**Report on Topic-based Mode Consistency
CATI/CAPI Pretesting Study for
the American Community Survey (ACS)**

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1. EXECUTIVE SUMMARY

The main objective of this pretesting study was to find out whether the implementation of a topic-based format for the collection of demographic data is operationally feasible in the automated computer assisted instruments (CAI) of the American Community Survey (ACS). This study tested the structure and the flow of the topic-based format on the name, relationship to householder, sex, date of birth and age, race and Hispanic origin questions in the ACS's automated instruments.

A topic-based interview asks all household members the same question (topic) one person at a time before moving on to the next topic, whereas a person-based interview asks all questions intended for each household member before moving on to the next person. In topic-based format, after the main question and the response categories have been read once in full to the first person, it can generally be shortened to "And how about [Name]?" for all subsequent household members. This is an efficient, natural, and non-repetitive way to administer the survey, and it helps improve the interview process (Moore and Moyer, 2002). The same format is recommended for followup branching questions whenever possible and applicable. The interview asks all household members the main stem question, then the branching question follows, if appropriate, and asks all household members whose response to the main question requires more details. Again, the "And how about [Name]?" is used to preserve the advantages of topic-based wording. Three ACS demographic questions ("relationship with householder" in the computer assisted telephone interview (CATI) only, "Hispanic origin" and "race" questions) which used followup branching questions were tested using this approach. A fourth branching question used for the date of birth question was left in its original format, in which the instrument administers the main date of birth stem question and immediately confirms the person's age (or follows up with the appropriate branching question) prior to moving on to the next person in the household.

The instruments pretested in this study were also redesigned to apply the Mode Consistency Guidelines (U.S. Census Bureau, 2006a), which are intended to minimize unnecessary differences across the multiple questionnaire and interview modes of the ACS and the 2010 Census. The changes made to the question texts and response categories were minor with the intention to make them consistent with the assumed content for the 2008 Census Dress Rehearsal (as of the date of the pretesting). These changes included revising the response categories and/or examples of the Hispanic origin and race questions, and the addition of response categories for the relationship with householder question, in particular, detailed type of relationship for children (biological, step or adopted) of the householder. A branching question was added to collect this new information in the ACS CATI instrument and the new categories were added as part of the response set for the CAPI instrument. Hence, this study mainly tested how well the topic-based format works on existing questions (including branching questions), response categories, instructions, and examples that differ slightly from the self-administered ACS instrument due to requirements of the different modes.

In addition to testing the topic-based demographics section of the survey, several housing items were included in the cognitive interviews to test the transition between the new topic-based format demographics section and the housing section of the survey. The major questions

addressed by the study were:

(1) Are there any major difficulties for respondents and interviewers with the implementation of the topic-based format and the mode-consistency guidelines on the CAI? and

(2) Does the transition between the new topic-based demographics section and the housing section work smoothly?

Cognitive interviews were used for this pretesting study. This technique is a useful way to detect problems in one or more components of the response process and identify possible causes of survey response error. In this method, respondents are often asked to "think aloud" and describe their thought processes as they answer the survey questions. In addition, interviewers often probe about the meaning of specific terms or the intent of specific questions throughout the interview. Cognitive testing generally uses small numbers of individuals (between 5 to 15) in an interview round (Willis 2005, P7). A total of 13 cognitive interviews were conducted in this study.

Overall, our findings suggest that the newly designed topic-based format for the CAI is operationally feasible for ACS, and that respondents are unlikely to have difficulty with the new format. The front end topic-based demographics section transitions smoothly to the next section where the questions collect household characteristics. Our respondents had no apparent problem or confusion with the structure and the flow of the new topic-based format of the CAPI/CATI interviews. The topic-based format used in the major demographic items (relationship, date of birth, Hispanic origin, and race) which required followup branching questions worked effectively. We recommend that the topic-based format as tested be implemented in the basic demographics section for the 2007 ACS field test and 2008 production survey.

2. INTRODUCTION

2.1. The American Community Survey (ACS)

The ACS is a nationally representative monthly survey designed to replace the need for a decennial long form in future censuses. There were two parts to the decennial census: 1) the short form, which captured the most basic demographic information (e.g. age, sex); and 2) the long form, which collected additional demographic, housing, social, and economic information from a 1-in-6 sample of households. Since a census is done only once every 10 years, long-form information rather quickly becomes out of date. The ACS will provide updated data every year instead of once in ten years. Full implementation of the ACS in every county of the United States began in 2005. The survey now samples approximately three million households annually. Data are collected initially by mail, and Census Bureau staff follow up with households that haven't responded either in-person or by phone, using computer-assisted instruments. ACS will provide estimates of demographic, housing, social, and economic characteristics every year for all states, as well as for all cities, counties, metropolitan areas, and population groups of 65,000 people or more. For more information about ACS, see http://www.census.gov/acs/www.

2.2. Person-based versus Topic-based Format

2.2.1. Person-based Format

Currently, the demographics section of the ACS's computer assisted person interview (CAPI) and computer assisted telephone interview (CATI) is in person-based format, where the instrument completes the entire set of questions for the first eligible household member, then returns to the beginning and completes the same demographic items for the second household member, and so on until information has been collected from all eligible persons. For example, all six demographic questions below would have been asked for one person before proceeding to the next person.

(1) What is [person1]'s name?
(2) How is [person1] related to [householder's name]?
(3) Is [person1] male or female?
(4) What is [person1]'s date of birth and age?
(5) Is [person1] of Hispanic, Latino, or Spanish origin?
(6) What is [person1]'s race?

2.2.2. Topic-based Format

Early experimental research by Moore and Moyer (2002) has shown that in most respects, including response rates, interview length, interviewers' and respondents' preference, a topic-based design for an ACS CATI interview is clearly superior to a person-based design. Unlike the person-based interview, a topic-based interview asks all household members the same question (topic) one person at a time before moving on to the next topic. For example,

(1) What is [person1]'s name?
What is [person2]'s name?
[etc. for persons 3, 4,...]

(2) How is [person1]'s related to [householder's name]?
How is [person2]'s related to [householder's name]?
[etc. for persons 3, 4,...]

(3) Is [person1] male or female?
And how about [person 2]'s name?
[etc. for persons 3, 4,...]

(4) What is [person1]'s date of birth and age?
And how about [person 2]'s name?
[etc. for persons 3, 4,...]
[etc. for more topics]

In general, the question only needs to be read once, to the first person, after which it can be shortened to "And how about [Name]?" for all subsequent household members. This includes having interviewers read all of the response categories essentially only once for all household members. This is an efficient, natural, and non-repetitive way to administer the survey, and it helps improve the interview process (Moore and Moyer, 2002).

The 2007 ACS Methods Panel had been scheduled to introduce the topic-based format to its front-end demographic items in both the CATI and CAPI instruments. These major demographic items include: 1) name; 2) relationship to householder; 3) sex; 4) date of birth and age; 5) Hispanic origin; and 6) race. However, this test was cancelled for budgetary reasons.

2.3. The Mode Consistency Guidelines

The Mode Consistency Working Group (chartered by the Decennial Management Division) has recently completed the Mode Consistency Guidelines (U.S. Census Bureau, 2006a) for the development of instruments for both the ACS and the 2010 Census. The Mode Consistency Guidelines (MCG) aim to minimize potential mode effects resulting from unnecessary differences across multiple instruments and modes. Hence, to a great extent the MCG dictated the content and question wordings used for this pretesting study. DSSD staff, along with several survey methodologists, interpreted and implemented applicable mode consistency guidelines for the CATI and CAPI instruments of the ACS, resulting in changes to make question wording and response categories consistent with the 2008 Census Dress Rehearsal (as of the date of the pretesting). These changes included revision to the response categories and /or examples of the Hispanic origin and race questions, and the addition of response categories for the relationship to householder question, in particular, detailed types of relationship for children (biological, step or adopted) of the householder. The revised instruments will be pretested in this study for the ACS Methods Panel field test in 2007.

2.4. Branching Procedures

Mode Consistency Guideline number 26 recommends that "if more than five response options are presented to the respondent, the question should if possible be adapted for interviewer administration (by use of a flashcard, a branching question or other adaptation). When the list of categories to be read to the respondent is long and visual aids cannot be used (in particular, in CATI), the instrument's performance may be improved by reducing the number and length of categories" (U.S. Census Bureau, 2006a). The main stem question containing broad and general response categories for respondents is first administered to respondents and then the corresponding branching question follows. The basic idea is to expose respondents to the same response categories without reading all of the long list of categories at once.

In the current production ACS's computer assisted instrument (CAI), the existing branching questions for date of birth, Hispanic origin and race adhere to the MCG, so they were kept and were implemented in the new topic-based format for this testing. A new branching question was added to the CATI instrument to collect the new detailed relationship information for children of the householder (for more details, see Appendix A).

By design the MCG do not prescribe exactly how to write a question for a certain mode, given all the different issues that can impact the administration of a question (Hicks, 2006). In particular, the MCG do not specify how to implement branching questions when a topic-based format is used. There is no empirical evidence indicating that one branching procedure is superior to another when the topic-based format is used. As a result, to best suit the needs of the ACS, we recommended that the interview first ask all household members the main stem question, and then follow with the branching question for all household members whose response to the main question requires more details. An important advantage of this format is that it allows the more efficient and natural "And how about [Name]?" format for the main and follow up questions. Three ACS demographic questions ("relationship with householder" -CATI only, "Hispanic origin" and "race" questions) which used followup branching questions were tested using this approach[1]. This same topic-based branching format was used in the 2000, 2001 and 2002 Methods Panel for the Survey of Income and Program Participation (MPSIPP) - SIPP is a longitudinal household panel survey conducted by the U.S. Census- and was implemented in the SIPP 2004 Panel's "relationship with householder" and "Hispanic origin" questions.

A fourth branching question used for the date of birth question was left in its original format, in which the instrument administers the main date of birth stem question and immediately confirms the person's age (or follows up with the appropriate branching question) prior to moving on to the next person in the household. This interrupts the main question with the followup question and requires the main question to be re-read for the next person[2]. However, in SIPP Method Panel field tests in 2000, 2001, and 2002, interviewers had expressed preference for this format during MPSIPP debriefing sessions. Hence, this format is recommended for the date of birth and age followup branching question.

2.4.1. Relationship questions

The 14 response categories of the relationship question present a challenge in telephone interviews, where the use of a flashcard is impossible. In accord with the MCG[3], the relationship question was tested as a two-part question in the ACS CATI questionnaire only (see below). Under this design, the main relationship question is asked of all household members first, using a global "son/daughter" category in place of the three current son/daughter sub-categories (biological, adopted, step) included in the paper self-administered form and on a flashcard in CAPI interviews (see below). A branching/followup question is asked for all household members indicated to be a son/daughter of the "householder" to determine whether the child is a

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[1]The label coined for this branching procedure was 'vertical branching' because the interview continues to go 'down' the roster list 'vertically,'asking the same question about everyone in the household before moving on to the next questions.

[2]We refer to this branching procedure as 'horizontal branching', since its asks the branching question immediately (branching sideways) before the main question is asked about the next household member.

[3]See Appendix A: document prepared for Decennial Leadership Group meeting on October 11, 2006: "Branching Procedure for Relationship Question for Telephone Interviews."

biological, adopted or stepchild[4]. For the CAPI instrument, a branching procedure was not implemented for this question and the new categories were added to the response set (see next page).

[Relationship to Householder - CATI instrument.]

How [Fill 2: is <Name>/ are you] related to <HHoldername>?

        <1> Husband or wife
        <2> Son or daughter
        <3> Brother or sister
        <4> Father or mother
        <5> Grandchild
        <6> In-law
        <7> Other relative
        <8> Roomer or boarder
        <9> Housemate or roommate
        <10> Unmarried partner
        <11> Foster child
        <12> Other non-relative

Followup question

CATI instrument

[Is <Name>/ are you] [your/ <Hholdername>'s] Biological Son or Daughter, Adopted Son or Daughter OR Stepson or Stepdaughter?

<1> Biological Son or Daughter
<2> Adopted Son or Daughter
<3> Stepson or stepdaughter
<4> Foster son or daughter (DO NOT READ)

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[4]At the time of this testing, the foster child relationship category was excluded as a category on the paper forms, but we included this category in the son/daughter followup question as a "way out" for the interviewer in case the respondent provided this response. However, there was also a clear instruction for the interviewer not to read this category aloud. If a respondent reported "foster child" during the followup, the interviewer could select the "silent" category as a response, so that the computer could proceed to the next question. We suggested the response to be coded back to the other non-relative category (either before the instrument closes or after post data collection). The other 11 relationship response categories are the same as that of the CAPI instrument (See REL and RELT questions in Attachment A)

[Relationship to Householder - CAPI Instrument]

How [Fill 2: is <Name>/ are you] related to <HHoldername>?

        <1>   Husband or wife
        <2>   Biological son or daughter
        <3>   Adopted son or daughter
        <4>   Step son or daughter
        <5>   Brother or sister
        <6>   Father or mother
        <7>   Grandchild
        <8>   In-law
        <9>   Other relative
        <10>   Roomer or boarder
        <11>   Housemate or roommate
        <12> Unmarried partner
        <13> Foster child
        <14> Other non-relative

2.4.2. Hispanic origin series

In both the CAPI and CATI interviews, the Hispanic origin "yes/no" question is asked first for all household members – whether or not they are of "Hispanic, Latino or Spanish origin." A detailed followup question is then asked for all household members who respond "yes" to the first question to determine whether they are (1) Mexican, Mexican American; (2) Puerto Rican; (3) Cuban or (4) of another Hispanic/Spanish origin. (In CAPI interviews, a flashcard is used along with the administration of this detailed Hispanic origin followup question.)

[Hispanic origin]
Are you Spanish, Hispanic or Latino?

(1) Yes
(2) No

First Branching question

[Is <he/she/NAME>/ Are you] of Mexican origin, Puerto Rican, Cuban
*   or some other Spanish/ Hispanic/ Latino group?*

      <1> Mexican, Mexican American, Chicano
      <2> Puerto Rican
      <3> Cuban
      <4> Other Spanish/Hispanic/Latino

Second branching question

> *Write-in*
> *Read if necessary: What is the other Spanish, Hispanic or Latino group?*
> *For example: Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard.*

A second branching question, asking the specific Hispanic subgroup, is administered to those who choose the "other" category. In cases where a respondent volunteers the information for additional people, e.g. "My husband and I are both from El Salvador," interviewers can record the response without asking the second branching question.

2.5. Other Questions

In addition to testing the topic-based demographic questions, several housing questions were included in the cognitive test to examine the transition between the two sections. The interview also included a number of education-related questions, including school enrollment, educational attainment, and one of several variants of a proposed new "field of degree" question that were tested for another cognitive study.[5]

2.6. Objectives of Cognitive Research

The main objective of this cognitive study was to test the structure and the flow of the new topic-based format of the redesigned automated instruments for the collection of front-end demographic data in the ACS. The current cognitive research was designed to address the following major questions:

(1) Are there any apparent difficulties for respondents and interviewers with the implementation of the topic-based format and the mode-consistency guidelines on the CAPI/CATI instruments; in particular, how well did the branching procedures work, and

(2) Does the transition between the new topic-based demographics section and the person-based detailed demographics section work smoothly?

3. METHODS

3.1. Cognitive Interviews

Cognitive interviews were used for this pretesting study. Cognitive interviews are generally designed to capture and document the cognitive processes respondents use to answer survey questions; "in particular, their comprehension, recall, decisions and judgement and response processes" (Willis, 2005). Cognitive pretesting of questionnaires is a useful way to detect

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[5]Results from the field of degree test will appear in a separate report to the National Science Foundation; see Rothgeb and Beck (forthcoming).

problems in one or more components of the response process and identify possible causes of survey response error. In this method, respondents are often asked to "think aloud" and describe their thought processes as they answer the survey questions. In addition, interviewers often probe about the meaning of specific terms or the intent of specific questions throughout the interview (Hughes, 2003).

Cognitive testing generally uses small numbers of individuals (between 5 to 15) in an interview round (Willis, 2005, P7). A total of thirteen cognitive interviews were conducted with laboratory respondents by four CSMR researchers between June 20 and July 6, 2006. Six interviews were conducted using a paper mockup of the CATI questionnaire and seven were conducted using a paper mock-up of the CAPI questionnaire. CAPI interviews were conducted in the cognitive lab and other places that were most convenient to respondents (e.g., the homes or offices of respondents). CATI interviews were conducted in the cognitive laboratory. All interviews were tape-recorded, with respondents' permission. Each interview lasted about 30 minutes to one hour depending on the number of people in the household. Respondents were paid $40 for their participation in the study.

All cognitive interviews in this study were conducted using concurrent "think-aloud" interviewing techniques. Respondents were instructed to think out-loud while answering the questions and they were trained to use the 'think-aloud' technique before the interview began. Each respondent was asked the demographic items, in a topic-based format, for all members of the household. As noted above, each item was asked about all members before the next question/topic was asked (with the exception of the date of birth and age questions which were asked together in a horizontal topic-based format before moving on to the Hispanic origin question). Interviewers used general concurrent probes based on the respondent's reaction as they responded to the questionnaire. Researchers were instructed to probe concurrently if the respondent had any apparent problem in comprehending or interpreting any survey question. Retrospective probes were also used after all the demographic questions were administered and before the interviewer began the housing section of the survey. Respondents were debriefed and were asked to provide feedback and comments on the topic-based question format. The interview continued with a selected number of housing questions, school enrollment, educational attainment, and one of several variants of a proposed new "field of degree" question.

3.2. Recruiting

Because this cognitive test was conducted in conjunction with another study examining a new content "field of degree" question in the ACS, recruiting needs were somewhat complicated. To satisfy both studies, respondents were selected based on the following criteria: (1) households with children, to test the relationship branching question on types of children (biological, step, adopted) in the CATI mode; (2) households with members who are of Hispanic origin, or who self-identify their race category as other than only "white" or only "black," in order to test the flow of the topic-based format for these questions and their detailed followups; (3) two-or-more person households (and especially households containing unrelated household members) with adult members who have advanced degrees, in order to pretest the field of degree question. Respondents were recruited through an advertisement in the local newspaper, some through

personal networks and also from our existing respondent database. All but one respondent were from the Washington DC metropolitan area.

3.3. Computer-Assisted Instruments (CAI)

One major constraint of this testing is that neither the electronic CAPI nor the CATI instruments were available for use, since they hadn't been implemented as a CAI at the time of the test. The CAI generally fill in all the names in the instrument for the interviewers rather than using a generic "Person's name" as in a self-administered form. The computer also automatically calculates the age of respondents and household members for verification, and also skips to the appropriate branching questions based on responses. Despite this constraint, we designed paper versions of the instruments to simulate an actual CAI (see Attachment A). We manually implemented the age calculations and applied the provided skip pattern accordingly. To facilitate the interview, a matrix was used where information for each household member was collected on one row with all basic demographic items listed, each in a separate column. The first column of the grid was a flap that opened from the inside cover, providing space to record the names of all household members. This roster remained visible even when the pages of the instrument were turned so that the researchers could easily "fill in" the name of the person whose data were being collected when administering the questions.

3.4. Respondent Characteristics

Our respondents' ages ranged from 20 to 57. Five respondents were in their twenties, two were in their thirties, four were in their forties and two were in their fifties (see Table 1). The average age of our respondents was 38 years old. Ten of the 13 respondents were female. As noted earlier, given our recruitment criteria, our respondents were highly educated, with all but two having at least a bachelors degree. About half of them had an advanced degree: four had doctoral degrees, one had a professional degree, and one had a masters degree. Three of the thirteen respondents were Hispanic, of whom two considered themselves "some other race" and one reported herself as "black" and "white." Of the remaining 10 respondents, two considered themselves non-Hispanic white, five considered themselves Asian, one respondent reported being Pacific Islander, and the remaining two reported more than one race (one reported being "white" and "Asian"; the other was "black" and "Asian"). Ten of our respondents lived in "family" households, two of which also had non-relatives residing in the household, and two had extended family members (e.g., cousins). Of these family type households, five were telephone interviews, and four included children, which allowed us to test the son and daughter branching format (used only in telephone interviews).

Table 1. Demographics Characteristics of Respondents

Demographic Characteristics	Frequency	Percentage
Age Range		
20-29	5	38.5%
30-39	2	15.4%
40-49	4	30.8%
50-59	2	15.4%
Sex		
Female	10	76.9%
Male	3	23.1%
Education Completed		
H.S. or some college	2	15.4%
College degree	5	38.5%
Postgraduate degree	6	46.2%
Hispanic Origin/Race		
Hispanic		
Some Other Race	2	15.4%
More than one race	1	7.7%
Non-Hispanic		
White	2	15.4%
Asian	5	38.5%
Pacific Islander	1	7.7%
More than one race	2	15.4%
Household Type		
Family household	8	61.6%
Family with non-relatives	2	15.4%
Non-relative household	3	23.1%

4. FINDINGS

4.1. Overall Topic-based Format

Overall, the topic-based structure of the ACS instruments worked smoothly and efficiently in all 13 interviews. No problems were detected and our respondents had no apparent difficulty or confusion with any of the questions that were related to using a topic-based interview structure. Respondents did have comments and confusion with regard to some of the question wordings, but these issues were irrelevant to the topic-based structure of the instrument. Some of these comments will be discussed in the last section of this report: future research.

4.2. Relationship to Householder

During the cognitive testing, relationships of household members to the householder were often volunteered to researchers during rostering procedures, regardless of interview mode. This was particularly true for family households where the respondent was also the householder. When the researcher asked for the names of everyone who lives or stays at the address, a common response was something like: "my name is John Doe, I live with my wife, Mary Doe, and my two sons, Andy Doe and Nathan Doe." This typical response makes the recommended vertical branching approach for the type of son or daughter followup question very conversational and natural. The interviewer will record the names of the children at the roster, confirm that they are the children of the householder and then proceed to ask the detailed relationship question. Ethnographic studies with rural white families have shown that some respondents find it offensive when they were asked to distinguish among biological, adopted and step-children (Hewner, 2000). This branching procedure helps improve interviewer/respondent rapport by allowing respondents to first report their children, and for the interviewer to acknowledge the relationship before probing for further details.

4.2.1. Relationship branching question: types of children

Four of our six CATI interviews were conducted with family households that included children. The "types of children" followup question was tested in these households. As noted above, in creating the household roster, respondents typically provided the names of household members along with their relationship to the householder (mostly themselves). The researchers were able to first record the names of respondents' children, select their relationship to the householder without explicitly asking the relationship with householder question, and then ask the scripted followup question on the types of children. In all four test cases, these respondents either replied "they are all my biological children" or in one case, the respondent replied that "they are both adopted" when researchers asked about the type of child for the first child. Thus we found that the topic-based branching approach for the relationship followup question worked effectively and "naturally" when administered after information from the main question has been collected from everyone first. It allowed respondents to answer for all children at once, avoid repetition, and it was easy for the interviewers to record the same response categories efficiently without repeating the same question. Although we didn't observe a case with a mix of types of children, we do not expect that this branching format would cause any particular difficulty in such circumstances.

4.3. Hispanic Origin Series

In the current computer-assisted ACS production instrument, the main question for Hispanic origin does not include the detailed examples of Hispanic groups that are listed in the self-administered questionnaire. Although there was some concern that the question wording may not be well understood without the examples, in our study all thirteen respondents understood the question well and, as far as we could tell, correctly answered the question with either a "yes" or "no" response. As with the relationship branching question, respondents generally responded voluntarily that all household members were (or were not) Hispanic. Three of our cognitive interviews were conducted with respondents who reported Hispanic origin. Again, we found that

the recommended branching approach worked very well; researchers were able to record respondents' "yes" or "no" answers smoothly and efficiently before asking the appropriate branching question[6]. However, we did observe one non-related household where the respondent and one other household member were reported as"Dominican." The respondent erroneously reported her other roommate, a Brazilian, as Hispanic as well. We attribute this problem to the respondent's conceptual misunderstanding of the meaning of "Hispanic" rather than an issue with the topic-based structure of the interview.

4.4. Race Series

Similarly, the ACS race question also uses branching followup questions when appropriate. In the CAPI instrument, respondents are shown a flashcard listing 14 racial/ethnic groups. Major race information is first collected from all household members. Initial responses of American Indian or Alaska Native, other Asian, other Pacific Islander, or some other race are followed by an appropriate branching question to obtain more details for all members who report the same response. If multiple racial categories are chosen, the branching question appears for everyone who reports the same response before the next open-ended branching question is administered (see Appendix A). In the CATI instrument, the major race question is asked of all household members first, but it only lists seven major racial/ethnic groups as response categories. A followup question is asked for all household members who indicate that they are American Indian or Alaska Native, Asian, other Pacific Islander, or some other race. For respondents who are Asian and/or Pacific Islanders, the first branching question provides a set of closed-ended response categories. If the respondent selects other Asian group or other Pacific Islander in the first followup question, a second detailed question follows after the first branching question has been administered to all other household members for whom it is appropriate.

Similar to the Hispanic origin question, the recommended branching structure for the race question also appeared to work well, with no problems detected during the cognitive interviews. The race branching questions were administered in six of the interviews. Two were CAPI interviews in households with Hispanic members; in both cases the respondents chose "some other race" for themselves and all other Hispanic household members when the race question was administered.   The followup open-ended branching question for a response of "some other race" elicited a response of "Mestiza" for the respondent and her child in one case. In the other case the respondent specified that the adult members were Peruvians, and his children, who were born in the United States, were Peruvian-American.

In four other interviews, branching questions were administered by telephone. All these households had members who were Asians and/or Pacific Islanders. The appropriate Asian and Pacific Islander branching questions were administered and they worked effectively, even in households where both Asian and Pacific Islander branching questions were asked. All four of these households were interracial and/or interethnic families, and three of the four had biological children. It is interesting to note that respondents did not necessarily choose the "logical" multiple racial categories for their children that correspond to both the parents' racial or ethnic

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[6]See Appendix B for more detail.

categories. In one case, an Asian Indian respondent whose husband is white, chose "some other race" for their children. In another case, the Pacific Islander respondent whose spouse is Asian and white (though she chose only the Asian category for her husband), chose only "Pacific Islander" for their children. Only one of the three respondents chose all the corresponding race and ethnic groups for her child. Again, these examples reflect respondents' conceptual understanding of the race question; the topic-based format appears to have had no impact on respondents' answers.

4.5. Date of Birth and Age

Lastly, we found that the horizontal branching topic-based design worked well with the date of birth and age verification questions. In four of the 14 households, respondents did not have complete information about all household members' dates of birth. In these instances, the respondents were able to provide an approximate age for these members efficiently. In one case, due to privacy concerns rather than a lack of knowledge, the respondent refused to provide date of birth information, and was only willing to report an age range for herself and her roommates.

4.6. Transition from Topic-based Demographic questions to Housing Questions

One of the objectives of the cognitive test was to look for any problems with the transitions between the newly designed topic-based basic demographics section and the housing questions and between the housing questions and the later detailed demographics section that is in person-based format. In our interviews, the transition from one section to another worked effectively and flawlessly. In fact, during debriefing, some of the respondents commented that they did not even notice the change in format between the two sections until we asked them if they had any issues with the change in format.

5. CONCLUSIONS

Both versions of the newly designed topic-based CAPI and CATI instruments provided to SRD were tested in our cognitive laboratory. No problem with the topic-based design was detected in any of the thirteen interviews. The topic-based format also works well with the demographic items (relationship, Hispanic origin, race, date of birth and age questions) that used branching questions. Our respondents had no apparent problem or confusion with the structure and the flow of the new topic-based format of the CAPI/CATI interviews. The new format worked effectively and efficiently in the test, and the transitions between sections were smooth and problem free.

Although the cognitive test detected no apparent problems with the topic-based format, our respondents did have problems with some of the question wordings and the repetitiveness of some of the ACS questions. For instance, one respondent commented how surprised she was, and how redundant it seemed to her, when we asked the Hispanic origin question for her children after she told us that neither she nor her husband were Hispanic, and that the children were their natural-born children. To avoid such problems, the SIPP 2004 panel questionnaire included procedures to automatically fill Hispanic origin (and race) without asking for natural-born children of two

parents both of whose Hispanic origin (race) were known to be the same. ACS should consider similar procedures for its CATI and CAPI instruments.

6. FUTURE RESEARCH

Given respondents' tendencies to report about all household members at once, the relatively low percentage of household with both Hispanic and non-Hispanic members[7], and the use of topic-based formatting in the basic demographic questions, it seems prudent to explore the potential benefits of allowing an "all members are of Hispanic origin" option, to speed up the interview process if the entire household consists of Hispanic members. Similarly, provided over 80% of U.S. population is non-Hispanic, a "no one in the household is Hispanic" response option would avoid asking all other household members the same Hispanic origin question repeatedly after the respondent has told us that "none of us are Hispanics" for the first person. The same response approach may also be useful for the "race" question as well. It is certainly important that this should be tested before implementation and that careful analysis be done to verify if such new response options would affect the Hispanic origin and race estimates.

7. LIMITATIONS

One of the potential limitations of this study is that, due to the fact that the topic-based test was combined with a test of a new "field of degree" question, our sample was highly educated. One could argue that less educated respondents may experience more problems with the topic-based formatted questions. However, given the nature of the front end questions, it is highly unlikely that respondents' educational attainment would affect their ability to provide basic demographic information such as name and date of birth.

Although cognitive interview has been demonstrated as a successful pretesting method, another limitation is that only a very small number of purposively chosen respondents are interviewed, and the results are not generalizable to a larger population.

8. ACKNOWLEDGMENTS

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[7]Although 14% or 43 million of the U.S. population is of Hispanic Origin (U.S. Census Bureau 2006b), very few of these households with Hispanic household members are from different Hispanic origin (less than 1% of all household in the U.S.-see Appendix B Table 1).

9. POST SCRIPTS

Other research conducted on decennial census forms observed some problems with the topic-based versions of the branching questions in the Hispanic origin and the race question series, and recommended a different approach than is recommended here (Childs and Goerman, 2006). In order to be consistent with the MCG, the Census Bureau has decided that ACS and decennial census instruments should use the same questions and procedures, to the maximum extent possible. Thus, despite our findings, and our recommendations concerning the format that is best suited for the ACS, the final design of ACS procedures is likely to follow the decennial recommendations.

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Appendix A
(This document was prepared for October 11, 2006 Decennial Leadership Group meeting)

Branching Procedure for Relationship Question for Telephone Interviews: Recommendations from Survey Methodologists (Chan and Childs 2006), Statistical Research Division

Recommendation:

Implementing a branching procedure for the son and daughter responses in the relationship with reference person question for **telephone interviews** on the ACS, CFU. and NRFU CATI instruments[8].

1)   Survey research suggests the current way of collecting relationship question does not elicit the desired response from respondents and may lead to decreased interviewer/respondent rapport.

- Respondent seldom distinguish among the types of children they have without prompting. Results from the 2006 NRFU behavior coding indicate that many respondents (41 reported children in 72 total households) did not give type of child without additional interviewer probing. In these 41 instances, there were only 10 cases where the interviewer actually probed about type of child (and in most of those cases, the interviewer simply asked "biological?"). Thus, by building in the probe as the branching approach in the instrument, you increase the likelihood of the interviewer appropriately asking for the additional son/daughter descriptor. This seems especially important in a census environment where interviewers are far less experienced than the staff we use when conducting these tests.

- In cognitive testing of the 2006 ACS topic-based demographic questions, relationships of household members to the householder were often volunteered during rostering regardless of interview mode, before the relationship question was asked. When the researcher asked for the names of everyone who lives or stays at the address using a topic-based roster format, a common response from a family household was something like: "my name is John Doe, I live with my wife, Mary Doe, and my two sons, Andy Doe and Nathan Doe." This typical response makes the branching approach for the type of son or daughter followup question very conversational and natural. In this example, because the respondent has already reported that Andy and Nathan are his sons, the interviewer would verify that Andy and Nathan are respondent's sons, then ask if they were his biological, step or adopted sons.

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[8]Currently, 10% of all ACS interviews are conducted by telephone. CFU has a fairly high telephone caseload, but demographics are not collected on all persons in CFU. The NRFU telephone caseload is very small.

- Some respondents find it offensive when we asked them to distinguish between biological, adopted and step-children (Hewner 2000). It may improve interviewer/respondent rapport if we first allow respondent to report son or daughter, thus acknowledged the relationship , before probing for type of child. Rapport building is important, especially in a telephone interview, to maintain the interview without initiating break-offs.

2)   Mode Consistency Goals

- Guideline 13 states that it is necessary to expose all respondents to the response categories across all modes. (*For closed questions (i.e., those with fixed categories), instruments in all modes should be designed and administered to expose respondents to the response categories and to present response categories with the question.*)

- It is very difficult to read all 14 response options to a respondent over the telephone. Guideline 26 of the Mode Consistency guidelines recommends branching as a strategy of dealing with a long list of response options (*Guideline 26: If more than five response options are presented to the respondent, the question should if possible be adapted for interviewer administration (by use of a flashcard, a branching question, or other adaptation*.)

- Given the large proportion of non-reference person household members that are children of the reference person (see O'Connell's statistics), and that interviewers often have to probe for the type of child (see above NRFU behavior coding data), it is important to have a well constructed standard question for interviewers to probe for the type of child. Otherwise, interviewers are likely to shortchange the question and either assume the child is a biological child, or only probe for biological or not, rather than giving the other two options.

3)   Potential nonresponse to followup question is minimal

- SIPP asks a follow up question on the type of child whenever there is a child and a parent in the household. The weighted response distributions from the 2004 SIPP Wave 1 TRANSCASES data show that item nonresponse is trivial (See Tables 1 & 2).
- TYPMOM: only 0.2% don't know and refused responses (see column 3) for all those that were asked of the question (mom and child pair) (see Table 1)
- TYPDAD: only 0.4% of don't know and refusal responses (see column 3) for all those that were asked of the question (see Table 2)

Followup Question Text:
Is [childname] [mom/dad's name]'s biological, step, adopted or foster child?
(1)=biological
(2)=step
(3)=adopted
(4)=foster

* *
Table 1. Weighted response distribution of TYPMOM (2004 W1 Transcases data)

	Weighted **SIPP 2004**	W1 Universe	
typmom	N	PCT	PCT
	150882169.06	67.7993	.
1	68962505.55	30.9885	96.2355
2	1368099.51	0.6148	1.9091
3	1115468.15	0.5012	1.5566
4	60549.38	0.0272	0.0845
D	73768.32	0.0331	0.1029
R	79779.95	0.0358	0.1113

* *

Table 2. Weighted response distribution of TYPDAD (2004 W1 Transcases data)

	Weighted	SIPP 2004	W1 Universe
typdad	N	PCT	PCT
	166649760.18	74.8845	.
1	49739759.17	22.3507	88.9917
2	4679416.74	2.1027	8.3722
3	1230285.00	0.5528	2.2012
4	41946.07	0.0188	0.0750
D	120830.76	0.0543	0.2162
R	80342.00	0.0361	0.1437

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Reference
Hewner, S. J. (2000.) "Ethnographic Research on Complex Households in Western New York State: Impact of Migration and Economic Change on the Complexity of Household Composition among Rural Caucasians." Report for Census 2000 Complex Household and Relationships in the Decennial Census and Ethnographic Studies Series. Unpublished report.

Recommendations for a vertical branching procedure for the Hispanic Origin Question for the American Community Survey

When a topic-based format is used in a CAI, there are two different approaches to implementing branching questions. The first approach is a "vertical branching" procedure, where the main stem question is first asked of everyone in the household before the branching question is administered to all persons whose responses require a detailed followup question. The main question only needs to be read once to the first person, e.g. "Are you of Hispanic, Latino or of Spanish origin?" then the question is generally shortened to "**And how about [Name]?**" for all subsequent household members. With the "vertical branching" approach, the same **"And how about"** format is used for the followup branching detailed 'nationality' question for all subsequent household member who are of Hispanic origin: "Are you Mexican, Mexican American, Chicano, Puerto Rican, Cuban or of another Hispanic Latino/Spanish origin, e.g. Argentinean, Columbian, Dominican, Nicaraguan, Salvadoran, Spaniard or so on?" as well.
This is a major advantage of the "vertical" branching approach, as it preserves the efficient, natural, non-repetitive "And how about [Name]?" topic-based wording. The "horizontal branching" approach interrupts the main question with a followup question, and requires the main question and the followup question to be re-read each time for each household member who are of Hispanic origin.

The "vertical branching" format is most efficient when all the household members who require a detailed followup question are likely to have the same response to the branching question. For example, the Hispanic origin question was asked in this format in the Survey of Income and Program Participation (SIPP) 2004 Panel and close to 99% of such household with Hispanic members are all from the same Hispanic ethnic background (see Table 1 below). In a Hispanic household, it is very likely for the respondent to reply "we are all Cuban" when the detailed branching question is asked of the first person; thus the vertical branching approach makes it easy and efficient for interviewer to record the same response category for all appropriate household members. For instance, interviewer will enter '1' for "yes" to the stem Hispanic question and all '3s' for "Cuban" to the followup questions for all households in a sequence. This is efficiently and reduce data entry error as opposed to a '1' and '3' sequence for a horizontal branching procedures.

The American Community Survey is a household survey that will be implementing a topic-based format to its front end demographics section. One of the major goal in implementing the topic-based format is to improve the interview process making the interview more conversational and natural while collecting the data efficiently and accurately. ACS uses laptops and the instruments require actual keying of data where the vertical branching procedure deems most appropriate.. The vertical branching procedure will compliment and highlight the advantages of the topic-based format when used in ACS.

The recommendation for a vertical branching for the Hispanic Origin question for the ACS are as follows:

(1) efficiency-as it preserves the efficient, natural, non-repetitive "And how about [Name]?" topic-based wording

(2) less burden on interviewers and focus on the stem question ("Are you Hispanic or not") rather than the followup 'nationality' question

(3) This format has been field tested three times in SIPP Methods Panel, a household survey similar to ACS, no problem has been detected in the field nor was there any issue by interviewers during debriefing sessions or written in debriefing questionnaire about the vertical branching procedures. (4) The 2004 SIPP Panel used a vertical branching procedure for its Hispanic Origin question and the procedure works well in the production survey. Estimates generated were in line with other surveys (SEE TABLE 2). The horizontal branching procedure has never been field tested in a household survey.

Table 1. Weighted Distribution of Household with Hispanic members (SIPP 2004 Panel Wave 1)

histype	Frequency	Percent	Cumulative Frequency	Cumulative Percent
	7.282E8	0.06	7.282E8	0.06
all Cuban	8.7618E9	0.78	9.49E9	0.85
all Mexican	8.89E10	7.93	9.839E10	8.78
all Puerto Rican	2.042E10	1.82	1.188E11	10.60
all non-Hispanic	9.566E11	85.37	1.075E12	95.97
all other*	3.09E10	2.76	1.106E12	98.73
mixed hishh**	1.426E10	1.27	1.121E12	100.00

*all other= all Hispanic members in the household reported 'other' for HISPAN subgroup question
**mixed hishh=hh has Hispanic members, maybe all are hispanics but maybe not; but all those who are hispanics were not of the same subgroup based on HISPAN subgroup response)

Table 2. HISPANIC ORIGIN RESPONSE - 2004 SIPP WEIGHTED

ORIGIN	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Y	4.719E11	16.47	4.719E11	16.47
N	2.389E12	83.36	2.861E12	99.83
D	1.6632E9	0.06	2.863E12	99.89
R	3.283E9	0.11	2.866E12	100.00

Frequency Missing = 7186438410

ACS Mode
Consistency
CAPI Instrument
for 100% Items
Cognitive Testing

June 20, 2006

CSMR, SRD

SELECT HHOLDER (Mark Householder's box below)
Of the people you named, who owns or rents this place?
Read if necessary: What name(s) are on the deed or lease? Is there anyone 15 years or older?)
If more than 1 person is named, select person with the lowest Person number as householder.

ROSTER		REL (Ask or verify)	SEX (Ask or verify)
First time ask	I am going to be asking some questions about everyone who is living or staying at this address. First let's create a list of the people starting with you. What is your name?	Using CARD A IN THIS PACKET, how [is Name/are you] related to [householder's name]? Read if necessary. ([Is Name/Are you] hhdername's...) 1) husband/wife (6) father/mother (11) roomer/boarder (2) biological son/daughter (7) grandchild (12) housemate/roommate (3) adopted son/daughter (8) parent-in-law (13) unmarried partner or (4) step son/daughter (9) son-in-law/daughter-in-law (14) other nonrelative (5) brother/sister (10) other relative	Is [Name/Are you] male or female?
Second time ask	What is the name of the next person living or staying here?	And, how [is Name/are you] related to householder's name? (Is <Name>/Are you] Householder's name's...)	How about [Name]?
P1 First Middle Last	Person 1	☐ Householder (1) husband/wife (6) father/mother (11) roomer/boarder (2) biological son/daughter (7) grandchild (12) housemate/roommate (3) adopted son/daughter (8) parent-in-law (13) unmarried partner or (4) step son/daughter (9) son-in-law/daughter-in-law (14) other nonrelative (5) brother/sister (10) other relative	Person 1
P2 First Middle Last	Person 2	☐ Householder (1) husband/wife (6) father/mother (11) roomer/boarder (2) biological son/daughter (7) grandchild (12) housemate/roommate (3) adopted son/daughter (8) parent-in-law (13) unmarried partner or (4) step son/daughter (9) son-in-law/daughter-in-law (14) other nonrelative (5) brother/sister (10) other relative	Person 2
P3 First Middle Last	Person 3	☐ Householder (1) husband/wife (6) father/mother (11) roomer/boarder (2) biological son/daughter (7) grandchild (12) housemate/roommate (3) adopted son/daughter (8) parent-in-law (13) unmarried partner or (4) step son/daughter (9) son-in-law/daughter-in-law (14) other nonrelative (5) brother/sister (10) other relative	Person 3
P4 First Middle Last	Person 4	☐ Householder (1) husband/wife (6) father/mother (11) roomer/boarder (2) biological son/daughter (7) grandchild (12) housemate/roommate (3) adopted son/daughter (8) parent-in-law (13) unmarried partner or (4) step son/daughter (9) son-in-law/daughter-in-law (14) other nonrelative (5) brother/sister (10) other relative	Person 4
P5 First Middle L st	Person 5	☐ Householder (1) husband/wife (6) father/mother (11) roomer/boarder (2) biological son/daughter (7) grandchild (12) housemate/roommate (3) adopted son/daughter (8) parent-in-law (13) unmarried partner or (4) step son/daughter (9) son-in-law/daughter-in-law (14) other nonrelative (5) br ther/sister (10) ther rel tive	Person 5

CAPI Pg 1

	DATE OF BIRTH Read the entire question for all persons	CONFIRM AGE IF MONTH=D/R goto DOBA		DOBA Ask ONLY if Month=D/R	AGEASK Ask if DOBA in (3,D,R)	AGERANGE Ask if AGEASK =D/R
ROSTER	What is [Name's/your] date of birth?	That would make [name/you] [fill <calculated age>/<calculated age> this month/less than one year old]. Is that correct?		Would you say [Name is /you are] 1. (2005-DOBY) yrs of age 2. (2006-DOBY) yrs of age 3. Neither is correct	What is your best estimate of [name's/ your] age?	Is [Name/are you] 1. It 3 yrs old 2. 3 or 4 yrs old 3. 5 to 14 yrs old or 4. 15 yrs old or older
First time ask I am going to be asking some questions about everyone who is living or staying at this address. First let's create a list of the people starting with you. What is your name?						
Second time ask What is the name of the next person living or staying here?		Put 2005 for INTYR IF birthday is after today, else put 2006		Put 2005 for INTYR IF birthday is after today, else put 2006		

P1
First
Middle
Last   Person 1
	Person 1
	Month
	Day
	Year
		INTYR: _____ 200__
		DOBY: _____ - _____
		    AGE=
				INTYR: _____ 200__
				DOBY: _____ - _____
				    AGE=
					Age=	1. It 3 yrs old
						2. 3 or 4 yrs old
						3. 5 to 14 yrs old or
						4. 15 yrs old or older

P2
First
Middle
Last   Person 2
	Person 2
	Month
	Day
	Year
		INTYR: _____ 200__
		DOBY: _____ - _____
		    AGE=
				INTYR: _____ 200__
				DOBY: _____ - _____
				    AGE=
					Age=	1. It 3 yrs old
						2. 3 or 4 yrs old
						3. 5 to 14 yrs old or
						4. 15 yrs old or older

P3
First
Middle
Last   Person 3
	Person 3
	Month
	Day
	Year
		INTYR: _____ 200__
		DOBY: _____ - _____
		    AGE=
				INTYR: _____ 200__
				DOBY: _____ - _____
				    AGE=
					Age=	1. It 3 yrs old
						2. 3 or 4 yrs old
						3. 5 to 14 yrs old or
						4. 15 yrs old or older

P4
First
Middle
Last   Person 4
	Person 4
	Month
	Day
	Year
		INTYR: _____ 200__
		DOBY: _____ - _____
		    AGE=
				INTYR: _____ 200__
				DOBY: _____ - _____
				    AGE=
					Age=	1. It 3 yrs old
						2. 3 or 4 yrs old
						3. 5 to 14 yrs old or
						4. 15 yrs old or older

P5
First
Middle
Last   Person 5
	Person 5
	Month
	Day
	Year
		INTYR: _____ 200__
		DOBY: _____
		    AGE=
				INTYR: _____ 200__
				DOBY: _____ - _____
				    AGE=
					Age=	1. It 3 yrs old
						2. 3 or 4 yrs old
						3. 5 to 14 yrs old or
						4. 15 yrs old or older

CAPI Pg 2

| | HISA | HISPANIC SUBGROUP | OTHER HISPANIC |
| | | IF 1ST person who indicated HISA=yes
Read if necessary | IF 1ST person who indicated HISB=other Hispanic
Read if necessary |

ROSTER		[Is Name/Are you] of Hispanic, Latino, or Spanish origin?	(Earlier you said that [you are/Name is] of Hispanic, Latino or Spanish origin.) [Is he/she/Name/Are you] ...Read all categories. (1) Mexican, Mexican American, Chicano, (2) Puerto Rican, (3) Cuban or (4) of another Hispanic Latino/Spanish origin, e.g. Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard & so on?	(Earlier you said [you are/name is] of another Hispanic, Latino, or Spanish origin.) What is the other origin? For example: Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.
First time ask	I am going to be asking some questions about everyone who is living or staying at this address. First let's create a list of the people starting with you. What is your name?			
Second time ask	What is the name of the next person living or staying here?	How about [Name]?	How about [Name]?	How about [Name]?
P1 First Middle Last	Person 1	(1) Yes (2) No D/R	Circle all that apply: (1) Mexican, Mexican American, Chicano, or (2) Puerto Rican, or (3) Cuban or (4) of another Hispanic Latino/Spanish origin	Write-in Other group=
P2 First Middle Last	Person 2	(1) Yes (2) No D/R	Circle all that apply: (1) Mexican, Mexican American, Chicano, or (2) Puerto Rican, or (3) Cuban or (4) of another Hispanic Latino/Spanish origin	Write-in Other group=
P3 First Middle Last	Person 3	(1) Yes (2) No D/R	Circle all that apply: (1) Mexican, Mexican American, Chicano, or (2) Puerto Rican, or (3) Cuban or (4) of another Hispanic Latino/Spanish origin	Write-in Other group=
P4 First Middle Last	Person 4	(1) Yes (2) No D/R	Circle all that apply: (1) Mexican, Mexican American, Chicano, or (2) Puerto Rican, or (3) Cuban or (4) of another Hispanic Latino/Spanish origin	Write-in Other group=
P5 First Middle Last	Person 5	(1) Yes (2) No D/R	Circle all that apply: (1) Mexican, Mexican American, Chicano, or (2) Puerto Rican, or (3) Cuban or (4) of another Hispanic Latino/Spanish origin	Write-in Other group=

CAPI Pg 3

ROSTER

First time ask	I am going to be asking some questions about everyone who is living or staying at this address. First let's create a list of the people starting with you. What is your name?
Second time ask	What is the name of the next person living or staying here?
P1 First Middle Last	Person 1
P2 First Middle Last	Person 2
P3 First Middle Last	Person 3
P4 First Middle Last	Person 4
P5 First Middle Last	Person 5

RAC

Using Card C, please choose one or more races that [Name considers himself/ herself/ you consider yourself] to be. Read if necessary. (Is Name / Are you...)

(11) White
(12) Black/African American/Negro
(13) American Indian/Alaska Native
(14) Asian Indian
(15) Chinese
(16) Filipino
(17) Japanese
(18) Korean
(19) Vietnamese
(20) Other Asian (e.g.: Hmong, Laotian, Thai, Pakistani, Cambodian, & so on.)
(21) Native Hawaiian
(22) Guamanian or Chamorro
(23) Samoan
(24) Other Pacific Islander (E.g.: Fijian, Tongan, and so on)
(25) some other race

How about [Name]?

Circle all that apply (per person P1–P5):

(11) White	(16) Filipino	(21) Native Hawaiian
(12) Black	(17) Japanese	(22) Guamanian/Chamorro
(13) AIAN	(18) Korean	(23) Samoan
(14) Asian Indian	(19) Vietnamese	(24) Other PI
(15) Chinese	(20) Other Asian	(25) some other race

INDIAN TRIBE	OTHER ASIAN	OTHER PACIFIC ISLANDER	SOME OTHER RACE
Ask if RAC=American Indian/Alaskan Native (13)	Ask if RAC= Other Asian (20)	Ask if RAC=OTHER PACIFIC ISLANDER (24)	Ask if RAC=SOME OTHER RACE (25)
Read if necessary	Read if necessary	Read if necessary	Read if necessary
(Earlier you said that [you are/Name is] Native Indian or Alaskan Native.) What is the name of [Name's/your] enrolled or principal tribe?	(Earlier you said that "you are/Name is] Asian.) To what other Asian group or groups [does Name/do you] belong? E.g: Hmong, Laotian, Thai, Paskistani, Cambodian, and so on.	(Earlier you said that [you are/Name]) is other Pacific Islander). To what Pacific Islander group or groups [does Name/do you] belong? Is Name/Are you (1) Guamanian/ Chamorro (2) Samoan or (3) other Pacific Islander e.g. Fijian, Tongan, and so on.	(Earlier you said that [name is /you are] of some other race.) What is the name of [your/Name's] race?
How about [Name]?	How about [Name]?	How about [Name]?	How about [Name]?
Tribe name	Write-in Other Asian group=	Write-in Other P.I.=	Write-in Other RACE=
Tribe name	Write-in Other Asian group=	Write-in Other P.I.=	Write-in Other RACE=
Tribe name	Write-in Other Asian group=	Write-in Other P.I.=	Write-in Other RACE=
Tribe name	Write-in Other Asian group=	Write-in Other P.I.=	Write-in Other RACE=
Tribe name	Write-in Other Asian group=	Write-in Other P.I.=	Write-in Other RACE=

CAPI Pg 4

OBSERVATION:

1) If there are Hispanic household members, how well did the topic-based format work for the HISA series?

2) If there are Asian household members, how well did the topic-based format work for the Asian subgroup series work?

3) Did respondent wait until all the response categories were read? If so, do they change their answers after you read all the categories?

DEBRIEFING / GENERAL PROBING

1) Any apparent misunderstanding-PROBE immediately
   • meaning of the questions
   • what they were thinking when they hear the question

End of Demographics Section:

2) Ask if they find anything confusing about the first group of basic demographics information.

3) Did respondent like the way we ask every household member the same thing before we move onto a new question? Would they have preferred us asking the demographics questions one person at a time?

CAPI Pg5

ACS Mode
Consistency
CATI Instrument
for 100% Items
Cognitive Testing

June 20, 2006

CSMR, SRD

SELECT HHOLDER (Mark Householder's box below)
Of the people you named, who owns or rents this place?
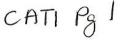Read if necessary: What name(s) are on the deed or lease? Is there anyone 15 years or older?)
If more than 1 person is named, select person with the lowest Person number as householder.

	ROSTER	RELT (Ask or verify)			SONDAU (Ask or verify)	SEX (Ask or verify)
First time ask	I am going to be asking some questions about everyone who is living or staying at this address. First let's create a list of the people starting with you. What is your name?	How [is Name/are you] related to [householder's name]? [Is Name/Are you] hhdername's ...[READ ALL CATEGORIES]. (1) husband/wife (2) son/daughter (3) brother/sister (4) father/mother (5) grandchild	(6) parent-in-law (7) son-in-law/daughter-in-law (8) other relative (9) roomer/boarder (10) housemate/roommate	(11) unmarried partner or (12) other nonrelative?	ASK IF relationship=son or daughter [Is Name/Are you] [hholdername's] (1) Biological Son or Daughter, (2) Adopted Son or Daughter OR (3) Stepson or Stepdaughter?	Is [Name/Are you] male or female?
Second time ask	What is the name of the next person living or staying here?	And, how [is Name/are you] related to householder's name? (Is <Name>/Are you] Householder's name's...)			How about [Name]?	How about [Name]?
P1 First Middle Last	Person 1	☐ Householder (1) husband/wife (2) son/daughter (3) brother/sister (4) father/mother (5) grandchild	(6) parent-in-law (7) son-in-law/daughter-in-law (8) other relative (9) roomer/boarder (10) housemate/roommate	(11) unmarried partner or (12) other nonrelative?	(1) biological son or daughter (2) adopted son or daughter (3) stepson or stepdaughter? DO NOT READ (4) foster son or daughter.	Person 1
P2 First Middle Last	Person 2	☐ Householder (1) husband/wife (2) son/daughter (3) brother/sister (4) father/mother (5) grandchild	(6) parent-in-law (7) son-in-law/daughter-in-law (8) other relative (9) roomer/boarder (10) housemate/roommate	(11) unmarried partner or (12) other nonrelative?	(1) biological son or daughter (2) adopted son or daughter (3) stepson or stepdaughter? DO NOT READ (4) foster son or daughter.	Person 2
P3 First Middle Last	Person 3	☐ Householder (1) husband/wife (2) son/daughter (3) brother/sister (4) father/mother (5) grandchild	(6) parent-in-law (7) son-in-law/daughter-in-law (8) other relative (9) roomer/boarder (10) housemate/roommate	(11) unmarried partner or (12) other nonrelative?	(1) biological son or daughter (2) adopted son or daughter (3) stepson or stepdaughter? DO NOT READ (4) foster son or daughter.	Person 3
P4 First Middle Last	Person 4	☐ Householder (1) husband/wife (2) son/daughter (3) brother/sister (4) father/mother (5) grandchild	(6) parent-in-law (7) son-in-law/daughter-in-law (8) other relative (9) roomer/boarder (10) housemate/roommate	(11) unmarried partner or (12) other nonrelative?	(1) biological son or daughter (2) adopted son or daughter (3) stepson or stepdaughter? DO NOT READ (4) foster son or daughter.	Person 4
P5 First Middle Last	Person 5	☐ Householder (1) husband/wife (2) son/daughter (3) brother/sister (4) father/mother (5) grandchild	(6) parent-in-law (7) son-in-law/daughter-in-law (8) other relative (9) roomer/boarder (10) housemate/roommate	(11) unmarried partner or (12) other nonrelative?	(1) biological son or daughter (2) adopted son or daughter (3) stepson or stepdaughter? DO NOT READ (4) foster son or daughter.	Person 5

CATI Pg 1

DATE OF BIRTH	CONFIRM AGE	DOBA	AGEASK	AGERANGE
Read the entire question for all persons	IF MONTH=D/R goto DOBA	ASK ONLY IF Month=D/R	ASK IF DOBA in (3,D,R)	ASK IF AGEASK =D/R

ROSTER		What is [Name's/your] date of birth?	That would make [name/you] [fill \<calculated age>/\<calculated age> this month/less than one year old]. Is that correct?	Would you say [Name is /you are] 1. (2005-DOBY) yrs of age 2. (2006-DOBY) yrs of age 3. Neither is correct	What is your best estimate of [name's/ your] age?	Is [Name/are you] 1. It 3 yrs old 2. 3 or 4 yrs old 3. 5 to 14 yrs old or 4. 15 yrs old or older
First time ask	I am going to be asking some questions about everyone who is living or staying at this address. First let's create a list of the people starting with you. What is your name?					
Second time ask	What is the name of the next person living or staying here?		Put 2005 for INTYR IF birthday is after today, else put 2006	Put 2005 for INTYR if birthday is after today, else put 2006		
P1 First Middle Last	Person 1	Person 1 Month Day Year	INTYR: _____ 200__ DOBY: _____-_____ AGE=	INTYR: _____ 200__ DOBY: _____-_____ AGE=	Age=	1. It 3 yrs old 2. 3 or 4 yrs old 3. 5 to 14 yrs old or 4. 15 yrs old or older
P2 First Middle Last	Person 2	Person 2 Month Day Year	INTYR: _____ 200__ DOBY: _____-_____ AGE=	INTYR: _____ 200__ DOBY: _____-_____ AGE=	Age=	1. It 3 yrs old 2. 3 or 4 yrs old 3. 5 to 14 yrs old or 4. 15 yrs old or older
P3 First Middle Last	Person 3	Person 3 Month Day Year	INTYR: _____ 200__ DOBY: _____-_____ AGE=	INTYR: _____ 200__ DOBY: _____-_____ AGE=	Age=	1. It 3 yrs old 2. 3 or 4 yrs old 3. 5 to 14 yrs old or 4. 15 yrs old or older
P4 First Middle Last	Person 4	Person 4 Month Day Year	INTYR: _____ 200__ DOBY: _____-_____ AGE=	INTYR: _____ 200__ DOBY: _____-_____ AGE=	Age=	1. It 3 yrs old 2. 3 or 4 yrs old 3. 5 to 14 yrs old or 4. 15 yrs old or older
P5 First Middle Last	Person 5	Person 5 Month Day Year	INTYR: _____ 200__ DOBY: _____ AGE=	INTYR: _____ 200__ DOBY: _____ AGE=	Age=	1. It 3 yrs old 2. 3 or 4 yrs old 3. 5 to 14 yrs old or 4. 15 yrs old or older

CATI Pg 2

HISA	HISPANIC SUBGROUP	OTHER HISPANIC
	IF 1ST person who indicated HISA=yes Read if necessary	IF 1ST person who indicated HISB=other Hispanic Read if necessary

ROSTER		[Is Name/Are you] of Hispanic, Latino, or Spanish origin?	(Earlier you said that [you are/Name is] of Hispanic, Latino or Spanish origin.) [Is he/she/Name/Are you] ...Read all categories. (1) Mexican, Mexican American, Chicano, (2) Puerto Rican, (3) Cuban or (4) of another Hispanic Latino/Spanish origin, e.g. Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard & so on?	(Earlier you said [you are/name is] of another Hispanic, Latino, or Spanish origin.) What is the other origin? For example: Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.
First time ask	I am going to be asking some questions about everyone who is living or staying at this address. First let's create a list of the people starting with you. What is your name?			
Second time ask	What is the name of the next person living or staying here?	How about [Name]?	How about [Name]?	How about [Name]?
P1 First Middle Last	Person 1	(1) Yes (2) No D/R	Circle all that apply: (1) Mexican, Mexican American, Chicano, or (2) Puerto Rican, or (3) Cuban or (4) of another Hispanic Latino/Spanish origin	Write-in Other group=
P2 First Middle Last	Person 2	(1) Yes (2) No D/R	Circle all that apply: (1) Mexican, Mexican American, Chicano, or (2) Puerto Rican, or (3) Cuban or (4) of another Hispanic Latino/Spanish origin	Write-in Other group=
P3 First Middle Last	Person 3	(1) Yes (2) No D/R	Circle all that apply: (1) Mexican, Mexican American, Chicano, or (2) Puerto Rican, or (3) Cuban or (4) of another Hispanic Latino/Spanish origin	Write-in Other group=
P4 First Middle Last	Person 4	(1) Yes (2) No D/R	Circle all that apply: (1) Mexican, Mexican American, Chicano, or (2) Puerto Rican, or (3) Cuban or (4) of another Hispanic Latino/Spanish origin	Write-in Other group=
P5 First Middle Last	Person 5	(1) Yes (2) No D/R	Circle all that apply: (1) Mexican, Mexican American, Chicano, or (2) Puerto Rican, or (3) Cuban or (4) of another Hispanic Latino/Spanish origin	Write-in Other group=

CATI Pg 3

ROSTER		RACT I'm going to read a list of race categories. Please choose one or more races that [Name considers himself/herself/you consider yourself] to be? [Is name /Are you] Read all categories (11) White, (12) Black/African American/Negro, (13) American Indian/Alaska Native, (14) Asian, (15) Native Hawaiian, (16) Other Pacific Islander or (17) some other race?	INDIAN TRIBE ASK IF RACT=16, American Indian or Alaskan Native Ask if necessary (Earlier you said that [you are/Name is] Native Indian or Alaskan Native.) What is the name of [Name's/your] enrolled or principal tribe?	ASIAN SUBGROUP IF RACT=Asian (14) Read if necessary (Earlier you said that [you are] Asian.) To what Asian group or groups [does Name/do you] belong? [Is name /Are you] READ ALL (1) Asian Indian (2) Chinese (3) Filipino (4) Japanese (5) Korean (6) Vietnamese or (7) Other Asian, e.g. Hmong Laotlan, Thai, Pakistani, Cambodian, & so on.	OTHER ASIAN IF ASIAN SUBGROUP =Other Asian (7) Read if necessary (Earlier you said that "you are/Name is] Asian.) To what other Asian group or groups [does Name/do you] belong? E.g: Hmong, Laotlan, Thai, Paskistani, Cambodian, and so on.	PACIFIC ISLANDER ASK IF RACT=Pacific Islander (16) Read if necessary (Earlier you said that [you are/Name]) is other Pacific Islander). To what Pacific Islander group or groups [does Name/do you] belong? [Is Name/Are you]... (1) Guamanian/ Chamorro, (2) Samoan or (3) other Pacific Islander e.g. Fijian, Tongan, and so on.	OTHER P.I. (ASK IF P.I.=3) AND/OR SOME OTHER RACE (ASK IF RACT=17) <OTHER P.I.> To what other Pacific Islander group {do you/does Name} belong? <SOME OTHER RACE> Read if necessary (Earlier you said that [name is /you are) of some other race.) Wha is the name of [your/Name's] race?
First time ask	I am going to be asking some questions about everyone who is living or staying at this address. First let's create a list of the people starting with you. What is your name?						
Second time ask	What is the name of the next person living or staying here?	How about [Name]?	How about [Name]?	How about [Name]?	How about [Name]?	How about [Name]?	How about [Name]?
P1 First Middle Last	Person 1	Circle all that apply: (11) White (12) Black/African American/Negro (13) American Indian/Alaska Native (14) Asian (16) Pacific Islander (15) Native Hawaiian (17) some other race	Tribe name	Circle all that apply. (1) Asian Indian (6) Vietnamese (2) Chinese (7) Other Asian (3) Filipino (4) Japanese (5) Korean	Write-in Other Asian group=	Circle all that apply. (1) Guamanian/Chamorro (2) Samoan or (3) other Pacific Islander	Write-in Other P.I.= Other RACE=
P2 First Middle Last	Person 2	Circle all that apply: (11) White (12) Black/African American/Negro (13) American Indian/Alaska Native (14) Asian (16) Pacific Islander (15) Native Hawaiian (17) some other race	Tribe name	Circle all that apply. (1) Asian Indian (6) Vietnamese (2) Chinese (7) Other Asian (3) Filipino (4) Japanese (5) Korean	Write-in Other Asian group=	Circle all that apply. (1) Guamanian/Chamorro (2) Samoan or (3) other Pacific Islander	Write-in Other P.I.= Other RACE=
P3 First Middle Last	Person 3	Circle all that apply: (11) White (12) Black/African American/Negro (13) American Indian/Alaska Native (14) Asian (16) Pacific Islander (15) Native Hawaiian (17) some other race	Tribe name	Circle all that apply. (1) Asian Indian (6) Vietnamese (2) Chinese (7) Other Asian (3) Filipino (4) Japanese (5) Korean	Write-in Other Asian group=	Circle all that apply. (1) Guamanian/Chamorro (2) Samoan or (3) other Pacific Islander	Write-in Other P.I.= Other RACE=
P4 First Middle Last	Person 4	Circle all that apply: (11) White (12) Black/African American/Negro (13) American Indian/Alaska Native (14) Asian (16) Pacific Islander (15) Native Hawaiian (17) some other race	Tribe name	Circle all that apply. (1) Asian Indian (6) Vietnamese (2) Chinese (7) Other Asian (3) Filipino (4) Japanese (5) Korean	Write-in Other Asian group=	Circle all that apply. (1) Guamanian/Chamorro (2) Samoan or (3) other Pacific Islander	Write-in Other P.I.= Other RACE=
P5 First Middle Last	Person 5	Circle all that apply: (11) White (12) Black/African American/Negro (13) American Indian/Alaska Native (14) Asian (16) Pacific Islander (15) Native Hawaiian (17) some other race	Tribe name	Circle all that apply. (1) Asian Indian (6) Vietnamese (2) Chinese (7) Other Asian (3) Filipino (4) Japanese (5) Korean	Write-in Other Asian group=	Circle all that apply. (1) Guamanian/Chamorro (2) Samoan or (3) other Pacific Islander	Write-in Other P.I.= Other RACE=

CATI Pg 4

OBSERVATION:

1) If there are children in the household and a CATI instrument is used, how well did branching question work?

2) Did the topic-based format work for the SONDAU question? Would it have worked better if the branching question (SONDAU) was asked right after RELT rather than waiting until all persons' relationship with householder were collected?

3) If there are Hispanic household members, how well did the topic-based format work for the HISA series?

4) If there are Asian household members, how well did the topic-based format work for the Asian subgroup series work?

5) Did respondent wait until all the response categories were read? If so, do they change their answers after you read all the categories?

DEBRIEFING / GENERAL PROBING

1) Any apparent misunderstanding-PROBE immediately
   • meaning of the questions
   • what they were thinking when they hear the question

END OF Demographics Section:

2) Ask if they find anything confusing about the first group of basic demographics information.

3) Did respondent like the way we ask every household member the same thing before we move onto a new question? Would they have preferred us asking the demographics questions one person at a time?

CATI P5