cresce and Ramirez 2003, Cresce et al. 2001). One notable issue documented in Census 2000 was the increase of general response reporting (i.e., "Hispanic," "Latino") among Hispanics at the expense of specific detailed origin reporting. This was largely attributed to the absence of specific Hispanic origin examples on the questionnaire (Martin, 2002).

Much has been written about the quality of Hispanic origin data from censuses but few studies have specifically examined the quality of Hispanic origin data from national household surveys. Considering how important censuses are for the apportionment process and the distribution of federal funds in the United States, it is no surprise that more attention has been paid to census counts of the Hispanic population. This may change in the next few years as the ACS, the largest national household survey in the United States, replaces the traditional census long form as part of the Census Bureau's 2010 Decennial Census redesign program. The ACS will gain more importance as the sole provider of socioeconomic and housing data of the general U.S. population and its minority groups at the local community level. The 2010 Census will be the first modern census not to have a long form in 80 years. Given the prominent role the ACS will play in the upcoming decades in providing official federal socioeconomic and housing statistics of the nation, one question has come to mind among many researchers inside and outside the Census Bureau – what is the quality of the Hispanic origin data from the ACS? This paper will attempt to answer this question.

2. Purpose

The purpose of this paper is to evaluate the quality of origin data from the question on Hispanic origin in the ACS for the years 2000 to 2007. Three key areas are examined: 1) item

[1] The Spanish origin question, now the Hispanic origin question, was originally fielded and tested by the Bureau of the Census in the November 1969 Current Population Survey (CPS). It was later used in the 1970 Census of Population (5 percent sample). Starting with the 1973 CPS March supplement, the Hispanic origin question has been included as a standard item on a monthly basis (Fernandez, 1975).

[2] For a comparison of ACS and CPS data on the Hispanic origin question, refer to "Comparison of ACS and ASEC Data on Hispanic Origin: 2004" by Roberto Ramirez and Sharon Ennis, U.S. Census Bureau, at http://www.census.gov/acs/www/Downloads/ACSvASEC_Hisp_final.doc.

nonresponse and allocation rates for the last eight years, 2) different response types by selected demographic characteristics, and 3) data editing, edit flags, and allocation methods. In addition, item nonresponse rates and response types are shown at the national, regional, and state level, by data collection mode and other selected demographic characteristics. The current ACS Hispanic origin edits and imputation methods are also discussed in detail, as well as possible future edit changes for the 2010 Census. The paper concludes with new edit recommendations for the question on Hispanic origin.

3. Background

Internal evaluation studies going back to the 1970 census and more extensive research studies conducted shortly after the 1980, 1990, and 2000 censuses have examined item nonresponse rates, different response types, and the editing and allocation methods to the question on Hispanic origin (Cresce et al. 2001, Ramirez 2005). Findings from these studies suggest the Hispanic origin question has performed well in these past four censuses with generally low item nonresponse and allocation rates with the exception of the 1990 census. Table A shows that the item nonresponse rate for the Hispanic origin question for the 1990 census (10.0 percent) was about twice the rate of the 1970 (3.5 percent), 1980 (4.3 percent), and 2000 censuses (5.6 percent). Research suggests that the dramatic nonresponse increase in 1990, largely attributable to non-Hispanics skipping the Hispanic origin question, was explained by the placement of the Hispanic origin question after the race question in the questionnaire (Martin 2002). Internal studies on data from the ACS, on the other hand, show dramatic improvements with much lower item nonresponse and allocation rates for the Hispanic origin question (more detailed information from the ACS is forthcoming).

Table A. Item Nonresponse Rate and Allocation Counts to the Question on Hispanic Origin in Decennial Censuses, United States: 1970, 1980, 1990, and 2000

United States[1/]	Census Year			
	1970[2/]	1980[3/]	1990[3/]	2000[3/]
Item nonresponse rate	3.5	4.3	10.0	5.6
Total allocation count (in millions)	7.2	9.8	24.7	12.4

[1/] Puerto Rico and the U.S. Island Areas are not included in this table.
[2/] Based on 5 percent sample long form: housing unit and group quarters population.
[3/] 100 percent short form: housing unit and group quarters population.
Note: 1990 and 2000 exclude edit assignments.

Source: U.S. Census Bureau, special tabulations: 1970, 1980, 1990, and 2000 Census of Population

The 2007 ACS edit for the Hispanic origin question is based on the original 1990 and 2000 Census Hispanic origin edits done on short form data. After every census, data results from the Hispanic origin question are evaluated and analyzed for quality and accuracy. Depending on the issues found, modifications and changes are made to the edit and allocation procedures in order to improve the quality of the data. For example, one notable allocation improvement for the

2000 Census was the use of surname-assisted hot decks.[3] Sections 9.6 and 9.7 of this paper will further discuss the application of this hot deck.

4. Methodology

Eight years of ACS data from 2000 to 2007 were used in this study. Internal ACS data files were used to produce the estimates presented in this paper. The estimates in this paper are based on responses from a national sample of the U.S. household and group quarters populations. As with all surveys, estimates may vary from the actual values because of sampling variation or other nonsampling factors. Therefore, all statements made in this paper have undergone statistical testing and are significant at the 90-percent confidence level unless otherwise noted. The Statistical Application Software Package (SAS) was used to process the data for this study. A SAS program was written to merge ACS state data files into one national data file for analysis and statistical testing. This national file consisted of both unedited and edited household and demographic variables for every respective year examined in this paper. The population universe is the household population of the United States. Puerto Rico and the U.S. Island Areas are excluded.

5. The American Community Survey in Brief

The history of the ACS can be divided into four distinct stages:

- Design and early proposals stage, 1990 to 1993
- Development stage, 1994 to 1999
- Demonstration stage, 2000 to 2004
- Full implementation stage, 2005 to present

The design and early proposals stage occurred when the concept of continuous measurement was first proposed. During this stage, the Census Bureau developed a research proposal for a continuous measurement alternative to the collection of detailed sample data and developed prototypes.

The development stage occurred when the Census Bureau tested early prototypes of continuous measurement in a small number of sites. Operational testing of the ACS began in 1995 in four test sites. In 1999, testing expanded to 36 counties in 26 states. The purpose of this testing was to validate methods and procedures, as well as to develop cost models for future implementation.

The demonstration stage occurred when the Census Bureau carried out large-scale, nationwide surveys and produced reports for the nation, states, and large geographic areas. The demonstration stage of the ACS was initially called the Census 2000 Supplementary Survey

[3] For more information, refer to working paper No. 65, "Evaluating Components of International Migration: Quality of Foreign-Born and Hispanic Population Data" by Arthur Cresce, Roberto Ramirez, and Gregory Spencer, U.S. Census Bureau, at http://www.census.gov/population/documentation/twps0065/twps0065.html.

(C2SS). The primary goal of the C2SS was to provide critical assessments of feasibility, quality, and comparability with Census 2000, thus demonstrating the ability to fully implement the ACS. The C2SS was conducted in 1,240 counties, of which 36 were ACS test counties. The annual sample size increased from 165,000 housing units (HUs) in 1999 to 800,000 HUs in 2000.

The full implementation stage began in January 2005 when the Census Bureau expanded the ACS to full sample size for HUs. Under full implementation, the ACS expanded to all 3,141 counties in all 50 states and the District of Columbia and to all 78 municipios in Puerto Rico. The annual ACS sample increased to about three million addresses in full implementation. Beginning in 2006, the ACS sample was expanded to include group quarters (GQ) facilities.[4]

5.1 Sample Frame

The ACS derives its sample frame from a national Master Address File (MAF) that the Census Bureau maintains. The MAF is the Census Bureau's official inventory of known living quarters (housing units and group quarters facilities) in the United States and Puerto Rico. The MAF contains mailing and location address information, geographic codes, and other information about each living quarters. The Census Bureau continues to update the MAF using the U.S. Postal Service's (USPS's) delivery sequence file (DSF), ACS non-response follow-up, updates from special census operations, and the Community Address Updating System (CAUS). [5,6]

5.2 Weighting and Controls

The ACS is weighted to account for the probability of selection and housing unit nonresponse. After the initial weighting, data from the ACS are controlled to independent estimates of the population by sex, age, race, and Hispanic origin and total housing units. The Population Estimates Program (PEP) at the U.S. Census Bureau produces these independent estimates annually as of July 1 of every year. Data from the ACS are controlled at the county level to independent estimates of the household population and the number of housing units as of July 1.[7,8] This is done to reduce the variability of the ACS housing unit and person estimates and to reduce bias due to undercoverage of housing units and people within housing units.

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[4] For more information regarding the history of the ACS, refer to the following document: U.S. Census Bureau, Design and Methodology, American Community Survey, Technical Paper 67, Washington, DC: U.S. Government Printing Office, 2006.

[5] The DSF is the USPS's master list of all delivery-point addresses served by postal carriers. The file contains specific data coded for each record, a standardized address and ZIP code, and codes that indicate how the address is served by mail delivery. The DSF has been the primary source of new city-style MAF addresses. For areas in which a significant number of mail deliveries are accomplished using non-city-style addresses, DSF addresses are not used to update the MAF because those addresses lack geocodes and might provide different (and unmatchable) address representations for housing units whose addresses already exist on the MAF.

[6] The CAUS program was designed specifically to address coverage concerns for the ACS. The Census Bureau recognized that the DSF, as the primary source of ACS frame updates, was not adequate to deal with changes in predominantly rural areas of the nation where city-style addresses are generally not used for mail delivery. The CAUS program, an automated field data collection operation, is designed to provide a rural counterpart to the update of city-style addresses received from the DSF.

[7] ACS does not control to the county level for small counties. For small counties, the ACS grouped the counties into weighting areas with a minimum population of 250,000. Data are then controlled at the weighting area level.

[8] The C2SS housing unit estimates were controlled to the Census 2000 housing unit counts.

5.3 Hispanic Origin and Race Controls

Household population estimates are controlled to the PEP independent population estimates by sex, age, race, and Hispanic origin combinations by weighting area, which is either a county or a group of less populous counties.[9] For the purposes of weighting, race and Hispanic origin are combined to define six unique race-ethnicity groups based on the Office of Management and Budget's (OMB's) race and ethnicity standards.[10] According to OMB's standards, there are five major race groups (White, Black, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander) and two ethnicity groups (Non-Hispanic and Hispanic). Race and Hispanic origin are combined in the ACS to create the following race-ethnicity groups:

- Non-Hispanic White
- Non-Hispanic Black
- Non-Hispanic American Indian or Alaska Native (AIAN)
- Non-Hispanic Asian
- Non-Hispanic Native Hawaiian or Other Pacific Islander (NHPI)
- Hispanic

The assignment of a single major race to a person can be complicated because people can identify themselves as "Some other race" (SOR) or as being of multiple races. Since these are not OMB groups, we assign these race responses to one of the major race groups.

Before the six race-ethnicity groups are created, any race response that contains the SOR category is redefined into one of the five major race groups. For all multiple race responses that contain the SOR category, the SOR category is dropped. For example, the multiple race response "Black and SOR" would become "Black." If the race response is the single race "SOR" then a new single race is imputed from a hot deck to one of the major race groups.

After this imputation procedure, any multiple race response is also redefined to one of the major race groups. If White and some minority race are reported then the minority race response is used. For all other multiple responses, the largest minority race group selected in that weighting area is used. For example, assuming that Asians are the largest minority group in a weighting area, a multiple race response of "Black, Asian, and NHPI" would be assigned to the Asian single race.

It is important to note that the six race-ethnicity groups created during this process are used for weighting purposes only and are not used for tabulations.

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[9] With the addition of group quarters in 2006, population estimates are controlled to independent estimates of the total population. The GQ weighting is performed first and then the ACS household population control is derived by subtracting the ACS GQ population estimate from the PEP total population estimate. This subtraction is done for each age-sex-race-Hispanic origin cell described later in Section 5.3.

[10] The U.S. Census Bureau follows the Office of Management and Budget (OMB) 1997 revised standards for the collection of federal data on race and ethnicity. For more information, refer to the revised standards at http://www.whitehouse.gov/omb/fedreg/ombdir15.html.

When there is insufficient sample or the ACS uncontrolled estimate and the control total differ greatly, the groups are collapsed according to a decision tree. Within each collapsed weighting race-ethnicity group, the people in sample are placed into sex-age cells formed by crossing sex by thirteen age categories. If necessary, these cells also are collapsed. Individual person weights are calculated at this point. Weighting cells are then created within each weighting area. These groups are defined by age, sex, race, and Hispanic origin. Control totals are then calculated from the independent population estimates for these cells. A factor is created for each cell by dividing the control totals by the total person weight for each cell. This factor is applied to each person in that cell.

For an estimate to be controlled, it must be controlled for all weighting areas from which the estimate is built. If any weighting area in a state is not controlled for an estimate then that state estimate – and, as a consequence, the national estimate – is not controlled.[11,12]

5.4 Data Collection at the National Level

Data are collected continuously throughout the calendar year using a combination of three data collection modes: 1) mail-out/mail-back questionnaires (Mail), 2) Computer-Assisted Telephone Interviewing (CATI), and 3) Computer-Assisted Personal Interviewing (CAPI). Every month during the calendar year a unique national sample of housing unit addresses receives an ACS mail questionnaire. Individual housing units that do not respond via mail questionnaire are telephoned during the second month of collection if a phone number for the address is available. A sub-sample of housing units that do not respond via telephone and a sub-sample of unmailable addresses are selected for CAPI in the third and the last month of data collection.[13]

Table 1 shows that over half of all respondents in the 2007 ACS household population were enumerated by mail questionnaire (51.7 percent) followed by CAPI (36.0 percent) and CATI (12.3 percent). Hispanics were more likely to be enumerated in CAPI than by mail (Mail 26.3 percent, CAPI 58.9 percent, and CATI 14.9 percent). Non-Hispanics, on the other hand, were enumerated similarly to the total population (Mail 56.2 percent, CAPI 31.9 percent, and CATI 11.9 percent). The percentage of the total population enumerated by mail has fallen from 57.9 percent in 2000 to 51.7 percent in 2007. This is particularly the case for Hispanics in which they experienced an eight percentage-point drop during the same time period, from 34.7 percent to 26.3 percent. The decline of mail response rates has increased the use of CATI and CAPI, with CATI experiencing the higher percent increase since 2000. This results in a decrease in item nonresponse and lower allocation rates. See Figures 1 through 3.

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[11] For 2007 data, estimates of the Hispanic population are controlled at the state level for only thirteen states and the District of Columbia. These states are: CA, CO, CT, DE, HI, ID, NV, NJ, NM, OR, TX, UT, and WA. For more information, refer to American FactFinder, 2007 ACS data, Table C03001.

[12] For more information regarding the application of population controls in the ACS, refer to the following document: U.S. Census Bureau, Design and Methodology, American Community Survey, Technical Paper 67, Washington, DC: U.S. Government Printing Office, 2006.

[13] The CAPI sub-sample is selected from two categories of cases. Mailable addresses are sampled at a rate of one-in-two, two-in-five, or one-in-three. Unmailable addresses are sampled at a rate of two-in-three.

5.5 Data Collection at the State Level

As compared to the national level, similar mode collection rates were observed among states with Hispanic populations of one million or more (see Table 1b). For example, Hispanics in all states with at least one million Hispanics (Arizona, California, Florida, Illinois, New Jersey, New York, and Texas) were more likely to be enumerated in CAPI than by mail or CATI. New York experienced the highest CAPI rate (65.4 percent) in 2007 while Florida had the lowest (56.4 percent). All seven states experienced about a five percentage-point or more decline in mail collection rates since 2000. Florida declined from 40.7 percent in 2000 to 30.8 percent in 2007 (about a ten percentage-point drop). Correspondingly, CATI usage increased during this time period with California increasing from 9.3 percent in 2000 to 15.4 percent in 2007 (about a six percentage-point increase).

5.6 Data Collection Mode for Hispanics by Selected Demographic Characteristics

As previously mentioned, nearly three-fourths of all Hispanic respondents in the 2007 ACS household population were captured in the CATI and CAPI phases of ACS (73.7 percent) compared to only 26.3 percent by mail. Such a large disparity between the data collection modes has raised concerns about the socioeconomic differences between those Hispanics who respond by mail versus those who do not. Table 2 examines this issue and the findings suggest there are some notable differences in respondent characteristics. According to the results, those Hispanics responding by mail questionnaire (as compared to those who responded through CATI or CAPI) were more educated (20.9 percent vs. 9.4 percent with a Bachelor's degree or more), less likely to live below the poverty level (12.8 percent vs. 23.3 percent), more likely to be professionals (30.0 percent vs. 13.6 percent in management and professional occupations), more likely to own their homes (67.4 percent vs. 42.9 percent), and more likely to be native (70.1 percent vs. 56.5 percent). These findings suggest that as the Hispanic population continues to grow in the coming years, more emphasis needs to be placed on outreach and educational programs about the ACS. This may help close the gap between the data collection modes among the Hispanic population.

5.7 Residence Rules

The ACS uses the concept of current residence to determine who should be considered residents of sample HUs. Residency is determined as of the date of interview. The ACS interviews everyone in the housing unit that is living or staying there for more than two months, regardless of whether or not they maintain a usual residence elsewhere. If a person who usually lives in the housing unit is away for more than two months at the time of the survey contact, he or she is not considered to be a current resident of that unit. There are three exceptions to this rule:

- Children (below college age) who are away at boarding school or summer camp for more than two months are always considered current residents of their parents' home.

- Children who live under joint custody agreements and move between residences are always considered current residents of the sample unit where they are staying at the time of interview.

- People who stay at a residence close to work and return regularly to another residence to be with their family are always considered current residents of the family residence.

This rule recognizes that people can have more than one place where they live or stay over the course of a year, and these people may affect estimates of the characteristics of the population for some areas.

6. The Question on Hispanic Origin

The ACS uses two versions of the Hispanic origin question -- one designed for the mail questionnaire and one for CATI/CAPI administration.[14,15]

The mail version of the ACS asks the Hispanic origin item as follows:

> Is this person Spanish/Hispanic/Latino?
> Mark (X) the "No" box if not Spanish/Hispanic/Latino.
> No, not Spanish/Hispanic/Latino
> Yes, Mexican, Mexican Am., Chicano
> Yes, Puerto Rican
> Yes, Cuban
> Yes, other Spanish/Hispanic/Latino – Print group.

The CATI/CAPI version of the ACS asks the Hispanic origin question in three parts:

> (Is (name)/ Are you) Spanish, Hispanic, or Latino? **[1]**
> Yes
> No
>
> Is (he/she/ Are you) of Mexican origin, Puerto Rican, Cuban, or some other Spanish/Hispanic/Latino group? **[2]**
>
> Mexican, Mexican American, Chicano
> Puerto Rican
> Cuban
> Other Spanish/Hispanic/Latino
>
> What is the other Spanish, Hispanic, or Latino group? **[3]**
> (For example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard)

[14] The Hispanic origin question is preceded by the sex, age, relationship, and marital status questions and followed by the race question in both the mail and CAPI/CATI versions of the questionnaire.

[15] Beginning with the 2008 ACS (and for Census 2010), four changes will occur to the Hispanic origin question: 1) the reordering of the general terms from (Spanish, Hispanic, Latino) to (Hispanic, Latino, Spanish) in the main stem of the Hispanic origin question, 2) the reinstatement of the word "origin" (i.e., "Is Person X of Hispanic, Latino, or Spanish origin") which was dropped back in Census 2000 but was previously used in the 1970, 1980, and 1990 censuses, 3) the rewording of the "Yes, other Spanish/Hispanic/Latino" category to "Yes, another Hispanic, Latino, or Spanish origin," and 4) the inclusion of examples of detailed Hispanic origin groups will be provided under the "Yes, another Hispanic, Latino, or Spanish origin" category on the mail questionnaire.

6.1 ACS Mail Questionnaire

The Hispanic origin question in the ACS paper questionnaire is presented as a single-banked item consisting of five check boxes and one write-in line. The write-in line is provided to capture other Hispanic origin groups not offered as check-box categories (such as Dominican, Colombian, Venezuelan, etc.). A maximum of two write-in entries are coded in the ACS. Since 1996, no printed examples of detailed Hispanic origin groups were provided under the "Yes, other Spanish/Hispanic/Latino" category in the ACS mail questionnaire, but beginning in 2008, printed Hispanic origin examples will be shown.

The ACS paper questionnaire instructs the respondent to answer both the Hispanic origin question and the race question. The instruction is stated as follows: "NOTE: Please answer BOTH questions 5 and 6." Question 5 is the Hispanic origin item and question 6 is the race item. The purpose of this instruction is to prompt respondents (mainly Hispanics) to answer the race question.

6.2 Computer-Assisted Telephone Interviewing (CATI) and Computer-Assisted Personal Interviewing (CAPI) Instruments

The CATI/CAPI version of the Hispanic origin question uses three separate questions (see items above) with the last being an open-ended question. The survey uses a short "Yes" or "No" question followed by a second question (for those respondents who answered "yes" to the first question) soliciting more detailed Hispanic origin group information. The second question has four categories for respondents to choose from, with the last category being "Other Spanish/Hispanic/Latino." Most respondents to the ACS find a response category within the second question, but if they do not, they are asked a third open-ended question. A flashcard is shown with detailed Hispanic origin examples only in the CAPI mode. The CATI and CAPI instruments do not allow interviewers to leave an item blank (which can be done on the mail questionnaire) but it does allow "Don't know" and "Refused" responses. Respondents may report more than one origin but only one is tabulated. Multiple Hispanic responses are collected for research purposes only (see section 9.3 for more information on this topic).

7. Item Nonresponse Rates to the ACS

Since 2000, the ACS has achieved high annual total housing unit response rates. Table B shows the ACS survey response rate for the housing unit population for the years 2000 through 2007. The ACS survey response rate is calculated as the initially weighted estimate of interviews divided by the initially weighted estimate of cases eligible to be interviewed. For the last eight years, the ACS has had consistent high total response rates with at least 95 percent or more of the eligible sampled housing units responding to the survey.

Table B. ACS Housing Unit Response Rates for the United States	
Year	**Response Rate**[16]
2007	97.7
2006	97.5
2005	97.3
2004	93.1
2003	96.7
2002	97.7
2001	96.7
2000	95.1

7.1 Item Nonresponse Rates to the Question on Hispanic Origin

According to the ACS, item nonresponse to the question on Hispanic origin occurs when the respondent fails to provide an answer to the question (blank) or provides an invalid answer to the question.[17] The item nonresponse rate for 2007 was calculated using the following formula:

$$\left(\left(\mathbf{4{,}394{,}836} \middle/ \mathbf{293{,}499{,}975}\right) \times \mathbf{100} = \mathbf{1.5\%}\right)$$

The numerator is defined as 4,394,836= [4,290,391 (blanks)] + [104,445 (blanked invalid codes)] divided by the total number of people in the survey [293,499,975]. The item nonresponse rate in the 2007 ACS for the Hispanic origin question was 1.5 percent.

Item nonresponse rates are often used as an indicator of data quality. They allow data users to judge the completeness of the data on which the survey estimates are based. Final Hispanic origin estimates can be adversely impacted when item nonresponse is high and bias can be introduced if the characteristics of nonrespondents differ from those reported by respondents.

Item nonresponse rates to the question on Hispanic origin for the years 2000 to 2007 are shown in Table 3. In the last eight years, the item nonresponse for the household population has fallen from 3.6 percent in 2000 to 1.5 percent in 2007. This has led to a major reduction in the total number of allocations for Hispanic origin, from 9.9 million in 2000 to 4.3 million in 2007 (a 50 percent decrease). This is attributable in part, to the declining mail response rates (particularly for Hispanics) and the corresponding increase of CAPI and CATI usage. Historically, CAPI and CATI tend to have lower item nonresponse rates than the mail questionnaire.

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[16] As a result of a reduction in funding in 2004, ACS dropped the telephone and personal visit follow-up operations for the January 2004 panel, thus only allowing mail respondents to contribute to the overall response for that panel. Dropping the nonresponse follow-up operations for that single panel month reduced the annual response rate by about four percentage points. If we exclude the January panel from the calculation, the annual response rate rises to 97.3 percent. The Census Bureau revised the methodology for calculation of the response rate in 2004 and although a similar cost reduction measure was taken in 2002, the response rates provided for 2002 do not reflect this new method.

[17] For more information, refer to the ACS Quality Measures website at http://www.census.gov/acs/www/UseData/sse/ita/ita_def.htm.

7.2 Item Nonresponse by Data Collection Mode

Table 4 shows item nonresponse rates to the Hispanic origin question by data collection mode at the national level. By far, item nonresponse rates are higher in mail questionnaires compared to CATI and CAPI. However, mail item nonresponse rates have fallen in the last eight years with a 3.1 percentage-point drop since 2000. See Figure 4.

7.3 Item Nonresponse Rate in the Group Quarters Population

As mentioned in section 5, the ACS was expanded to include GQ facilities in 2006. GQ facilities are places where people live or stay that are normally owned or managed by an entity or organization providing housing and/or services for the residents. These services may include custodial or medical care as well as other types of assistance. GQ facilities include college dormitories, nursing homes, military barracks, etc.[18] Table C shows edited item nonresponse rates for the Hispanic origin question for the GQ population in 2006 and 2007. Overall, item nonresponse rates increased from 2.3 percent in 2006 to 3.2 percent in 2007.

Table C. Item Nonresponse Rates for the Hispanic Origin Question for the Group Quarters Population in the United States: ACS 2006 to 2007

Year	Item Nonresponse Rate
2007	3.2
2006	2.3

Source: U.S. Census Bureau, American Community Survey, 2006 and 2007

8. Response Types to the Question on Hispanic Origin

Responses to the Hispanic origin question are categorized into three major groups: 1) no origin response (blank and blanked invalid responses), 2) single origin response, and 3) multiple origin responses (see Table D below). The categorization of these response types was based on the frequency and type of single and multiple responses reported in the ACS in all three data collection modes.

[18] Some GQ types are not included in ACS data collection. These are domestic violence shelters, soup kitchens, regularly scheduled mobile food vans, targeted non-sheltered outdoor locations, crews of commercial maritime vessels, natural disaster shelters, and dangerous encampments. Reasons for their exclusion include concerns about privacy and the operational feasibility of repeated interviewing for a continuing survey.

Table D. Typology of Origin Responses

1. No Origin Response
2. Single Origin Response
    a. Hispanic
    b. Not Hispanic
3. Multiple origin responses
    a. Part Hispanic (Mixed)
    b. Multiple Hispanic
    c. Multiple Non-Hispanic

Source: ACS 2007

8.1 No Origin Response

The first type of response group is composed of those individuals who did not report an origin or a valid answer to the Hispanic origin question. These individuals neither marked a check box nor provided a valid response entry in the write-in line to the mail questionnaire or they provided a "Don't know" or "Refused" response to the CATI/CAPI questionnaire. As previously described in section 7.1, the item nonreponse rate for this category in 2007 was 1.5 percent.

8.2 Single Origin Response

The second type of response group is comprised of those individuals who reported a single origin, either by reporting a single category or by providing a single origin for the "Other Spanish/Hispanic/Latino" category of the Hispanic origin question. As instructed by the question itself, these individuals indicated that they were either of a Non-Hispanic origin or a Hispanic origin.

8.3 Multiple Origin Response

The third type of response group is comprised of individuals who reported more than one origin to the Hispanic origin question. Section 9.3 will discuss two different types of multiple origin reporting: part-Hispanic (mixed) and multiple Hispanic.

8.4 Response Type by Nation, Regions, and States

Table 5 shows that 98.2 percent of the total U.S. household population provided a single ethnic origin response in 2007, while 1.5 percent left the Hispanic origin question entirely blank or did not provide a valid response. Nationally, only 0.3 percent reported more than one ethnic origin. Similar results were observed by Census regions with the Midwest region having the highest reported single origin responses (98.5 percent). Among the individual states, Hawaii (2.3 percent) had the highest nonresponse rate.[19] California (0.7 percent) had the highest percentage of multiple origin responses.[20]

9. Data Editing and Imputation Procedures: Present and Future

The ACS Hispanic origin edit and imputation procedures are designed to ensure that the final edited data are as consistent and complete as possible. These rules are used to identify and account for missing, incomplete, and contradictory responses. In each case where a problem is detected, pre-established edit rules govern its resolution. The ACS employs two principal imputation methods: assignment and allocation. Assignment imputation assigns values for blank or inconsistent responses on the basis of the respondent's answers to other questions on the questionnaire. Allocation supplies responses for missing or inconsistent data items from the respondent's own household members or from other respondents with similar characteristics who provided valid answers to the survey.

During the edit and imputation process, an internal edit flag is assigned to the person record to indicate the source of the Hispanic origin code. The ACS assigns flags to any code that was assigned or allocated. These flags provide the basis for the calculation of item nonresponse and allocation rates. Currently, there are six edit flags: 0) origin reported by the respondent, 1) origin assigned from multiple origins reported by respondent, 2) origin assigned from the race question, 4) origin allocated from within household, 5) origin allocated from surname-assisted hot deck, and 6) origin allocated from hot deck - no surname used. (See Table E below.) In general, edit flags 1 and 2 are labeled as "assignment" whereas flags 4 thru 6 are labeled as "allocation."

Table E. Current Edit Flags in the ACS

Flag	Label
0	Reported: Origin reported
1	Assignment: Multiple origin reported
2	Assignment: Origin assigned from race question
4	Allocation: Origin allocated from within household
5	Allocation: Origin allocated from Hotdeck: surname
6	Allocation: Origin allocated from Hotdeck: no surname

Source: ACS 2007

[19] The nonresponse rate for Hawaii was not statistically different from the nonresponse rate for Louisiana.
[20] The percentage of multiple origin responses in California was not statistically different from the percentage in New Mexico.

9.1 Explanation of Edit Procedures and Edit Flags

Before missing Hispanic origin values are assigned or allocated, the unedited data are first edited and coded. Edits are designed to ensure that all appropriate questions have valid responses. The edit procedures for the Hispanic origin question in the ACS consist of the following rules: 1) convert check-box marks into three-digit codes (see the Hispanic code list in the Appendix); 2) ensure that all write-in responses are valid and coded appropriately; and 3) override the code for the "Other Spanish/Hispanic/Latino" check box with a specific write-in code for any origin that was provided. The following section describes each edit flag in more detail.

9.2 Flag 0: Origin Self-reported

This flag indicates the number of respondents in the survey who reported an origin. Ideally, the percentage of respondents that self-reported origin would be 100 percent indicating everyone in the survey provided an origin response.

9.3 Flag 1: Multiple Origin Responses

Unlike the race question where more than one response is solicited, the Hispanic origin question asks for a single response in the ACS. However, some respondents report multiple origins and there are several edits in place to handle such responses. There are three basic types of multiple responses. The first type includes those individuals who reported two or more Hispanic groups such as Mexican and Cuban, or Puerto Rican and Dominican. This type of response is coded as "Multiple Hispanic origin." The second type includes those respondents who reported that they were both Non-Hispanic and Hispanic. They are coded as "Part Hispanics" or "Mixed." The final multiple response type is comprised of individuals who reported only two or more Non-Hispanic terms and are coded as "Multiple Non-Hispanic" (e.g., French and German). Due to small sample size (less than 25,000 weighted cases) and confidentiality concerns, individuals in this last group are not shown separately in the tables and were recoded into the single response category.

In the ACS, multiple origin responses are retained in all data collection modes for research purposes only. No unique multiple combinations are actually tabulated or coded. Respondents who report multiple detailed groups are given a generic unique three-digit code depending on the type of multiple-origin combination reported. That is, if all the multiple responses are Hispanic groups (e.g., Mexican and Cuban), the respondent is assigned a code of 291 ("Multiple Hispanic"). If all of the multiple responses are Non-Hispanic groups (e.g., French and German), the respondent is assigned a code of 190 ("Multiple Non-Hispanic"). If the multiple responses are a mix of Hispanic and Non-Hispanic terms (e.g., Mexican and German) the responses are edited to obtain a single origin code.[21,22] The current mixed response edit consists of three basic

[21] The U.S. Census Bureau follows the Office of Management and Budget (OMB) 1997 revised standards for the collection of federal data on race and ethnicity. For more information, refer to the revised standards at http://www.whitehouse.gov/omb/fedreg/ombdir15.html.

steps: 1) assign Hispanic origin if there is a Hispanic response to the race question; 2) if Hispanic origin cannot be assigned from the race question and the respondent has a Spanish surname, then origin is assigned based on the original Hispanic responses to the origin question; and 3) if the respondent does not have a Spanish surname then an origin is obtained by random selection of the reported origins.

Beginning with the 2010 ACS, the way multiple origin responses are handled in the Hispanic origin question will undergo some changes. Multiple origin responses will continue to be collected but will be edited to a single response as the Office of Management and Budget mandates. A single origin will be randomly selected from the original reported origins for Multiple Hispanic or Multiple Non-Hispanic responses. On the other hand, Part-Hispanic responses will be edited differently -- all Part-Hispanic responses will be coded as Hispanic.

9.4 Flag 2: Hispanic Origin Assigned from the Race Edit

Hispanic origin responses to the question on race are used to assign a missing Hispanic origin response. For example, if a respondent wrote in “Mexican” in the race question and left the Hispanic origin question blank, they would be assigned Mexican origin. Most Hispanic origin responses are obtained from the “Some Other Race” write-in line. This procedure is part of a "joint edit" between the Hispanic origin and race questions. If either one is missing a response, an origin or race is assigned from the other question if a valid response is provided.

9.5 Flag 4: Within-Household Imputation

If Hispanic origin information is missing after the pre-editing procedures (edit flags 1 and 2) are completed, a Hispanic origin value is allocated using a value from respondents’ other household members in a particular hierarchical household donor sequence. This sequence is based on household relationship: 1) householder, 2) spouse, 3) child, 4) sibling, 5) parent, 6) grandchild, or 7) other relative. Thus, if members of a particular household are missing origin data (donees), they are assigned the origin of the householder (donor). On the other hand, if the householder's origin data were missing, then origin would be assigned to the householder based on the origin of his or her spouse. In addition, household members can only "donate" an origin if the household member needing an origin (donee) is the same race as the donor.

9.6 Flags 5 and 6: Hot Decks

If Hispanic origin cannot be allocated from other members of the household, origin is then allocated from a hot deck matrix. A hot deck is a geographically based data table in which the

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[22] Data collection rules vary by mode. For example, respondents can report both Non-Hispanic and Hispanic (Part-Hispanics) on mail questionnaires because we have no control on how respondents choose to respond. They cannot report this way in CATI or CAPI because the automated instruments do not allow interviewers to select both "Yes" and "No."

values of reported responses (donor) are stored and updated on a flow basis and are used to assign missing values to people (donees) with similar characteristics. In the ACS, hot decks are stratified by age, sex, race and Hispanic origin. In addition to the variables mentioned above, hot decks in the ACS are aided by a surname list originally developed after the 1990 census.[23] For more information on the Spanish surname list, see section 10 entitled "Brief History of the Spanish Surname List."

9.7 Surname Assisted Hot Decks

The ACS has three surname-assisted hot decks for allocating missing Hispanic origin: 1) a Spanish-surname-assisted, 2) a non-Spanish-surname-assisted, and 3) a non-surname-assisted hot deck. People with a reported origin (either not Hispanic or Hispanic) and a Spanish surname donate their origin to the Spanish-surname-assisted hot deck (see section 10.1 regarding surname classification). People with a reported origin (either not Hispanic or Hispanic) and a non-Spanish surname donate their origin to the non-Spanish-surname-assisted hot deck. All other people who report a Hispanic or non-Hispanic origin and whose surname is indeterminate or are missing their surname donate their origin to a non-surname-assisted hot deck.[24] The main purpose of the surname assisted hot deck is to use the respondents' surname to help allocate an origin. For example, if a respondent was missing an origin and their surname was classified as "Spanish," then they are allocated an origin from the Spanish surname hot deck. This is the opposite for those respondents with a non-Spanish surname. All other people requiring an origin from the hot deck would receive an origin from the non-surname-assisted hot deck. Note that having a Spanish surname does not mean the respondent will be automatically allocated a Hispanic code. The probability is higher (about 80 percent) but not 100 percent.

9.8 Edit Flags and Allocation Distribution by Nation, Regions, and States

The percent distributions of edit flag type by collection year and Hispanic origin are shown in Table 6. The most common edit flag was flag 0 "origin reported." In general, there were no notable percent differences by edit flag type between Hispanic and Non-Hispanics, however, Non-Hispanics were more likely to have had their origin allocated from the surname-assisted hot deck, particularly in 2000 (2.6 percent vs. 0.8 percent).

However, greater differences by edit flag type were observed between Hispanics and Non-Hispanics when total assignments and allocations were examined as shown in Table 7. Over half of all origin assignments and allocations in the 2007 ACS came from the surname-assisted hot deck (52.5 percent) followed by the within-household edit at 34.6 percent. This was particularly the case for Non-Hispanics, where 61.9 percent of their assignments and allocations came from the surname-assisted hot deck in 2007. This percentage has been greater than 60 percent since 2000. Approximately half of all Hispanics whose origin was assigned or allocated reported multiple Hispanic origins (48.1 percent) and about 30.0 percent obtained their origin from the

[23] For more information, refer to Population Division Working Paper No. 13, "Building A Spanish Surname List for the 1990's –A New Approach to an Old Problem" by David L. Word and R. Colby Perkins Jr. at http://www.census.gov/population/documentation/twpno13.pdf

[24] An indeterminate surname occurs when a surname is missing or when a surname cannot be determined as Spanish or non-Spanish.

within-household allocation in 2007. For Hispanics, the multiple origin assignment showed about a 28 percentage-point increase since 2000.

According to Table 8, about 900,000 people in the 2007 ACS reported more than one origin.[25] The most common multiple origin response type was Multiple-Hispanic origin, representing 63.1 percent of the total, followed by Part-Hispanic origin (36.9 percent). The Northeast region had the highest reported Multiple-Hispanic origin responses (71.4 percent) while the West had the lowest (57.3 percent).

9.9 Response Type by Selected Demographic Characteristics

In order to have a better understanding of the demographic profile of the different response types to the question on Hispanic origin, several key demographic variables were selected for further examination. The percent distributions of response type by sex, age, race, mode of data collection, and tenure are shown in Table 9. About 1.5 percent of both men and women left the origin question blank but people who were 65 years and older were more likely (2.2 percent) to leave it blank than younger people.[26] Nearly three percent of Asians (2.9 percent) and Blacks (2.5 percent) left the Hispanic origin question blank, the highest among all the race groups. People who responded by mail questionnaires were seven times more likely not to have answered the origin question than people who responded by CATI and CAPI (2.6 percent vs. 0.3 percent, respectively). Finally, people who rented their homes were more likely than owners to leave the origin question blank (1.3 percent compared to 1.2 percent).

In general, there were no notable percent differences by sex for multiple origin reporting. However, individuals under the age of 35 (0.5 percent) and those who rented their homes (0.2 percent) were more likely to report multiple origins than their counterparts. People who identified as Some Other Race alone or reported more than one race were especially likely to report multiple origins (1.5 percent and 1.9 percent, respectively).

Among the different types of multiple origin reporting (see Table 10), multiple Hispanic reporting was most common among individuals under the age of 35, compared to people aged 35 to 64, and 65 and older (70.1 percent, 37.3 percent, and 17.1 percent, respectively). Part-Hispanic was most commonly reported among the 65 and older group at 82.9 percent. Multiple Hispanic origin reporting was most common among the Some Other Race alone population (84.9 percent), the highest among all race groups, followed by White alone (62.2 percent).[27] Part-Hispanic was reported higher among Asian alone (83.3 percent) and people who reported more than one race (70.6 percent).[28] Multiple Hispanic origin reporting was more frequently observed in CATI and CAPI (86.6 percent) compared to mail questionnaires (39.1 percent). Owners were more likely than renters to report Part-Hispanic (62.6 percent vs. 47.1 percent).

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[25] The "Multiple non-Hispanic" group is not included here due to small sample size and confidentiality concerns.
[26] The percentage of men that left the origin question blank was statistically different from the percentage of women that left the question blank.
[27] The percentage reporting multiple Hispanic origins in the White alone population was not statistically different from that in the Native Hawaiian and Other Pacific Islander alone population.
[28] The percentage reporting as part-Hispanic in the Two or more races population was not statistically different from that in the Native Hawaiian and Other Pacific Islander alone population.

10. Brief History of the Spanish Surname List

The 1950 census was the first census to use a Spanish surname list, which was originally compiled by the Immigration and Naturalization Service in 1936 (Lockwood, 1936). The original list contained about 8,000 names and was expanded in the 1960 and 1970 censuses via internal and external linguistic and expert research (Fernandez, 1975). The original purpose of the surname list was to identify the Spanish origin population in the five Southwestern states of Arizona, California, Colorado, New Mexico, and Texas. In 1975, the Census Bureau conducted a study analyzing the effectiveness of the 1970 census Spanish surname list (about 8,500 names) in identifying the Spanish population in the five aforementioned states (Fernandez, 1975). The study compared people with Spanish surnames to people reporting Spanish Origin in the United States. Results from the study showed that the surname list worked well in identifying Hispanics in the Southwest but not elsewhere in the country.

10.1 ACS Spanish Surname List

Currently, the ACS uses a static surname list of 12,215 names derived originally from a list of 25,000 Spanish surnames. This Spanish surname list was compiled by David Word and R. Colby Perkins Jr. using data (extract) from the 1990 Post Enumeration Survey (PES) (Word and Perkins, 1996). This file was originally used to estimate the undercount in the 1990 census. The record file they used was called the SOR (Spanish Origin) which linked surname to individual 1990 census records. The surname was classified Spanish by the ethnicity of the householder (i.e., the proportion of householders who self-reported Hispanic on the Hispanic origin question). The PES sample was used instead of using data from the 1990 census because surname was not processed in 1990 and therefore was not available on the record layout. Based on their research, a surname was determined to be "Heavily Spanish" if there were 10 or more occurrences of a particular surname and at least 75 percent of the householders (with that particular name) self-reported Hispanic on the Hispanic origin question. The ACS currently uses this surname list in the Hispanic origin edit.[29]

The research that David Word and R. Colby Perkins Jr. conducted in the 1990s expanded research into the classification of surnames that had been previously done in the 1970s and 1980s by Jeffery Passel, David Word, and Edward Fernandez (Passel and Word 1980, Fernandez 1975). For example, in 1980 the Census Bureau published a list of 12,497 "Spanish" surnames that were compiled from a database of 85 million taxpayers filing individual federal returns in 1977. The methodology used to develop the 1980 Spanish surname list differed from the methodology used in 1990. The 1980 list was developed by indirect statistical methods (Bayes' theorem and the multinomial distribution) that compared the similarity of a particular surname's geographic distribution to the geographic distribution of the Hispanic origin population within the United States. Despite the different methods used in 1980 and 1990, both surname lists were very similar in size and content.

[29] See Table 4 in Population Division Working Paper No. 13, "Building A Spanish Surname List for the 1990's –A New Approach to an Old Problem" by David L. Word and R. Colby Perkins Jr. at http://www.census.gov/population/documentation/twpno13.pdf.

10.2 Census 2000 Spanish Surname List

Unlike the ACS, the Census 2000 surname-assisted hot decks did not use a static Spanish surname list but used a dynamic Spanish surname list that was state-based and produced "live" during Census 2000 processing. A surname was determined to be "Spanish" if there were 10 or more occurrences of a particular surname and at least 85 percent of all householders within a given state self-reported Hispanic origin. This is similar to Word and Perkins' methodology for the 1990 list although the threshold is set 10 percentage points higher (75 percent vs. 85 percent). The surname processing and classification was conducted at the state level and separately from the 100 percent edits. The same criteria were applied for the classification of Non-Hispanic surnames. Surnames not meeting either Hispanic or Non-Hispanic classification criteria were classified as undetermined. Census 2000 was the first census to capture and process surnames at the 100 percent level. This same surname classification procedure is also planned for the Hispanic origin edit in Census 2010.[30]

11. Summary

Since 2000, the question on Hispanic origin has experienced low item nonresponse and allocation rates, an indication of quality and consistency. Compared to previous census results, the ACS continues to lead in both these important statistical areas. However, there are some notable differences by data collection mode and the origin of the respondent. The mail questionnaire, compared to CATI and CAPI, continues to experience higher item nonresponse rates and Hispanics are more likely than Non-Hispanics to leave the Hispanic origin question blank. This is an area that needs more attention and research. In addition, the declining mail questionnaire response rates among Hispanics and the corresponding rise of CATI and CAPI usage is a major concern. The rise in CATI and CAPI usage indicates that an increasing number of Hispanics are being captured during the nonresponse follow-up (NRFU) phase of ACS. The NRFU phase is more costly and expensive to implement than the mail questionnaire. Despite these issues, the ACS continues to produce excellent sociodemographic, economic, and housing data on the Hispanic population in the United States.

12. Future Research

Updating the existing Spanish surname list for surname-assisted hot decks in the ACS is currently under development. The goal is to update the current list of 12,215 names with data from Census 2000 using similar criteria that Word and Perkins (1996) used. It is hoped an updated surname list will improve the surname-assisted hot deck allocations in the 2010 ACS.

For the 2010 ACS, the Census Bureau will use an additional source for assigning missing Hispanic origin data. Census data from 2000 may be used to assign missing Hispanic origin data if origin cannot be assigned from the race question or imputed from members of the household. If previous census data include Hispanic origin information for the same individual missing

[30] Frequently occurring surnames from Census 2000 are now available online at http://www.census.gov/genealogy/www/freqnames2k.html. Tabulations of all surnames occurring 100 or more times in the Census 2000 returns are provided.

origin then origin could be assigned from this information. If the previous census data do not include Hispanic origin information, then origin could be allocated from one of the hot decks.

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Table 1. Distribution of Responses to the Hispanic Origin Question by Data Collection Mode for the Household Population: ACS 2000 to 2007

United States 2/	Data Collection Mode 1/			
	Total	Mail	CATI	CAPI
Total				
2007	100.0	51.7	12.3	36.0
2006	100.0	52.6	12.5	34.9
2005	100.0	53.8	12.2	34.0
2004	100.0	55.0	12.7	32.3
2003	100.0	52.7	13.2	34.1
2002	100.0	55.4	11.6	33.0
2001	100.0	54.9	11.4	33.6
2000	100.0	57.9	9.4	32.7
Hispanic				
2007	100.0	26.3	14.9	58.9
2006	100.0	26.7	15.4	58.0
2005	100.0	28.3	15.3	56.5
2004	100.0	30.0	16.3	53.7
2003	100.0	29.0	15.9	55.1
2002	100.0	31.4	13.8	54.8
2001	100.0	30.0	12.5	57.6
2000	100.0	34.7	10.0	55.3
Non-Hispanic				
2007	100.0	56.2	11.9	31.9
2006	100.0	57.2	12.0	30.8
2005	100.0	58.2	11.7	30.2
2004	100.0	59.1	12.1	28.8
2003	100.0	56.5	12.8	30.7
2002	100.0	59.2	11.2	29.5
2001	100.0	58.7	11.3	30.1
2000	100.0	61.2	9.3	29.5

Source: U.S. Census Bureau, American Community Survey, 2000 to 2007

NOTES:
1/ Mail = Mail questionnaire universe, CATI = Computer-Assisted Telephone Interview, CAPI = Computer-Assisted Personal Interview.
2/ Puerto Rico is not included in this table.

Table 1b. Distribution of Responses to the Hispanic Origin Question by Data Collection Mode for the Hispanic Household Population in States with a Million or More Hispanics: ACS 2000 to 2007

Geographic area and mode	Year							
	2000	2001	2002	2003	2004	2005	2006	2007
Mail								
Arizona	30.6	29.5	30.1	25.4	26.5	27.1	25.8	24.5
California	32.4	26.9	27.9	26.8	27.7	26.4	24.5	24.3
Florida	40.7	35.7	37.6	35.1	34.6	33.2	31.8	30.8
Illinois	30.9	25.7	28.4	24.5	29.6	27.7	25.1	25.7
New Jersey	33.8	29.9	33.4	28.2	29.4	28.3	26.3	27.9
New York	33.9	29.9	31.5	29.0	29.6	26.9	24.5	24.5
Texas	33.4	29.2	30.0	28.1	29.8	27.5	27.0	26.0
CATI								
Arizona	12.1	17.6	16.0	17.2	16.1	14.4	16.0	15.9
California	9.3	11.7	12.3	15.4	16.4	15.2	15.7	15.4
Florida	10.7	11.8	13.7	16.0	16.4	14.3	14.2	12.8
Illinois	9.1	11.6	12.7	16.2	14.4	12.6	13.3	12.5
New Jersey	6.4	8.9	9.7	12.0	13.7	11.9	12.2	11.4
New York	4.7	8.5	10.2	10.1	12.4	10.7	10.3	10.1
Texas	11.7	14.1	16.9	18.5	17.4	17.3	16.6	16.0
CAPI								
Arizona	57.3	52.9	53.9	57.4	57.4	58.4	58.2	59.7
California	58.2	61.4	59.8	57.8	56.0	58.4	59.7	60.3
Florida	48.6	52.5	48.7	48.9	49.0	52.5	54.0	56.4
Illinois	60.0	62.7	58.9	59.3	56.0	59.7	61.5	61.8
New Jersey	59.8	61.2	56.9	59.9	56.9	59.8	61.5	60.8
New York	61.4	61.6	58.3	60.9	58.0	62.4	65.2	65.4
Texas	54.9	56.7	53.0	53.4	52.8	55.2	56.5	58.0

Source: U.S. Census Bureau, American Community Survey, 2000 to 2007

Table 2. Selected Demographic Characteristics by Data Collection Mode for the Household Population: ACS 2007

Characteristics	Hispanic		
	Total	Mail 1/	CATI/CAPI 2/
United States 3/	44,567,840	11,703,171	32,864,669
Sex			
Male	51.3	49.1	52.0
Female	48.7	50.9	48.0
Age			
Less than 35 years	63.1	54.4	66.2
35 to 64 years	31.5	36.4	29.7
65 years and older	5.4	9.2	4.0
Education (Population 25 years and over)			
Less than high school	39.1	28.0	43.6
High school or equivalent, some college or associate's degree	48.1	51.1	47.0
Bachelor's degree or more	12.7	20.9	9.4
Nativity			
Native	60.1	70.1	56.5
Foreign born	39.9	29.9	43.5
Occupation (Civilian population 16 years and over)			
Management, professional, and related	17.7	30.0	13.6
Service	24.3	18.8	26.2
Sales and office	21.5	27.1	19.6
Farming, fishing, and forestry	2.3	0.7	2.8
Construction, extraction, maintenance, and repair	16.2	9.5	18.5
Production, transportation, and material moving	18.0	13.8	19.4
Poverty			
At or above poverty	79.4	87.2	76.7
Below poverty	20.6	12.8	23.3
Tenure (Occupied housing units)			
Owner	49.9	67.4	42.9
Renter	50.1	32.6	57.1

Source: U.S. Census Bureau, American Community Survey, 2007

NOTES:
1/ Mail = Mail questionnaire universe.
2/ CATI = Computer-Assisted Telephone Interview, CAPI = Computer-Assisted Personal Interview..
3/ Puerto Rico is not included in this table.

Table 3. Item Nonresponse Rates for the Hispanic Origin Question for the Household Population: 2000 to 2007

Geographic area	Year							
	2000	2001	2002	2003	2004	2005	2006	2007
United States 1,2/	3.6	2.0	2.0	1.8	1.7	1.5	1.5	1.5
Region								
Northeast	3.1	1.9	1.9	2.0	1.8	1.6	1.6	1.6
Midwest	3.6	2.0	2.0	1.7	1.6	1.4	1.3	1.3
South	3.6	2.2	2.0	1.8	1.7	1.6	1.6	1.6
West	4.0	1.8	1.9	1.8	1.6	1.5	1.4	1.4
State								
Alabama	4.6	2.9	2.4	2.5	1.9	1.8	1.8	1.9
Alaska	3.4	2.1	1.8	1.6	1.0	1.1	0.9	0.9
Arizona	3.5	1.7	1.7	1.4	1.3	1.3	1.2	1.1
Arkansas	4.1	2.8	2.2	2.1	1.6	1.4	1.5	1.6
California	4.1	1.7	2.0	2.0	1.7	1.5	1.4	1.5
Colorado	3.1	1.9	1.7	1.6	1.2	1.3	1.3	1.3
Connecticut	3.0	2.1	2.1	2.0	1.9	1.4	1.5	1.5
Delaware	2.8	1.7	1.9	1.9	1.5	1.5	1.4	1.3
District of Columbia	3.5	3.3	2.6	3.0	2.3	2.7	2.3	1.7
Florida	3.4	2.3	2.1	1.9	1.8	1.7	1.7	1.7
Georgia	3.0	2.0	2.2	1.9	1.9	1.7	1.7	1.8
Hawaii	5.4	2.5	2.8	2.6	2.7	2.2	2.3	2.3
Idaho	4.0	1.6	1.8	1.6	1.3	1.0	1.3	1.2
Illinois	4.3	1.9	1.9	1.8	1.6	1.5	1.4	1.5
Indiana	3.1	1.9	2.7	2.1	1.9	1.4	1.3	1.3
Iowa	4.4	1.9	2.1	1.6	1.2	1.2	1.1	1.2
Kansas	4.0	2.2	2.1	1.5	1.4	1.3	1.1	1.2
Kentucky	3.3	2.1	2.0	1.8	1.7	1.5	1.4	1.5
Louisiana	4.9	2.8	2.5	1.8	2.2	2.1	1.7	2.0
Maine	2.6	1.7	1.8	1.3	1.2	1.1	1.1	1.1

Table 3. Item Nonresponse Rates for the Hispanic Origin Question for the Household Population: 2000 to 2007 (cont.)

Geographic area	Year							
	2000	2001	2002	2003	2004	2005	2006	2007
Maryland	3.0	2.0	2.1	1.9	1.5	1.7	1.7	1.7
Massachusetts	3.0	2.0	2.0	1.9	1.6	1.7	1.5	1.7
Michigan	2.9	1.9	2.0	1.7	1.4	1.4	1.4	1.4
Minnesota	4.1	2.1	1.8	1.8	1.4	1.2	1.2	1.3
Mississippi	5.3	3.1	2.8	2.0	2.3	2.1	2.0	1.8
Missouri	4.1	2.3	1.9	1.6	1.5	1.3	1.4	1.3
Montana	3.9	1.8	2.1	1.6	1.2	1.2	1.4	1.1
Nebraska	3.7	2.1	2.0	1.5	1.2	1.2	1.2	1.0
Nevada	4.3	1.9	1.6	1.5	1.7	1.4	1.4	1.3
New Hampshire	2.6	1.9	1.6	1.4	1.6	1.3	1.2	1.4
New Jersey	3.1	1.8	1.8	2.0	1.8	1.6	1.6	1.6
New Mexico	3.8	2.1	1.7	1.4	1.4	1.6	1.7	1.4
New York	3.4	2.0	2.0	2.2	2.2	1.9	1.8	1.8
North Carolina	2.9	2.0	1.9	1.8	1.5	1.5	1.4	1.5
North Dakota	3.4	1.8	1.8	1.6	1.1	0.9	1.2	1.2
Ohio	3.2	1.9	2.0	1.7	1.6	1.4	1.5	1.4
Oklahoma	4.3	2.3	2.2	1.6	1.6	1.2	1.2	1.4
Oregon	4.4	2.0	2.0	1.7	1.7	1.3	1.3	1.3
Pennsylvania	3.1	2.0	2.0	2.0	1.5	1.5	1.4	1.5
Rhode Island	2.8	1.9	1.7	1.6	1.7	1.6	1.6	1.3
South Carolina	3.9	2.1	2.3	2.2	1.6	2.0	1.8	1.7
South Dakota	4.2	2.0	1.7	1.5	1.2	1.1	0.8	1.6
Tennessee	4.7	2.7	2.3	1.7	1.5	1.6	1.7	1.6
Texas	3.5	1.7	1.5	1.4	1.4	1.3	1.3	1.3
Utah	4.2	1.5	1.6	1.7	1.7	1.3	1.2	1.3
Vermont	1.9	1.4	1.3	1.3	1.1	1.2	1.0	1.2
Virginia	3.0	1.9	2.2	1.7	1.6	1.5	1.4	1.5
Washington	4.5	2.0	1.9	1.9	1.6	1.4	1.4	1.4
West Virginia	3.3	2.0	2.5	1.7	1.3	1.4	1.2	1.3
Wisconsin	3.7	2.1	1.8	1.7	1.7	1.2	1.2	1.2
Wyoming	3.2	1.0	1.2	1.3	1.4	0.7	0.9	0.8

Source: U.S. Census Bureau, American Community Survey, 2000 to 2007

NOTES:

1/ Puerto Rico is not included in this table.

2/ See section 7.1 for the calculation of the item nonresponse rate.

Table 4. Item Nonresponse Rates for the Hispanic Origin Question by Data Collection Mode for the Household Population: ACS 2000 to 2007

United States 2,3/	Data Collection Mode 1/			
	Total	Mail	CATI	CAPI
Total				
2007	1.5	2.6	0.4	0.3
2006	1.5	2.5	0.5	0.3
2005	1.5	2.5	0.4	0.3
2004	1.7	2.7	0.5	0.4
2003	1.8	3.1	0.5	0.4
2002	2.0	3.0	0.7	0.7
2001	2.0	3.1	0.7	0.7
2000	3.6	5.7	0.8	0.7

Source: U.S. Census Bureau, American Community Survey, 2000 to 2007

NOTES:
1/ Mail = Mail questionnaire universe, CATI = Computer-Assisted Telephone Interview, CAPI = Computer-Assisted Personal Interview.
2/ Puerto Rico is not included in this table.
3/ See section 7.1 for the calculation of the item nonresponse rate.

Table 5. Household Population by Response Type to the Hispanic Origin Question: ACS 2007

Geographic area	Household population	Percent Distribution by Response Type 1/		
		No response 2/	Single response	Multiple response
United States 3/	293,499,975	1.5	98.2	0.3
Region				
Northeast	52,941,022	1.6	98.0	0.4
Midwest	64,546,621	1.3	98.5	0.2
South	107,469,618	1.6	98.2	0.2
West	68,542,714	1.4	98.1	0.5
State				
Alabama	4,508,691	1.9	98.1	0.0
Alaska	661,167	0.9	98.9	0.3
Arizona	6,229,385	1.1	98.5	0.4
Arkansas	2,754,740	1.6	98.3	0.1
California	35,690,809	1.5	97.8	0.7
Colorado	4,752,761	1.3	98.4	0.3
Connecticut	3,385,463	1.5	98.2	0.4
Delaware	839,870	1.3	98.6	0.1
District of Columbia	552,984	1.7	98.1	0.2
Florida	17,835,596	1.7	97.7	0.6
Georgia	9,282,562	1.8	98.1	0.1
Hawaii	1,247,553	2.3	97.2	0.5
Idaho	1,465,538	1.2	98.7	0.1
Illinois	12,529,875	1.5	98.1	0.4
Indiana	6,159,026	1.3	98.6	0.1
Iowa	2,882,856	1.2	98.7	0.1
Kansas	2,693,875	1.2	98.7	0.1
Kentucky	4,126,455	1.5	98.4	0.0
Louisiana	4,169,986	2.0	97.9	0.1
Maine	1,279,253	1.1	98.9	0.0

Table 5. Household Population by Response Type to the Hispanic Origin Question: ACS 2007 (cont.)

Geographic area	Household population	Percent Distribution by Response Type 1/		
		No response 2/	Single response	Multiple response
Maryland	5,475,589	1.7	98.2	0.1
Massachusetts	6,233,881	1.7	98.1	0.2
Michigan	9,812,734	1.4	98.5	0.1
Minnesota	5,054,764	1.3	98.7	0.1
Mississippi	2,823,468	1.8	98.2	0.0
Missouri	5,710,825	1.3	98.7	0.1
Montana	931,310	1.1	98.9	0.1
Nebraska	1,721,760	1.0	98.9	0.1
Nevada	2,531,990	1.3	98.2	0.5
New Hampshire	1,276,127	1.4	98.5	0.1
New Jersey	8,489,659	1.6	97.8	0.6
New Mexico	1,927,346	1.4	98.0	0.6
New York	18,691,609	1.8	97.6	0.6
North Carolina	8,786,613	1.5	98.4	0.1
North Dakota	611,786	1.2	98.8	0.1
Ohio	11,161,796	1.4	98.5	0.1
Oklahoma	3,501,220	1.4	98.5	0.1
Oregon	3,665,833	1.3	98.5	0.2
Pennsylvania	11,966,636	1.5	98.4	0.1
Rhode Island	1,017,900	1.3	98.3	0.4

Table 5. Household Population by Response Type to the Hispanic Origin Question: ACS 2007 (cont.)

Geographic area	Household population	Percent Distribution by Response Type 1/		
		No response 2/	Single response	Multiple response
South Carolina	4,263,337	1.7	98.2	0.1
South Dakota	765,517	1.6	98.4	0.0
Tennessee	6,004,332	1.6	98.3	0.1
Texas	23,309,570	1.3	98.3	0.4
Utah	2,600,792	1.3	98.5	0.2
Vermont	600,494	1.2	98.8	0.0
Virginia	7,468,122	1.5	98.4	0.1
Washington	6,329,469	1.4	98.4	0.2
West Virginia	1,766,483	1.3	98.6	0.1
Wisconsin	5,441,807	1.2	98.7	0.1
Wyoming	508,761	0.8	99.1	0.1

Source: U.S. Census Bureau, American Community Survey, 2007

NOTES:

1/ For response type definitions see Section 8.

2/ See section 7.1 for the calculation of the item nonresponse rate.

3/ Puerto Rico is not included in this table.

Table 6. Household Population by Edit Flag Type to the Question on Hispanic Origin for the United States: ACS 2000 to 2007

Year	Household population 2/	Percent distribution by flag type 1/						
				Assigned		Allocated		
		Total	Reported origin	Multiple origin	From race question	Within household	Hot deck surname 3/	Hot deck no surname 4/
Total								
2007	293,499,975	100.0	98.3	0.2	0.0	0.6	0.9	0.0
2006	291,332,841	100.0	98.4	0.2	0.0	0.6	0.9	0.0
2005	288,378,137	100.0	98.3	0.2	0.0	0.6	0.9	0.0
2004	285,691,501	100.0	98.2	0.1	0.0	0.6	1.0	0.0
2003	282,909,885	100.0	98.0	0.1	0.0	0.6	1.2	0.0
2002	280,540,330	100.0	97.9	0.1	0.1	0.7	1.2	0.0
2001	277,017,622	100.0	97.9	0.1	0.1	0.6	1.4	0.0
2000	273,643,273	100.0	96.2	0.1	0.1	1.2	2.3	0.0
Hispanic								
2007	44,567,840	100.0	97.8	1.1	0.1	0.7	0.3	0.0
2006	43,422,127	100.0	97.9	1.0	0.1	0.7	0.3	0.0
2005	41,870,703	100.0	97.8	1.0	0.1	0.8	0.4	0.0
2004	40,459,196	100.0	97.7	0.9	0.1	0.9	0.4	0.0
2003	39,194,837	100.0	97.6	0.9	0.1	0.8	0.5	0.0
2002	37,872,475	100.0	97.3	0.8	0.4	0.9	0.5	0.0
2001	36,200,781	100.0	97.6	0.7	0.4	0.7	0.5	0.1
2000	34,474,440	100.0	96.1	0.8	0.4	1.9	0.8	0.1
Non-Hispanic								
2007	248,932,135	100.0	98.4	0.0	0.0	0.6	1.0	0.0
2006	247,910,714	100.0	98.5	0.0	0.0	0.5	1.0	0.0
2005	246,507,434	100.0	98.4	0.0	0.0	0.6	1.0	0.0
2004	245,232,305	100.0	98.3	0.0	0.0	0.6	1.1	0.0
2003	243,715,048	100.0	98.1	0.0	0.0	0.6	1.3	0.0
2002	242,667,855	100.0	97.9	0.0	0.0	0.7	1.3	0.0
2001	240,816,841	100.0	97.9	0.0	0.0	0.5	1.5	0.0
2000	239,168,833	100.0	96.3	0.0	0.0	1.1	2.6	0.0

Source: U.S. Census Bureau, American Community Survey, 2000 to 2007

NOTES:

1/ For edit flag type definitions see Section 9.

2/ Puerto Rico is not included in this table.

3/ Origin allocated from surname-assisted hot deck.

4/ Origin allocated from hot deck – no surname used.

Table 7. Total Assignments and Allocations to the Question on Hispanic Origin by Edit Flag Type for the Household Population in the United States: ACS 2000 to 2007

Year	Total Assignments and Allocations 2/	Total	Percent distribution by flag type 1/				
			Assigned		Allocated		
			Multiple origin	From race question	Within household	Hot deck surname 3/	Hot deck no surname 4/
Total							
2007	4,923,428	100.0	10.7	1.0	34.6	52.5	1.1
2006	4,757,353	100.0	9.8	1.2	33.8	54.0	1.2
2005	4,812,305	100.0	9.4	1.1	35.4	52.9	1.2
2004	5,137,265	100.0	7.8	1.0	34.8	55.3	1.1
2003	5,558,025	100.0	7.0	0.6	32.1	59.0	1.2
2002	6,009,927	100.0	5.4	2.8	33.5	57.3	1.0
2001	5,944,861	100.0	4.9	2.6	26.0	65.3	1.1
2000	10,280,900	100.0	2.8	1.3	32.7	62.5	0.7
Hispanic							
2007	991,222	100.0	48.1	5.2	30.0	15.3	1.5
2006	925,413	100.0	45.2	6.1	31.0	16.1	1.6
2005	940,912	100.0	43.3	5.7	33.5	15.9	1.8
2004	942,362	100.0	38.7	5.4	37.1	17.2	1.6
2003	923,518	100.0	38.7	3.8	35.8	20.0	1.7
2002	1,024,109	100.0	30.3	16.5	34.1	17.3	1.8
2001	854,067	100.0	31.3	18.2	28.0	20.3	2.2
2000	1,347,264	100.0	19.9	10.2	47.9	20.4	1.6
Non-Hispanic							
2007	3,932,206	100.0	1.3	0.0	35.8	61.9	1.0
2006	3,831,940	100.0	1.3	0.0	34.4	63.2	1.1
2005	3,871,393	100.0	1.2	0.0	35.9	61.8	1.1
2004	4,194,903	100.0	0.9	0.0	34.2	63.8	1.0
2003	4,634,507	100.0	0.7	0.0	31.4	66.8	1.1
2002	4,985,818	100.0	0.3	0.0	33.4	65.5	0.8
2001	5,090,794	100.0	0.5	0.0	25.7	72.9	0.9
2000	8,933,636	100.0	0.2	0.0	30.4	68.8	0.6

Source: U.S. Census Bureau, American Community Survey, 2000 to 2007

NOTES:

1/ For edit flag type definitions see Section 9.

2/ Puerto Rico is not included in this table.

3/ Origin allocated from surname-assisted hot deck.

4/ Origin allocated from hot deck – no surname used.

Table 8. Household Population by Multiple Origin Response Type to the Hispanic Origin Question: ACS 2007

Geographic area	Total multiple population 1/	Type of Multiple Origin 2/	
		Part Hispanic	Multiple Hispanic
United States 3/	913,281	36.9	63.1
Region			
Northeast	203,570	28.6	71.4
Midwest	101,509	34.2	65.8
South	256,325	36.6	63.4
West	351,877	42.7	57.3
State			
Alabama	1,968	81.4	18.6
Alaska	1,760	40.9	59.1
Arizona	24,905	48.9	51.1
Arkansas	2,179	56.0	44.0
California	250,552	37.3	62.7
Colorado	16,305	61.8	38.2
Connecticut	11,953	36.1	63.9
Delaware	452	42.3	57.7
District of Columbia	1,192	17.2	82.8
Florida	107,653	24.8	75.2
Georgia	13,546	39.9	60.1
Hawaii	6,140	63.3	36.7
Idaho	1,579	56.9	43.1
Illinois	51,412	21.0	79.0
Indiana	7,440	37.3	62.7
Iowa	1,974	72.0	28.0
Kansas	3,318	59.7	40.3
Kentucky	1,916	61.6	38.4
Louisiana	3,201	68.4	31.6
Maine	379	40.1	59.9

Table 8. Household Population by Multiple Origin Response Type to the Hispanic Origin Question: ACS 2007 (cont.)

Geographic area	Total multiple population 1/	Type of Multiple Origin 2/	
		Part Hispanic	Multiple Hispanic
Maryland	7,377	49.1	50.9
Massachusetts	14,554	34.3	65.7
Michigan	11,036	48.3	51.7
Minnesota	3,128	42.6	57.4
Mississippi	1,203	65.3	34.7
Missouri	3,834	66.1	33.9
Montana	569	67.7	32.3
Nebraska	2,372	75.5	24.5
Nevada	13,201	49.5	50.5
New Hampshire	1,235	50.4	49.6
New Jersey	47,170	26.7	73.3
New Mexico	11,603	74.8	25.2
New York	107,473	25.9	74.1
North Carolina	10,905	37.3	62.7
North Dakota	364	94.8	5.2
Ohio	9,364	46.5	53.5
Oklahoma	3,544	57.5	42.5
Oregon	6,886	47.2	52.8
Pennsylvania	17,051	37.0	63.0
Rhode Island	3,587	35.7	64.3
South Carolina	3,480	58.0	42.0
South Dakota	208	76.9	23.1
Tennessee	3,217	54.5	45.5
Texas	82,643	44.1	55.9
Utah	5,124	42.8	57.2
Vermont	168	100.0	0.0
Virginia	10,245	36.7	63.3
Washington	12,769	62.0	38.0
West Virginia	1,604	36.4	63.6
Wisconsin	7,059	26.6	73.4
Wyoming	484	61.0	39.0

Source: U.S. Census Bureau, American Community Survey, 2007

NOTES:

1/ The "Multiple non-Hispanic" group is not included due to small sample size and confidentiality concerns.

2/ For multiple origin response type definitions see Section 8.

3/ Puerto Rico is not included in this table.

Table 9. Selected Demographic Characteristics by Percentage Distribution of Response Type to the Hispanic Origin Question for the Household Population: ACS 2007

Characteristics	Total	Type of Response 1/		
		No response 2/	Single response	Multiple response 3/
United States 4/	293,499,975	4,394,836	288,191,858	913,281
	100.0	1.5	98.2	0.3
Sex				
Male…….	100.0	1.5	98.2	0.3
Female……..…	100.0	1.5	98.2	0.3
Age				
Less than 35……...	100.0	1.5	98.0	0.5
35 to 64……	100.0	1.3	98.6	0.1
65 and older……	100.0	2.2	97.8	0.1
Race 5/				
White alone……..	100.0	1.3	98.5	0.2
Black alone……..	100.0	2.5	97.4	0.1
AIAN alone……..…	100.0	1.8	97.7	0.4
Asian alone……..	100.0	2.9	97.1	0.1
NHPI alone……..	100.0	1.7	98.1	0.2
SOR alone……	100.0	1.0	97.5	1.5
Two or more……	100.0	2.0	96.0	1.9
Households 6/	112,377,977	1,387,349	110,835,463	155,165
	100.0	1.2	98.6	0.1
Form type 7/				
Mail return……	100.0	2.6	97.1	0.3
CATI/CAPI……..…	100.0	0.3	99.3	0.3
Tenure				
Owner……	100.0	1.2	98.7	0.1
Renter……	100.0	1.3	98.5	0.2

Source: U.S. Census Bureau, American Community Survey, 2007

NOTES:

1/ For response type definitions see Section 8.

2/ See section 7.1 for the calculation of the item nonresponse rate.

3/ The "Multiple non-Hispanic" group is not included.

4/ Puerto Rico is not included in this table.

5/ AIAN = American Indian and Alaska Native, NHPI = Native Hawaiian and Other Pacific Islander, SOR = Some Other Race.

6/ Data for households refer to response type of the householder.

7/ CATI = Computer-Assisted Telephone Interview, CAPI = Computer-Assisted Personal Interview.

Table 10. Selected Demographic Characteristics by Percentage Distribution of Multiple Origin Response Type to the Hispanic Origin Question for the Household Population: ACS 2007

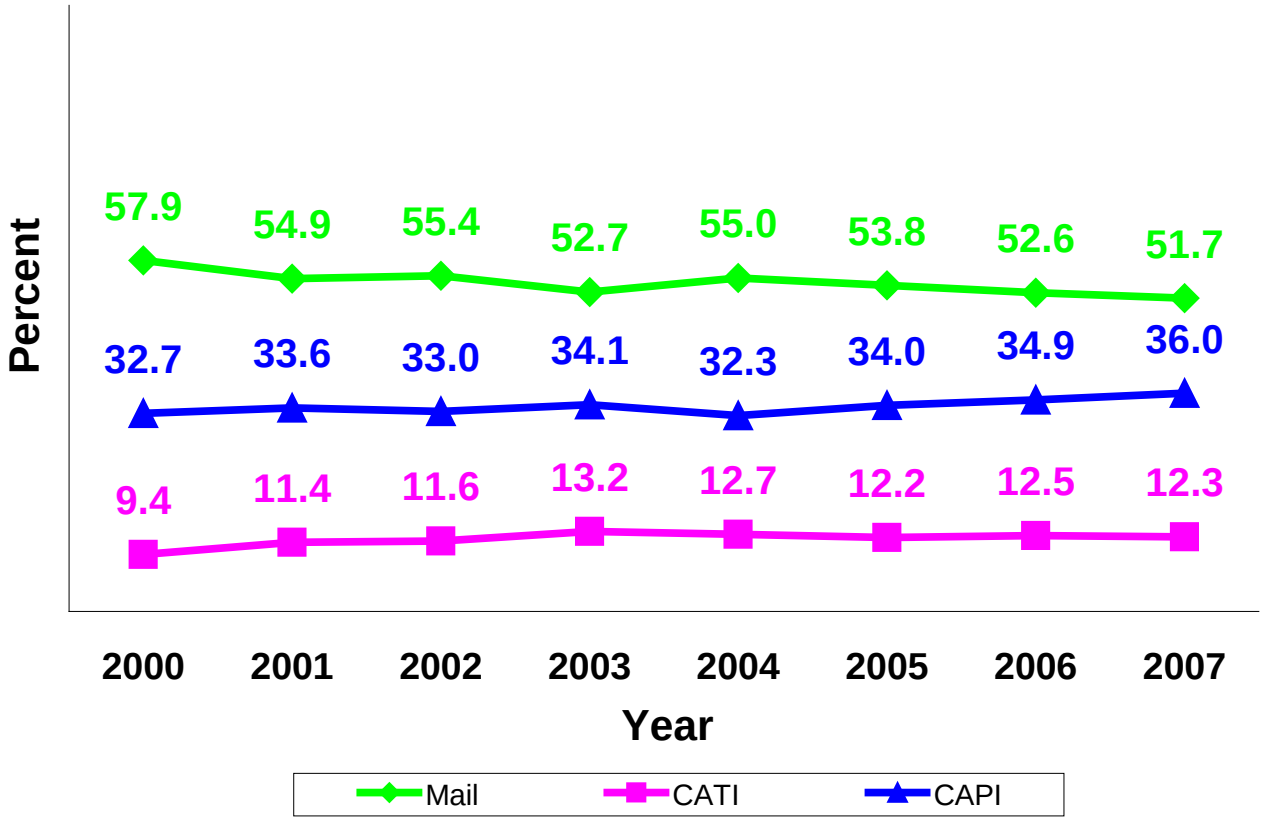
Characteristics	Total 1/	Type of Multiple Origin 2/	
		Part Hispanic	Multiple Hispanic
United States 3/	913,281	337,046	576,235
	100.0	36.9	63.1
Sex			
Male	100.0	36.6	63.4
Female	100.0	37.2	62.8
Age			
Less than 35	100.0	29.9	70.1
35 to 64	100.0	62.7	37.3
65 and older	100.0	82.9	17.1
Race 4/			
White alone	100.0	37.8	62.2
Black alone	100.0	61.6	38.4
AIAN alone	100.0	59.3	40.7
Asian alone	100.0	83.3	16.7
NHPI alone	100.0	54.4	45.6
SOR alone	100.0	15.1	84.9
Two or more	100.0	70.6	29.4
Households 5/	155,165	86,189	68,976
	100.0	55.5	44.4
Form type 6/			
Mail return	100.0	60.9	39.1
CATI/CAPI	100.0	13.4	86.6
Tenure			
Owner	100.0	62.6	37.4
Renter	100.0	47.1	52.9

Source: U.S. Census Bureau, American Community Survey, 2007

NOTES:

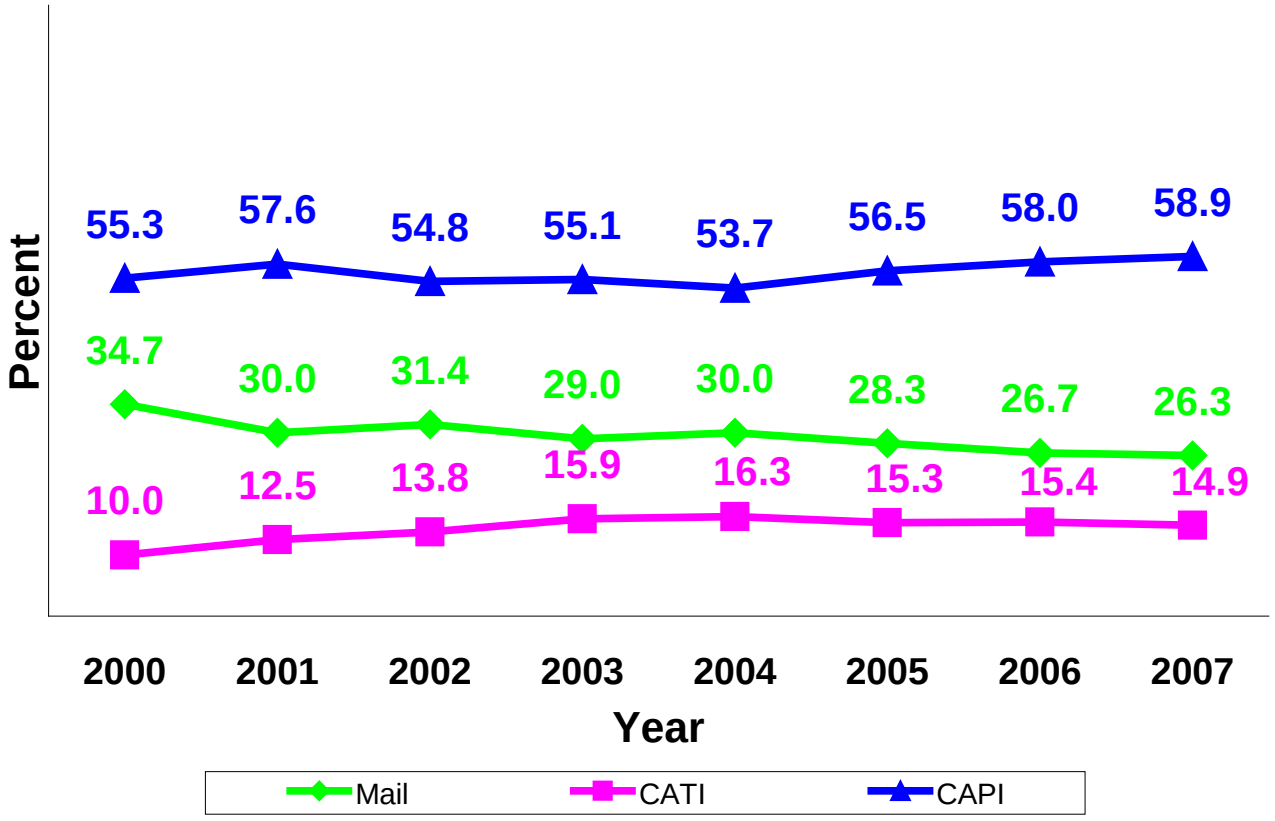
1/ For multiple response type definitions see Section 8.
2/ The "Multiple non-Hispanic" group is not included.
3/ Puerto Rico is not included in this table.
4/ AIAN = American Indian and Alaska Native, NHPI = Native Hawaiian and Other Pacific Islander SOR = Some Other Race.
5/ Data for households refer to response type of the householder
6/ CATI = Computer-Assisted Telephone Interview, CAPI = Computer-Assisted Personal Interview.

Figure 1. Distribution of Responses to the Hispanic Origin Question by Mode of Data Collection for the Household Population: 2000 to 2007



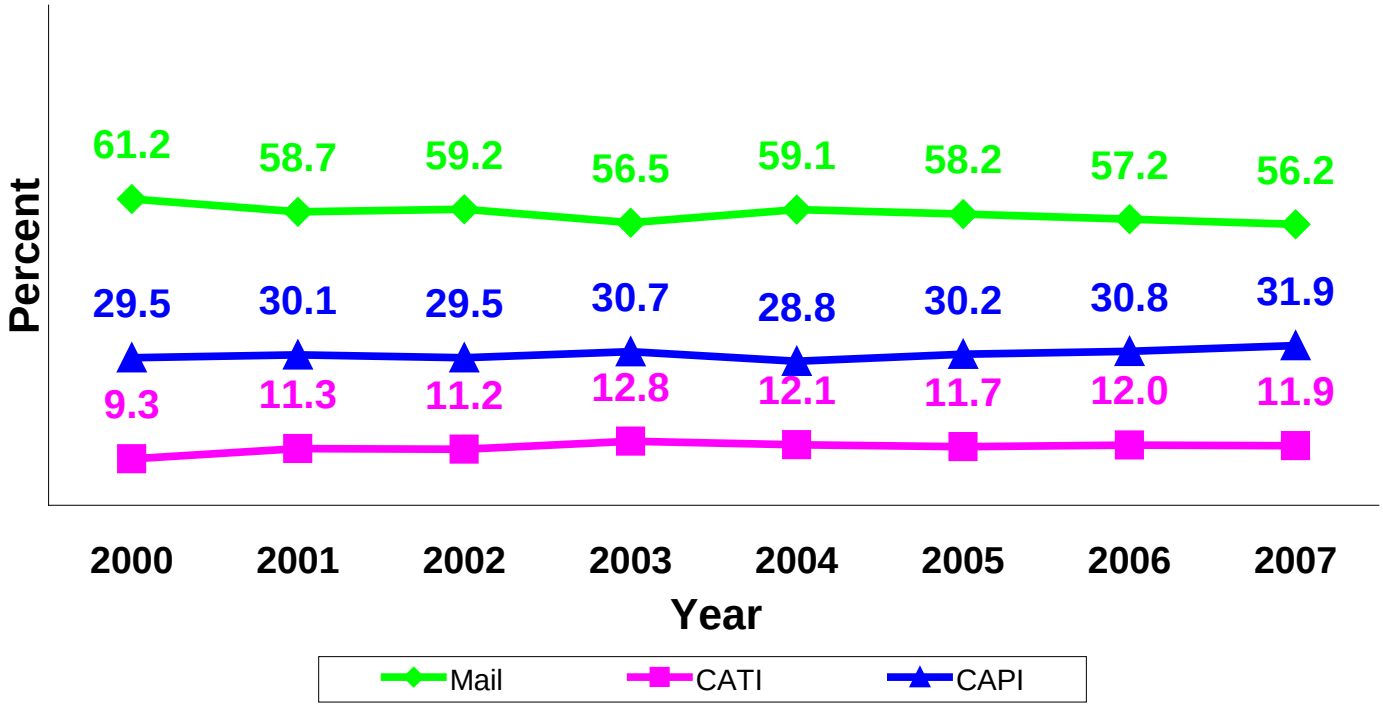
Source: U.S. Census Bureau, American Community Survey, 2000 to 2007

Figure 2. Distribution of Responses to the Hispanic Origin Question by Mode of Data Collection for the Hispanic Household Population: 2000 to 2007



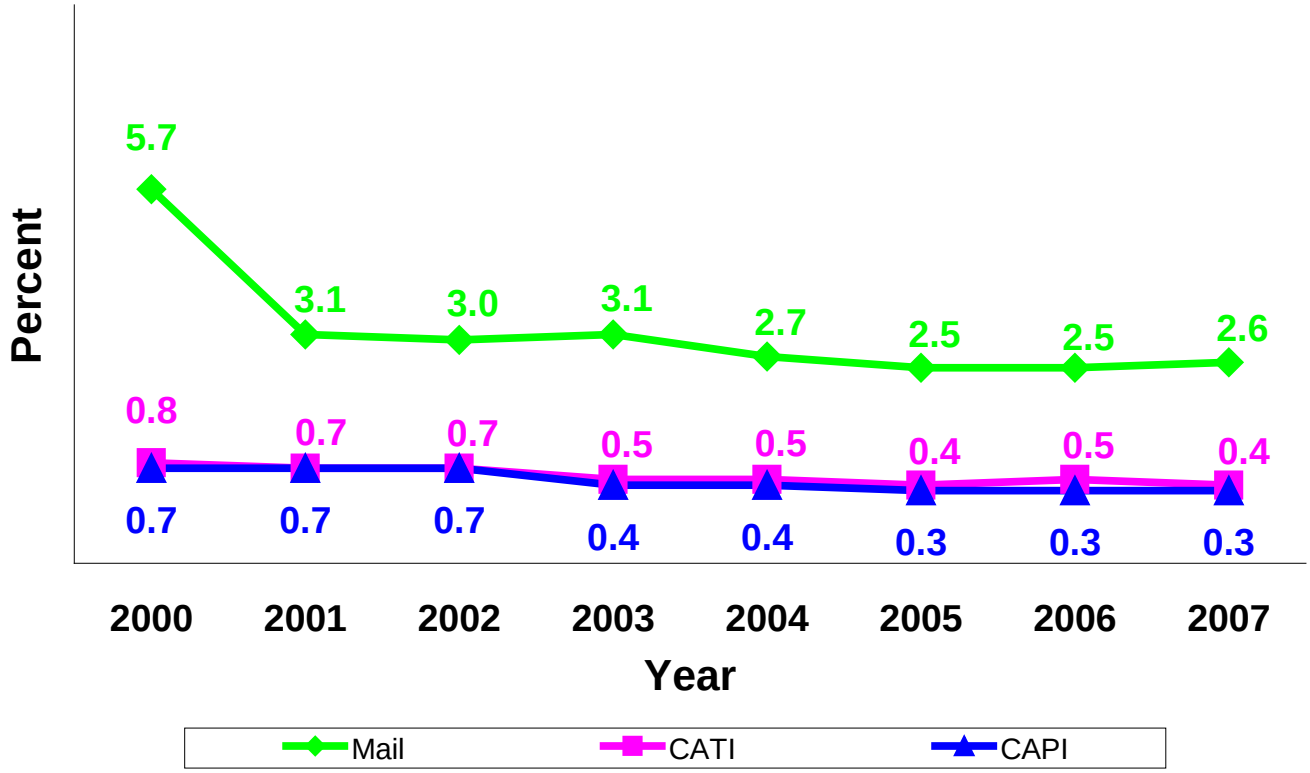
Source: U.S. Census Bureau, American Community Survey, 2000 to 2007

Figure 3. Distribution of Responses to the Hispanic Origin Question by Mode of Data Collection for the Non-Hispanic Household Population: 2000 to 2007



Source: U.S. Census Bureau, American Community Survey, 2000 to 2007

Figure 4. Item Nonresponse Rates for the Hispanic Origin Question by Data Collection Mode for the Household Population: 2000 to 2007



Source: U.S. Census Bureau, American Community Survey, 2000 to 2007

Appendix

ACS Hispanic Code List

Code	Detailed Hispanic Origin
NOT SPANISH/HISPANIC	
100	Not Spanish/Hispanic (check box)
101	Not Spanish/Hispanic
110	Portuguese
111	Azorean
112	Brazilian
116	Belizean
117	British Honduran
118	Haitian
119	Dominica Island
120	Basque
121	Sephardic
130	White
135	Black (African American)
145	American Indian
146	Alaska Native
150	Other Asian
151	Asian Indian
152	Chinese
153	Filipino
154	Japanese
155	Korean
156	Vietnamese
160	Native Hawaiian
166	Other Pacific Islander
167	Guamanian or Chamorro
168	Samoan
190	Multiple Not Hispanic
SPANIARD	
200	Spaniard
201	Andalusian
202	Asturian
203	Castillian
204	Catalonian
205	Balearic Islander
206	Gallego
207	Valencian
208	Canarian
209	Spanish Basque

Code	Detailed Hispanic Origin
MEXICAN	
210	Mexican (check box)
211	Mexican
212	Mexican American
213	Mexicano
214	Chicano
215	La Raza
216	Mexican American Indian
218	Mexico
CENTRAL AMERICAN	
221	Costa Rican
222	Guatemalan
223	Honduran
224	Nicaraguan
225	Panamanian
226	Salvadoran
227	Central American
228	Central American Indian
229	Canal Zone
SOUTH AMERICAN	
231	Argentinean
232	Bolivian
233	Chilean
234	Colombian
235	Ecuadorian
236	Paraguayan
237	Peruvian
238	Uruguayan
239	Venezuelan
240	South American Indian
241	Criollo
242	South American

Code	Detailed Hispanic Origin
LATIN AMERICAN	
250	Latin American
251	Latin
252	Latino
PUERTO RICAN	
260	Puerto Rican (check box)
261	Puerto Rican
CUBAN	
270	Cuban (check box)
271	Cuban
DOMINICAN	
275	Dominican
OTHER SPANISH/HISPANIC	
280	Other Spanish/Hispanic (check box)
281	Hispanic
282	Spanish
283	Californio
284	Tejano
285	Nuevo Mexicano
286	Spanish American
287	Spanish American Indian
288	Meso American Indian
289	Mestizo
290	Caribbean
291	Multiple Hispanic Origin
299	Other Spanish/Hispanic, n.e.c.