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**A Usability Evaluation of the Nonresponse Followup
Enumerator (NRFU) Questionnaire Form**

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A Usability Evaluation of the Nonresponse Followup Enumerator (NRFU) Questionnaire Form

Usability Laboratory Series Memorandum #125

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Abstract

In preparation for the 2010 Census, the Statistical Research Division (SRD) evaluated the usability of the Nonresponse Followup Enumerator Questionnaire (NRFU) form in July 2008. The testing evaluated the success and satisfaction of 19 participants with the paper form developed by the Decennial Management Division (DMD). The paper form will be used by census interviewers in the 2010 Census. Census interviewers will visit non-respondents and record their answers in a personal interview. Participants in this usability test acting as census interviewers attempted to administer the NRFU questionnaire to SRD Usability Lab staff members who acted as census respondents. Usability testing revealed several usability problems, including difficulties maneuvering the form and binder that is used during administration, difficulties using the continuation form, and difficulties accurately recording respondents' answers. This report provides a complete summary of the findings of this usability evaluation. Recommendations are provided to improve the usability of the NRFU form.

Executive Summary

In July 2008, the U.S. Census Bureau Statistical Research Division (SRD) conducted usability testing to evaluate the Nonresponse Followup Enumerator Questionnaire (NRFU) form. The testing evaluated the success and satisfaction of externally recruited participants with the form developed by the Decennial Management Division (DMD). The paper form will be used by in the 2010 Census. Census interviewers will visit non-respondents and record their answers in a personal interview. Participants in this usability test acting as census interviewers attempted to administer the NRFU questionnaire to SRD Usability Lab staff members who acted as census respondents. Testing took place at the U.S. Census Bureau Usability Lab in Suitland, MD.

Purpose. The primary purpose of the usability test was to identify elements of the layout and flow of the NRFU form that were problematic and lead to incorrect or unanswered questions.

Method. Nineteen non-federal employees were recruited via the Usability Lab database for participation, and respondents were members of the Usability Lab staff. No participant had prior experience with the NRFU. All participants underwent training to learn proper administration.

The participant and respondent stood facing each other in a small room with one-way glass and a wall camera. The participant held a notebook binder, the questionnaires and supporting materials, as the enumerator will in the 2010 interviews. The participant asked the questions and recorded the answers from the respondent on the form. Tape on the floor marked the area where the participant was to stand. The sessions were audio and video recorded.

Upon completion of each scenario, the participant answered questions about his/her experience with the NRFU form for that particular scenario. After completing all scenarios, the participant completed a Satisfaction Questionnaire and then answered debriefing questions. Overall, each usability testing session (including 60 minutes of training) ran about 180 minutes.

Results. The full report provides complete descriptions of each finding and recommendations for usability issues. The following section highlights some of the important issues and recommendations to resolve them.

1. Individuals struggled with holding the forms and binder. Some participants dropped all of the items during the interviews, while many just felt and appeared awkward in managing the items. The current tri-fold form encourages flipping and awkwardness as it is much larger than the binder enumerators use. In addition, due to the size of the form, some individuals folded the pages back to align the names on the left side with questions on the right side of the form. This folding is of concern as it can interfere with data capture if creases are in the same areas as data. The struggling with the form and binder also leads to longer questionnaire completion times.

Recommendation: We designed a new form to address these issues. This new design keeps the form from hanging off the edge of the binder while the user records answers to questions that need the household members' names referenced. In addition, this new design eliminates folding that occurred in testing due to the need to reference names on the left side of the page. Neither the order of administering the questions nor the question numbers have changed with this new design. Enumerators should use a clipboard and/or larger binder that fits the entire questionnaire on its surface.

Status: One usability test was done with the new design. In this test, the participant did not fold the form in places where it was not supposed to be folded (in natural creases). The new form appeared more comfortable and manageable compared to the other 19 observations with the tested form. An impromptu meeting was called on August 18, 2008, in which the design of the form and these issues were addressed. Video tapes were shown that displayed the folding of the forms during usability testing. In addition, the group examined some of the actual forms that had been used in the usability testing. More testing is needed to verify whether the folding will cause problems with data capture.

2. The correct way to use the continuation form consists of the user asking for and writing all household member names, then asking the questions on the first page for all individuals on that page, then asking all the questions for all individuals on the second page. Seldom did participants successfully maneuver through the forms in this way.

Recommendation: In training, use scenarios where households are larger than five people, in which the continuation form will be used.

3. *Question #6: Please look at List D and choose one or more races. For this census, Hispanic origins are not races. What is (NAME)'s race?* For this question, we examined participants' recording when the person on the form was of Hispanic, Latino or Spanish origin. Certain ethnicities posed problems. Oftentimes, participants did not record an answer to the Race question because they felt the question had been answered already in the Ethnicity question. Sometimes participants wrote the correct answer but in the incorrect boxes. We also examined participants' recording when the person on the form was American Indian. When there was only one race, participants often accurately recorded responses. When there were two races, accuracy fell, most often because participants failed to ask about enrolled or principal tribe, even though they had accurately recorded American Indian for race.

Recommendation: On the form, add a shaded region around Asian races, Pacific Islander races, Other Asian (and boxes) and Other Pacific Islander (and boxes). The shaded region will clarify which boxes are to be used for the response. Add a similar shaded region around American Indian and Alaskan Native and the corresponding boxes to specify tribe. In training, use practice cases where the respondent reports more than one race to teach enumerators that more than one race is acceptable. In training, use practice cases with Hispanic respondents to teach enumerators how to probe the race question with Hispanics. In training, include practice cases with American Indian respondents to teach enumerators to probe for enrolled or principal tribe.

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1.0 Introduction

In preparation for the 2010 Census, the Statistical Research Division (SRD) evaluated the usability of the Nonresponse Followup Enumerator Questionnaire (NRFU) form. The testing evaluated the success and satisfaction of the test participants with the paper form developed by the Decennial Management Division (DMD). The paper form will be used by census interviewers in the 2010 Census. Census interviewers will visit non-respondents and record their answers in a personal interview. Participants in this usability test acting as census interviewers attempted to administer the NRFU questionnaire to SRD Usability Lab staff members who acted as census respondents. Findings and recommendations will inform the designer on areas of satisfaction as well as areas where the participants struggled while using the NRFU paper form.

1.1 Background

The user-interface design is an important element to a questionnaire. For a questionnaire to be successful, the user interface design must be able to meet the needs of its user in an efficient, effective, and satisfying way. The NRFU form collects very basic housing unit and demographic information. In addition to very basic questions, sometimes interviewers ask a series of questions in topic-based design, where information on a certain topic (e.g. relationship) is gathered for the whole household before moving to the next topic (i.e. gender). This is in contrast to a person-based design, where information is gathered in entirety about the first person, and then the same series of questions is administered for the next person and so on for the entire household. The NRFU is generally a topic-based design. Sometimes respondents refer to information sheets when the interviewer needs to present more information than can be stored in working memory. The present study examines the user-interface design of the NRFU form. Users of the NRFU form must be able to successfully record the answers of respondents in an efficient and effective manner.

1.2 Purpose

The primary purpose of the usability testing is to identify elements of the layout and flow of the NRFU paper form that are problematic and lead to incorrect or unanswered questions as well as confusion.

1.3 Usability Goals

The usability goals for this study are defined in three categories: user accuracy, efficiency, and satisfaction. In this plan, these goals reflect the extent to which the user-interface is expected to support user performance and satisfaction.

Goal 1: To achieve a high level of accuracy in recording the answers on the NRFU form. The user should be able to successfully record 100 percent of the answers given by the respondent without encountering unsolvable problems if the response boxes are used correctly, particularly for the age, date of birth, ethnicity and race questions. The user should be able to ask 100 percent of the questions correctly and navigate properly through the form.

Goal 2: To achieve a high level of efficiency in using the NRFU form. The user should be able to record answers in an efficient manner, taking no longer than approximately 10 minutes for the entire form.

Goal 3: To experience a moderate to high level of satisfaction from experience with the NRFU form. The overall mean of the Satisfaction Questionnaire ratings should be well above five on a

seven-point scale, where one is the lowest rating and seven is the highest rating. The same should be true for the individual Satisfaction Questionnaire items.

1.4 Scope

All user interactions with the NRFU form are within the scope of the usability evaluation. The user interface design was not tested for compliance with the Section 508 regulations at this time. However, since this is a government form, before the form becomes available for use in the 2010 Census, it must comply with Section 508 regulations unless a waiver has been granted.

1.5 Assumptions

- Participants were external, non-federal employees who were recruited via the Usability Lab database.
- Participants were diverse in age and ethnicity and had sufficient reading and writing skills.
- Participants were trained on NRFU form administration via a manual and verbatim script that simulated actual field training.
- Participants were not trained by individuals in the Usability Lab who were involved in the study.
- Participants did not have prior experience with the NRFU form before involvement in this study.

2.0 Method

2.1 Participants and Observers

Nineteen non-federal employees were recruited via the Usability Lab database for participation in this study, and respondents were members of the Usability Lab staff. No participant had prior experience with the NRFU, and all participants underwent training to learn proper administration of the NRFU paper form. Upon completion, participants received $80 for expenses. See Table 1 for participant demographics.

Table 1. Participant Demographics.

Participant mean (and range) characteristics.	
Gender	10 F / 9 M
Age (in years)	40.94 (21 – 65)
Education (in years)	15.78 (12 – 21)

Observers from the DMD team and Content IPT team were invited to watch the usability tests on television screens in a separate room from the participants and test administrator. At the end of each test session, the test administrator and observers had the opportunity to discuss the findings from that session and compare them to findings from other sessions.

2.2 Facilities and Equipment

Testing took place at the Usability Lab at the U.S. Census Bureau in Suitland, MD, Room 5K509.

2.2.1 Training

Training materials were prepared by SRD staff using the Census 2000 Enumerator Questionnaire, 2006 Census Test Update Enumerate, the 2008 Dress Rehearsal NRFU Verbatim Training Guides and Training Manuals supplied by Field Division. Because the 2008 NRFU materials were prepared for a

handheld computer, the 2000 and 2006 materials were used to make the training materials apply to a paper form. The verbatim training session was allotted 45 minutes to 1 hour and focused on training the participant on the questions on the form, in addition to basic form navigation. The training contained two practice exercises where the participant asked the trainer questions and recorded answers on a paper mock-up of a NRFU form. See Appendix C. Training was conducted by an SRD staff member that was affiliated with the usability testing.

2.2.2 Usability Testing

The participant and respondent stood facing each other in a small room with one-way glass and a wall camera. The participant held a notebook binder, the questionnaires and supporting materials, as the enumerator will in the 2010 interviews. The participant asked the questions and recorded the answers from the respondent on the form. During the usability test, the test administrator was in the control room on the other side of the one-way glass and communicated with the participant via microphones and speakers.

2.2.3 Audio and Video Recording

Tape on the floor marked the area where the participant was to stand. Two video cameras were used. The overhead camera recorded the participant's use of the materials as well as movement, and the wall-mounted camera recorded the participant's face. Video was fed through a PC Video Hyperconverter Gold Scan Converter, mixed in a picture-in-picture format with the camera video, and recorded via a Sony DSR-20 digital Videocassette Recorder on 124-minute, Sony PDV metal-evaporated digital videocassette tape. Audio for the videotape was picked-up from one desk microphone located close to the participant and one ceiling microphone. The audio sources were mixed in a Shure audio system to eliminate feedback, and then they were fed to the videocassette recorder.

2.3 Materials

2.3.1 General Introduction

The test administrator read some background material and explained several key points about the session. See Appendix A.

2.3.2 Consent Form

Prior to beginning the usability test, the participant completed a consent form. See Appendix B.

2.3.3 Training Manual

The trainer used the verbatim training manual to train participants. This manual is an abbreviated version of the actual training manual that will be used in 2010. See Appendix C.

2.3.4 NRFU Questionnaire and Information Sheet

Members of the Content IPT created the NRFU questionnaire and information sheet. The questionnaire was designed to gather basic housing and demographic information for individuals who do not mail in the Census form. The information sheet supplies supplementary information. See Appendix D for the current version of the NRFU form that was tested, and Appendix E for the Information sheet.

2.3.5 Scenario Scripts

Members of the Usability Lab created the scenario scripts. The respondents used these scripts to answer the questions administered by the participant. See Appendix F.

2.3.6 Performance Questions

After completing each scenario, the participant answered retrospective questions about his/her experience using the NRFU form. See Appendix G.

2.3.7 Satisfaction Questionnaire

Members of the Usability Lab created the Satisfaction Questionnaire, loosely based on the Questionnaire for User Interaction Satisfaction (Chin, Diehl, and Norman, 1988). In usability tests at the Census Bureau, typically 10 to 12 items are used that are tailored to the particular user interface being evaluated. In this study, the Satisfaction Questionnaire included 15 items worded for the NRFU form. See Appendix H.

2.3.8 Debriefing Questions

After completing all scenarios, the participant answered debriefing questions about his/her experience using the NRFU form. See Appendix I.

2.3.9 Payment Voucher

Upon completion, the participant signed and dated a payment voucher. See Appendix J.

2.4 Procedure

Each participant reported to the Usability Lab at the U.S. Census Bureau separately. The test administrator greeted the participant and gave an introduction and information about the research study. The participant then read and signed the consent form, followed by approximately one hour of training by an SRD employee not affiliated with the usability testing. Video recording began at the beginning of training. Training consisted of a manual and verbatim script reading, simulating a shortened version of the actual field training that will take place in 2010[1]. Following training, the test administrator returned to the testing room and the respondent joined the participant and test administrator. After rearranging the desk and explaining the tasks, the test administrator left the testing room and moved to the control room. The participant administered the NRFU questions to the internal Census respondent and recorded the verbal answers on the questionnaire.

The participant read each question aloud and the respondent answered each question aloud. They went through four different scenarios, in which the respondent acted as an actual census responder by reading pre-scripted scenarios. All participants received the following three scenarios: an eight-member household that included a foster child, a nanny, a mother-in-law, a son in college, and a child younger than one year; a seven-member household that included a half-sister and six unrelated members; and a five-member household that included an unmarried couple and a brother who was temporarily staying in the home. In addition, three other scenarios were randomly assigned to each participant, so that each interviewed only one case of an unoccupied unit. The three scenarios were a dentist's office (nonresidential business), a summer residence (vacant-seasonal), and a house for sale (vacant-for sale). See Appendix F for detailed scenarios and scripts. The scenarios were in randomized order so that each participant did not answer each scenario in the same order. The test

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[1] The training that took place for this study was only one hour. It was not feasible to give participants the full 1-2 days worth of training that they will receive in 2010 for one hour of usability testing.

administrator noted any struggles or other behaviors from the participant. Upon completion of each scenario, the test administrator asked the participant questions about his/her experience with the NRFU form for that particular scenario. See Appendix G. The test administrator probed based on observed actions and behaviors. After completing all scenarios, the respondent left, and the participant completed the Satisfaction Questionnaire. See Appendix H.

After the participant completed the Satisfaction Questionnaire, the test administrator returned to the testing room where the participant answered debriefing questions. See Appendix I. This was an opportunity for a conversational back and forth exchange where the test administrator remained neutral. At the conclusion of the usability evaluation, the video recording was stopped. Overall, each usability testing session (including 60 minutes of training) ran about 180 minutes.

2.5 Performance Measurement Methods

2.5.1 Accuracy

After each participant completed the session, each task was rated as a success or a failure. In the context of usability testing, successful completion of a task means that the design supported the user in reaching a goal. Failure means that the design did not support task completion. Here, a successful task involved the participant successfully recording an answer as the Census Bureau wants it to be recorded. If the participant struggled to find the information, but eventually arrived at the correct response, this was marked as a success. A failure was recorded when the user interface presented obstacles to the participant's attempts to record the answer correctly.

The average accuracy score was calculated for each question by scenario. Prior to the usability study, the Usability Lab set an overall accuracy goal of 100 percent per task for all participants.

2.5.2 Efficiency

After all usability tests were complete, an average time taken to complete each scenario was calculated. In addition, observations were made on the participant's ability to maneuver the forms and binder while standing and performing the interview, as well as the ability to maneuver onto and through the continuation form.

2.5.3 Satisfaction

After completing the usability session, the participants indicated their satisfaction with the NRFU form using the tailored Satisfaction Survey. The Satisfaction Survey is used to compute the average Overall Satisfaction on a 7-point Likert scale. For example, participants were asked to rate their overall reaction to the form site by circling a number from 1 to 7, with 1 being the lowest possible rating and 7 the highest possible rating. We report ranges and mean values by participant and by Satisfaction Survey question.

2.5.4 Identifying and Prioritizing Usability Problems

To identify design elements that caused participants to have problems completing the task objectives, the test administrator recorded detailed notes during the usability session. To reinforce notes captured during the usability session, the test administrator reviewed the videotape recordings as needed. By noting participant behavior and comments, the test administrator, in cooperation with additional usability staff members, inferred the likely design elements that caused the participants to experience difficulty. The usability issues were grouped into categories. The findings and recommendations of these issues are presented below.

The usability team assigned each problem a priority code, based on its effect on performance, as follows:

- *High Priority* – These problems bring the test participant to a standstill. He or she is not able to complete the task.
- *Moderate Priority* – These problems cause some difficulty or confusion, but the test participant is able to complete the task.
- *Low Priority* – These problems cause minor annoyances but do not interfere with the flow of the tasks.

3.0 Results and Recommendations based on Usability Testing

3.1 Participant Accuracy

In this section, we report the frequency of successes and failures for specific questions and issues identified by the SRD team before the study began. These questions were thought to pose potential problems to users and so were specifically studied. They are organized in sequential order as they appear on the NRFU form. To see the actual scenarios and the order presented, see Appendix F. See Appendix J for a list of usability issues organized by priority.

3.1.1 Question #2 *(Medium Priority)*
Please look at list B on the Information sheet. How is (NAME) related to (PERSON 1)?
The specific relationships studied for this question were nanny, foster daughter and half sister relationships. These relationships were thought to pose potential problems to users, as they would fall into the other nonrelative, other nonrelative, and sister categories, respectively. As can be clearly seen in Table 2, participants struggled with correctly recording foster daughter and half sister. Only 21 percent of the participants accurately recorded foster daughter and 37 percent accurately recorded half sister. Although users did not have as much trouble with the nanny relationship (68 percent success), accuracy scores were still well below the 100 percent accuracy goal.

 Recommendation: Since many respondents did not automatically specify what type of child was in their household and had to be probed by the enumerator an "Ask if necessary: Biological, Adopted, or Step-son/daughter" probe should be included on the form for enumerators, at the top of the relationship column. In addition, enumerators should ask respondents to "Provide an answer from List B," when a noncodeable answer is given.

3.1.2 Question #4 *(Medium Priority)*
What was (NAME)'s age on April 1, 2010? What was this person's date of birth?
The two specific scenarios studied for this question were a 6-month old child, and an unknown date of birth. When a child is less than a year old, an accurate recording on the NRFU form would be 000. When a date of birth is unknown, the user is supposed to write whatever information is known. As can be seen in Table 3, 84 percent of the users recorded the 6-month old child correctly. However, when the date of birth was unknown, only 47 percent of the participants recorded whatever information was given to them. The other participants left all of the boxes for this question blank. Neither of the scenarios is in line with the 100 percent accuracy goal.

 Recommendation: In training, discuss how to record this answer correctly when partial information is given. Use specific examples in training. In addition, enumerators should pause between the two questions, allowing the respondent to answer with birth date and year before asking

age. It is important to get as accurate information on age and full birth date as possible, because these variables are used for matching and preventing duplication.

Table 2. User Accuracy Results for NRFU form Question #2: *How is (Name) related to (Person 1)*?

	Question 2		
Participant	Nanny	Foster Daughter	Half Sister
1	**Failure***	**Failure***	**Failure****
2	Success	**Failure*****	Success
3	Success	**Failure****	**Failure****
4	Success	Success	**Failure****
5	Success	**Failure****	**Failure****
6	Success	Success	Success
7	Success	**Failure****	**Failure****
8	**Failure****	Success	Success
9	**Failure^**	**Failure*****	**Failure****
10	Success	**Failure*****	**Failure^^**
11	Success	**Failure*****	**Failure^^^**
13	Success	**Failure*****	**Failure^^**
14	Success	**Failure*****	Success
15	Success	**Failure*****	**Failure*^**
16	**Failure**^**	**Failure**^**	**Failure****
17	**Failure^**	**Failure**^**	Success
18	Success	**Failure****	**Failure****
19	Success	Success	Success
20	**Failure^**	**Failure*****	Success
Success By Scenario	**68%**	**21%**	**37%**

* did not mark any.
** marked other relative.
*** marked adopted.
^ marked roomer or boarder.
^^ marked other nonrelative.
^^^ marked daughter-in-law.
*^ marked step sister.
**^ marked housemate.

Table 3. User Accuracy Results for NRFU form Question #4: *What was (NAME)'s age on April 1, 2010? What is this person's date of birth?*

Participant	6 month old baby: write age as 000	Unsure about DOB: write what is known
	Question 4	
1	Success	Success
2	Success	**Failure**
3	Success	**Failure**
4	Success	**Failure**
5	Success	**Failure**
6	**Failure**	Success
7	Success	**Failure**
8	Success	Success
9	**Failure**	Success
10	Success	**Failure**
11	**Failure**	Success
13	Success	Success
14	Success	**Failure**
15	Success	Success
16	Success	**Failure**
17	Success	Success
18	Success	**Failure**
19	Success	**Failure**
20	Success	Success
Success By Scenario	**84%**	**47%**

3.1.3 Question #5 *(Low Priority)*

Please look at List C. Is (NAME) of Hispanic, Latino, or Spanish origin?
A number of scenarios were utilized to examine usability of the NRFU form for this question. The ethnicities studied here are Dominican, which is in fine print at the top of the form as an example of other Hispanic, Latino or Spanish origin; Columbian, which is also in fine print at the top of the form; Puerto Rican, which is an explicit response option; Cambodian, which is not a Hispanic origin and elicits a No recording; and Mexican, which is also an explicit response option. As shown in Table 4, this question did not pose a problem for most participants. With the exception of one user, all participants were able to accurately record the responses, 100 percent of the time. One user had difficulty recording three of the five responses.

Recommendation: In training, use examples that cover a multitude of ethnicities.

Table 4. User Accuracy Results for NRFU form Question #5: *Is (Name) of Hispanic, Latino or Spanish origin?*

Participant	Question 5				
	Dominican	Columbian	Puerto Rican	No, Cambodian	Mexican
1	**Failure**	**Failure**	Success	**Failure**	Success
2	Success	Success	Success	Success	Success
3	Success	Success	Success	Success	Success
4	Success	Success	Success	Success	Success
5	Success	Success	Success	Success	Success
6	Success	Success	Success	Success	Success
7	Success	Success	Success	Success	Success
8	Success	Success	Success	Success	Success
9	Success	Success	Success	Success	Success
10	Success	Success	Success	Success	Success
11	Success	Success	Success	Success	Success
13	Success	Success	Success	Success	Success
14	Success	Success	Success	Success	Success
15	Success	Success	Success	Success	Success
16	Success	Success	Success	Success	Success
17	Success	Success	Success	Success	Success
18	Success	Success	Success	Success	Success
19	Success	Success	Success	Success	Success
20	Success	Success	Success	Success	Success
Success By Scenario	**95%**	**95%**	**100%**	**95%**	**100%**

3.1.4 Question #6 *(High Priority)*

Please look at List D and choose one or more races. For this census, Hispanic origins are not races. What is (NAME)'s race?

For this question, we first examined participants' recording when the person on the form was of Hispanic, Latino or Spanish origin (Yes responses for Question #5). This was thought to pose potential problems, and as can be seen in Table 5, certain ethnicities did pose problems. In the first column (Dominican and Black), 68 percent of the participants accurately recorded that the person was Black. Five of the participants did not record an answer to the Race question because they felt the question had been answered already in question #5 (regarding Hispanic origin). In the second column (Columbian and White), 53 percent of the participants accurately recorded that the person was White. Again, five participants did not record an answer to the Race question because they felt the question had been answered already in question #5 (regarding Hispanic origin). One participant marked Some Other Race and wrote the correct answer in the incorrect boxes. In the center column (Puerto Rican and Black), 84 percent of the participants accurately recorded that the participant was Black. Three participants did not record an answer because they felt the question had been answered already in question #5. In the second to last column (Cambodian), 37 percent of the participants accurately recorded that the person was Cambodian. Ten participants (50 percent) marked Some Other Race and then wrote the correct answer in the lower boxes, rather than the center boxes. And finally, in the last column (Mexican and Marshallese), 11 percent of the participants accurately recorded that the person was Marshallese. Seven of the participants marked Some Other Race and then wrote the correct answer in the lower boxes, rather than the center boxes.

Table 5. User Accuracy Results for NRFU form Question #6: *What is (NAME)'s race?* **(when person is of Hispanic, Latino or Spanish origin)**

Participant	Q5: Dominican Q6: Black	Q5: Columbian Q6: White	Q5: Puerto Rican Q6: Black	Q5: No, Cambodian Q6: Cambodian	Q5: Mexican Q6: Mexican and Marshallese
			Question 6		
1	Success	**Failure**	Success	**Failure***	**Failure**
2	**Failure^**	**Failure^**	Success	**Failure****	**Failure****
3	Success	Success	Success	**Failure****	**Failure**
4	Success	Success	Success	**Failure****	**Failure****
5	Success	**Failure****	Success	**Failure****	**Failure**
6	Success	Success	Success	**Failure****	**Failure**
7	Success	Success	Success	**Failure****	Success
8	**Failure**	**Failure****	**Failure^**	**Failure****	**Failure**
9	**Failure^**	**Failure^**	**Failure^**	**Failure****	**Failure**
10	Success	Success	Success	Success	**Failure****
11	Success	Success	Success	Success	**Failure**
13	**Failure^**	**Failure^**	**Failure^**	Success	**Failure**
14	**Failure^**	**Failure^**	Success	Success	**Failure****
15	Success	**Failure**	Success	**Failure****	**Failure****
16	**Failure^**	**Failure^**	Success	Success	**Failure****
17	Success	Success	Success	Success	**Failure**
18	Success	Success	Success	**Failure****	**Failure****
19	Success	Success	Success	**Failure*****	Success
20	Success	Success	Success	Success	**Failure**
Success By Scenario	**68%**	**53%**	**84%**	**37%**	**11%**

* marked Vietnamese.
** marked Some other race; wrote correct answer in lower boxes.
*** marked Some other race and Other Pacific Islander; wrote Cambodian in center boxes.
^did not mark any

Next, we examined participants' recording when the person on the form was American Indian. We were specifically interested in seeing if users correctly probed for more information about enrolled or principal tripe. As demonstrated in Table 6, when there was only one race, participants accurately recorded responses 68 percent of the time. When there were two races (American Indian and Native Hawaiian), accuracy fell to 58 percent. Of all of these recordings, 15 (20 percent) were not successful because participants failed to ask about enrolled or principal tribe, even though they had accurately recorded American Indian for race. Neither of these outcomes is in line with the 100 percent accuracy goal.

Recommendation: On the form, add a shaded region around Asian races, Pacific Islander races, Other Asian (and boxes) and Other Pacific Islander (and boxes). See question #S5 for an example of the recommended shaded region. The shaded region will clarify which boxes are to be used for the response. Add a similar shaded region around American Indian and Alaskan Native and the corresponding boxes to specify tribe. In training, use practice cases where the respondent reports more than one race to teach enumerators that more than one race is acceptable. In training, use practice cases with Hispanic respondents to teach enumerators how to probe the race question with

Hispanics. In training, include practice cases with American Indian respondents to teach enumerators to probe for enrolled or principal tribe.

Table 6. User Accuracy Results for NRFU form Question #6: *What is (NAME)'s race?* **(when person is American Indian)**

Participant	Question 6			
	American Indian, Navajo	American Indian, Hopi	American Indian, Hopi and Native Hawaiian	American Indian, Hopi
1	Failure	Failure*	Failure*	Failure*
2	Success	Success	Failure*	Success
3	Failure*	Failure*	Failure*	Failure*
4	Success	Success	Success	Success
5	Success	Success	Failure	Success
6	Success	Failure*	Success	Success
7	Success	Success	Success	Success
8	Failure	Failure	Failure	Failure
9	Failure*	Failure*	Failure*	Failure*
10	Failure*	Success	Success	Success
11	Failure*	Success	Failure	Failure
13	Success	Failure	Failure	Failure
14	Success	Success	Success	Success
15	Success	Success	Success	Success
16	Success	Success	Success	Success
17	Success	Success	Success	Success
18	Success	Success	Success	Success
19	Success	Success	Success	Success
20	Success	Success	Success	Success
Success By Scenario	**68%**	**68%**	**58%**	**68%**

* marked American Indian, but did not write tribe.

3.1.5 Question #7 *(Low Priority)*

Does (NAME) sometimes live or stay somewhere else for any of these reasons? In college housing; In the military; At a seasonal or second residence; In jail or prison; In a nursing home; For another reason.

For this question, we examined a number of scenarios thought to pose potential problems to users. Overall, many participants recorded "No" when they felt that the individuals lived at this residence *most of the time*. As shown in Table 7, participants struggled with the scenario "daughter stays with father in another home sometimes" and accurately recorded "for child custody" 37 percent of the time. There was no clear pattern for unsuccessful recordings: five participants marked "No", three marked "for another reason," two marked "at a seasonal or second home," and two did not mark any option. Similarly, participants struggled with the scenario "housemate who only lives here during the semesters" and accurately recorded "at a seasonal or second home" 47 percent of the time. Again, there was no clear pattern for unsuccessful recordings: one participant marked "No," three marked "for another reason," and two did not mark any option. Participants had less difficulty, but still some, with the scenarios "son lives in college during the semesters (but is home now)" and "mother-in-law lives at nursing home during the week (but is home now)." Accuracy for these scenarios were 84 percent and 89 percent, respectively. All of these scenarios resulted in accuracy scores well below the 100 percent accuracy goal.

Table 7. User Accuracy Results for NRFU form Question #7: *Does (Name) sometimes live or stay somewhere else for any of these reasons.*

Participant	Question 7			
	Daughter stays with father in another home sometimes	Son lives at college during the semesters	Mother-in-law lives at nursing home during the week	Housemate only lives here during the semesters
1	Failure*	Success	Success	Failure*
2	Failure^	Failure***	Success	Failure
3	Failure**	Success	Success	Failure
4	Success	Success	Success	Success
5	Failure**	Failure^	Failure^	Failure**
6	Failure**	Success	Success	Success
7	Success	Success	Success	Failure**
8	Failure^	Failure^	Failure^	Failure^
9	Failure***	Success	Success	Success
10	Failure*	Success	Success	Failure
11	Failure*	Success	Success	Success
13	Success	Success	Success	Failure
14	Success	Success	Success	Success
15	Failure*	Success	Success	Success
16	Failure*	Success	Success	Failure^
17	Success	Success	Success	Success
18	Failure***	Success	Success	Success
19	Success	Success	Success	Failure**
20	Success	Success	Success	Success
Success By Scenario	**37%**	**84%**	**89%**	**47%**

* marked No.

** marked for another reason.

*** marked seasonal or second home.

^ did not mark any.

       Recommendation: In training, cover recording "Yes" whenever respondent reports living or staying in another place. Many participants recorded "No" when they felt that the individuals lived at this residence *most of the time*.

3.1.6 Question #H1 *(Low Priority)*

We do not want to miss any people who might have been staying here on April 1.   Were there any additional people that you didn't mention, for example: Babies? Foster children? Any other relatives? Roommates? Any other nonrelatives? How about anyone else staying here on April 1 who had no permanent place to live?

We utilized two different scenarios to examine usability of the NRFU form for this question. The first was to report that a household member's brother was temporarily staying in the home on September 1. We examined whether or not participants checked the correct box and wrote his name in the boxes provided. As Table 8 shows, 17 (89 percent) participants successfully and accurately wrote the brother's name in the boxes provided, while 2 wrote his name on the inside of the form with the other household members. Nine (47 percent) participants successfully checked the correct box (any other nonrelatives), while eight checked incorrect boxes and one did not check any box.

The other scenario was to mention the baby that had already been reported with the household members earlier in the questionnaire. We wanted to examine if participants wrote the baby's

information again. As shown in Table 8, 15 (79 percent) participants accurately did not write the baby's information again, while 4 participants did. Both of these scenarios resulted in accuracy scores below the 100 percent accuracy goal.

Table 8. User Accuracy Results for NRFU form Question #H1: *Where there any additional people that you didn't mention.*

	Question H1		
Participant	Partner's brother: Write name in boxes	Partner's brother: Check box	Baby (already mentioned)
1	Success	**Failure****	**Failure**
2	Success	Success	Success
3	Success	**Failure*****	Success
4	Success	Success	Success
5	Success	**Failure****	Success
6	Success	Success	Success
7	Success	Success	Success
8	Success	Success	Success
9	Success	**Failure^**	**Failure**
10	Success	**Failure*****	**Failure**
11	Success	Success	**Failure**
13	Success	**Failure*****	Success
14	**Failure***	**Failure**	Success
15	Success	Success	Success
16	**Failure***	Success	Success
17	Success	**Failure****	Success
18	Success	**Failure*****	Success
19	Success	Success	Success
20	Success	**Failure****	Success
Success By Scenario	**89%**	**47%**	**79%**

* wrote name on inside with other members.
** checked other relative.
*** checked anyone else.
^ did not mark any.

Recommendation: In training, cover cases like these. Enumerators should be trained on what to do when an individual was already mentioned previously or has not been mentioned yet.

3.1.7 Question #H2 *(Low Priority)*

Is this (house/apartment/mobile home) – Owned by you or someone else in this household with a mortgage or loan (including home equity loans), Owned free and clear (without a mortgage or loan), Rented, or Occupied without payment of rent?
For this question, we examined whether or not participants asked the question correctly. Seventy-three percent of the time, participants asked the question correctly, in its entirety and probed when necessary. Of the 27 percent of the time that the question was not asked correctly, sometimes participants asked it in its entirety but did not probe further when the respondent said that the home was owned, and sometimes participants began the question and did not continue through all the choices when the respondent gave an answer.

Recommendation: On the form, add an introductory statement that lets the respondent know that they are going to hear four categories. This may reduce the number of interruptions. For example, the questions would change to the following: "I am going to read four categories to you. Please pick the one that fits best. Is this (house/apartment/mobile home) - A. Owned by you or someone else in this household with a mortgage or loan (including home equity loans); B. Owned free and clear (without a mortgage or loan); C. Rented; or D. Occupied without payment of rent?" In training, emphasize that enumerators have to go through all options and probe when necessary.

3.2 Participant Efficiency

3.2.1 Average Time to Complete Interviews *(Low Priority)*

Table 9 displays the average time taken to complete each interview by scenario. For a four-person household, the average time to complete the interview was 10.8 minutes; for a 7-person household, 14.5 minutes; for an 8-person household, 17.3 minutes; for a vacant residence, 2.4 minutes. All scenarios, except for the vacant scenario, were over the 10 minutes or less goal set for this study.

Table 9. Average time taken to complete interview by scenario.

	Question S5			
	4 people	7 people	8 people	Vacant
Average time to complete interview	10.8 minutes	14.5 minutes	17.3 minutes	2.4 minutes

Recommendation: On the form, revise wording in question #S5 to reflect that it may take longer than 10 minutes.

3.2.2 Maneuvering the Form and Binder *(High Priority)*

A main concern of SRD and the sponsor was that users might struggle with the binder and forms when on a household's doorstep in 2010. By observation, we noticed that indeed, individuals struggled with holding the forms and binder. Some participants actually dropped all of the items during the interviews, while many just felt and appeared awkward in managing all of the items. The current tri-fold NRFU form encourages flipping and awkwardness as it is much larger than the binder enumerators are to use. In fact, during debriefing, some participants commented that "…the form was difficult to hold. I was juggling everything," and that "the size and shape (of the form) were difficult to handle and hard to maneuver, and I didn't like the tri-fold flipping inside and out." Other participants commented that, "At someone's doorway, it would be difficult and cumbersome," and that "it was difficult to flip back and forth and awkward to hold the binder in my arm." In addition, due to the size of the NRFU form, some individuals folded the pages back to align the names on the left side of the form with the questions on the right side of the form. This folding is of concern as it can interfere with data capture if creases are in the same areas as data. Furthermore, the struggling with the form and binder leads to longer questionnaire completion times. See Figure 1 for a sample of still shots of participants folding the form and appearing awkward.

Recommendation: We designed a new form to address these issues. See Figure 2 for the new form design. This new design keeps the form from hanging off the edge of the binder while the user records answers to questions that need the household members' names referenced. In addition, this new design eliminates folding that occurred in testing due to the need to reference names on the left side of the page. Specifically, questions #6 and #7 are now on the center panel of the form rather than the right-most panel, and questions #H1, H2 and H3 are now on the right-most panel, which does not

need to reference household member names. Neither the order of administering the questions nor the question numbers have changed with this new design.

Enumerators should use a clipboard and/or larger binder that fits the entire questionnaire on its surface. Some participant recommendations include making the form smaller; having a harder surface to write on; making the form "notebook size, so it fits and doesn't hang over the edge or flip over the edge"; changing the layout by "shrink(ing) everything to minimize folding and flipping"; "make regular pages that can be turned…two pages wide instead of three pages wide."
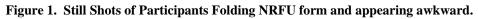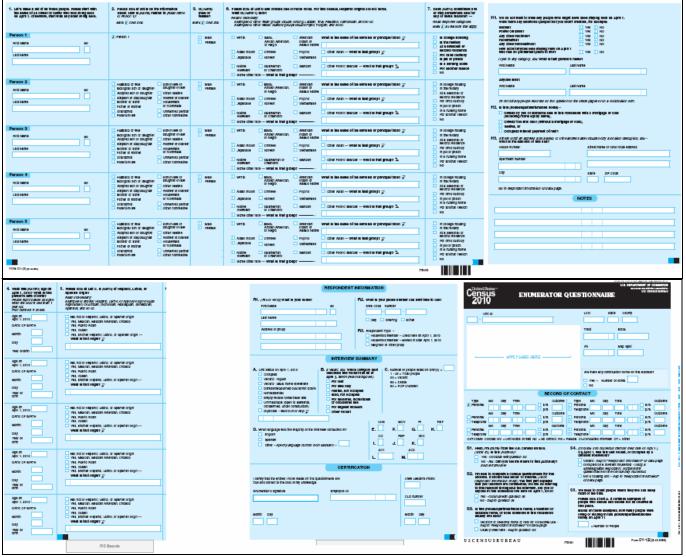
Figure 1. Still Shots of Participants Folding NRFU form and appearing awkward.

Figure 2. New NRFU form design.

**view of NRFU form for Questions #1, 2, 3, 4, 5.

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Status: One usability test was done with the new design. In this test, the participant did not fold the form in places where it was not supposed to be folded (in natural creases). The form appeared more comfortable and manageable compared to the other 19 observations with the tested form. See Figure 3 for a still shot of the participant recording answers on the newly designed form.

An impromptu meeting was called on August 18, 2008, in which the design of the form and these issues were addressed. See Appendix K for minutes from that meeting. Video tapes were shown that displayed the folding of the forms during usability testing. In addition, the group examined some of the actual forms that had been used in the usability testing. More testing is needed to verify whether the folding will cause problems with data capture.

If the redesign is not accepted, use of a clipboard is strongly recommended in place of the binder.

Figure 3. Still Shots of Participant Using Newly Designed NRFU form.

On right: Participant is administering question #6 on center panel. On left: Participant is administering question H1 on right panel, which does not require the use of the names on left panel.

3.2.3 Using the Continuation Form *(High Priority)*

We examined the usability of the continuation forms and whether users were able to accurately and successfully maneuver through the main form and continuation form. The correct way to use the continuation form consists of the user asking for and writing all household member names, then asking the topic-based questions on the first page for all individuals on that page, then asking all the topic-based questions for all individuals on the second page. Only nine percent of the time, participants successfully maneuvered through the forms in this way. Seventy-five percent of the time, when the continuation form was used, participants wrote all names then asked the topic-based questions, going back and forth between the two pages. Nine percent of the time, participants wrote all the names for the people only on the first page, then asked each topic-based question on that page, then wrote the names on the second page and asked each topic-based question on that page. Six percent of the time, participants wrote all names then mixed up topic-based questions, sometimes asking all of the first page questions and then asking the second page, and sometimes flipping back and forth between the two pages.

The better way to administer the form is by asking for and writing all household member names, then asking the topic-based questions on the first page for all individuals on that page, then asking all the topic-based questions for all individuals on the second page. This is the way participants were supposed to administer the form, and for those that did, there was less fumbling and awkwardness than those that administered the form in one of the other ways mentioned.

Recommendation: In training, use scenarios where households are larger than five people, in which the continuation form will be used.

3.3 Participant Satisfaction

Table 10 displays individual and mean user satisfaction ratings for the NRFU form. The average Satisfaction score was 5.93 out of 7, which is within the satisfaction goal of 5 or higher for the form. Only 2 out of 19 individuals had a satisfaction mean below the goal. Although the means overall were quite high for satisfaction, ratings below the mid-point of the scale indicate issues that may affect other users. It is well-known that users tend to give higher satisfaction ratings than might be expected from their accuracy scores (Andre & Wickins, 1995; Beck & Murphy, 2008; Malakhoff, 2007). Thus, it is not surprising that the satisfaction scores are closer to the goal than are some of the accuracy scores.

Some participant comments about using the form are that it is "easy to navigate through (and) the language is easy to understand," and that "it flowed fairly well. It's logical- question to question." Others said that "answers were easy to record," and "the order of questions was good." Overall, participants were satisfied with the questions and the flow of the questions on the form. Participants were least satisfied with the size of the form, as previously noted in section 3.2.2 of this report.

4.0 Conclusions

Overall, the user-interface design supported the users in completing the tasks. The 100 percent accuracy goal and 10-minute efficiency goal were never achieved, but the problems encountered can be avoided if the recommendations given are implemented. Users were satisfied overall with the design of the questions but not the actual form. Recommendations are given to resolve usability issues.

5.0 References

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Malakhoff, L. (2007). An accessibility and usability evaluation of the X-12 Arima graphing application; Human-computer interaction memorandum series #104. (Submitted to Demetra Lytras, Office of Statistical Methods, Research Economics Program). U.S. Census Bureau.

Table 10. User Satisfaction Ratings for the NRFU form (1 = low; 7 = high).

Satisfaction Questionnaire Items	Participant																			MEAN RATING
	1	2	3	4	5	6	7	8	9	10	11	13	14	15	16	17	18	19	20	
Filling in the form can be performed in a straight-forward manner	7	7	5	5	6	3	5	6	5	5	6	5	5	6	7	5	6	5	6	5.3
Organization of the form	7	4	7	7	5	3	6	7	7	7	6	6	5	7	7	5	6	6	6	6
Use of terminology throughout the form	7	7	7	6	5	3	6	6	7	6	7	6	7	7	5	5	7	5	6	6
Information on the form	7	7	5	6	5	3	6	7	6	5	7	5	6	7	7	5	7	7	6	6
Census Bureau-specific terminology	7	5	5	7	4	4	7	7	7	6	7	7	7	7	6	6	7	6	7	6
Characters (e.g., letters, numbers, parentheses) on the form	7	7	7	6	4	3	7	7	7	6	7	7	7	7	7	6	7	7	5	6
Learning to use the form	7	7	7	7	5	2	6	6	6	7	6	5	5	7	7	6	7	5	7	6
Questions on the form	7	7	6	6	5	3	6	5	6	6	7	6	7	7	7	6	7	6	7	6
Navigating through the form (going from one question to the next)	7	2	7	3	5	2	5	4	7	7	6	4	4	7	7	6	6	6	5	5
When I had to skip questions (going from one question to the next)	7	2	6	6	4	4	5	7	5	7	5	6	4	6	7	6	7	6	5	6
Instructions on the form	7	7	6	5	5	3	6	6	6	7	7	5	5	7	6	6	7	7	5	6
Writing answers in boxes	7	7	7	7	6	2	7	6	6	7	7	5	7	7	7	6	7	5	7	7
Use of arrows pointing to boxes on form	7	7	6	7	3	2	6	6	7	7	7	4	6	7	7	6	7	4	4	6
Overall reactions to the form*	7	5	6.7	5.7	4.7	2	6	5.7	6	5.7	6	5.3	5.3	7	6.3	6	6.3	4.7	6	5.65
MEAN RATING BY PARTICIPANT	**7**	**5.7**	**6.3**	**5.9**	**4.8**	**2.7**	**6**	**6.1**	**6.3**	**6.3**	**6.4**	**5.4**	**5.7**	**6.9**	**6.6**	**5.8**	**6.7**	**5.6**	**5.9**	**5.93**

* Scores reflect an average of three ranges: Terrible – Wonderful; Frustrating – Satisfying; Difficult – Easy.

Appendix A
Test Administrator Script.

General Introduction for Participant
Thank you for your time today. My name is **[test administrators name]**. I work here in the U.S. Census Bureau Usability Lab, and I will be working with you today. In this lab, we evaluate how easy or difficult Census products are to use. We bring in people like you who are potential users of our products to try them out while there is still time to make changes to them. What works well, we keep. When potential users such as you have difficulty with something, we have an opportunity to fix it.

Today, we will be evaluating a questionnaire design by having you administer the questionnaire to another individual. Your experience with the questionnaire is an essential part of our work. We are going to use your comments to give feedback to the developers of the questionnaire. Your comments and thoughts will help the developers make changes to improve the questionnaire. I did not create the questionnaire, so please do not feel like you have to hold back on your thoughts to be polite. We are not evaluating you or your skills, but rather you are helping us to see how well the questionnaire works.

In order to adequately prepare you for administering the questionnaire, the first part of today's session will consist of training. You will be trained by **[trainer's name]** for approximately one hour. Then, at the end of training, you will administer the questionnaire to another individual. When we finish, you will fill out a questionnaire about your experience during the session.

Before we start, there is a form I would like you to read and sign. It explains the purpose of the session and your rights as a participant. It also informs you that we would like to videotape the testing session to get an accurate record of your feedback. Only those of us connected with the project will review the tape and it will be used solely for research purposes. Your name will not be associated with the tapes or any of the other data collected during the session.

[Hand consent form; give time to read and sign; sign own name and date.]
[Start video recording.]
[Training hour]
[Upon return, adjust desk and instruct participant where to stand. Respondent enters.]

[Go into control room. Do sound check.]
Ok, now we are ready to begin the questionnaire. At the end of each questionnaire interview, I will ask you questions about what happened as you worked on the questionnaire. I want to know your thoughts about the questionnaire, so please keep any thoughts in mind as you are going through the questionnaire. I will want to know these thoughts at the end of each interview. Ok, please begin.
[In between each scenario]
Ok. Now I will ask you questions about this particular scenario. Remember to think about your thoughts as you were administering the questionnaire to the respondent.
[Upon completion of all scenarios]
Ok. Great. Please have a seat at the table by the door and complete the questionnaire. I will be in in a moment.

Once Participant has completed the Satisfaction Questionnaire, go in to the test room and administer Debriefing Questionnaire. Video-recording stops after Debriefing and Payment.

Appendix B

Consent Form.

Consent Form
For Individual Participants
Usability Testing of Census Questionnaire

Each year the Census Bureau conducts many different usability evaluations. For example, the Census Bureau routinely tests the wording, layout and behavior of products, such as Web sites and online surveys and questionnaires in order to obtain the best information possible.

You have volunteered to take part in a study to improve the usability of a questionnaire that will be used in the 2010 Census. In order to have a complete record of your comments, your usability session will be videotaped. We plan to use the tapes to improve the design of the product. Only staff directly involved in the research project will have access to the tapes. Your participation is voluntary and your answers will remain strictly confidential.

This usability study is being conducted under the authority of Title 13 USC. The OMB control number for this study is 0607-0725. This valid approval number legally certifies this information collection.

I have volunteered to participate in this Census Bureau usability study, and I give permission for my tapes to be used for the purposes stated above.

Researcher's Name: _____

Researcher's Signature: _____ Date: _____

Participant's Name: _____

Participant's Signature: _____ Date: _____

NRFU TRAINING

What is the Nonresponse Followup?

Census questionnaires are delivered to most houses, apartments, and mobile homes by either

the U.S. Postal Service or census enumerators. Occupants complete the questionnaire for the

household and mail it back to the Census Bureau. If the Census Bureau does not receive a

completed questionnaire for a housing unit, a Nonresponse Followup interviewer must go to

the address and collect the information. We call these interviewers enumerators, and that's the

part that you will be playing today. Typically, the enumerator will find an occupied housing

unit. If the current household – or part of the household - lived there on Census Day, which is

April 1, 2010, the enumerator interviews a household member and completes the

questionnaire. If the unit was vacant or nonexistent on Census Day, the enumerator completes

the questionnaire for the unit by interviewing a knowledgeable respondent.

In a few minutes, we'll practice conducting an interview using the questionnaire. But first, let's

look at the different sections of the questionnaire. Please take out a blank questionnaire, DY-

1(E), from your training materials.

When you are asking a respondent a question using the census questionnaire, remember to only

ask the questions that are **bolded.** The comments in *italics* or comments that are not bolded are

designed to help you complete the questionnaire accurately.

At the bottom of the front cover is the Introduction section. This is the first section we will focus on. The five questions in the introduction section are the first questions you ask the respondent when you begin the interview. Questions S1 through S5 help determine the status of a housing unit on Census Day. When we take a census, all information is collected as of a fixed reference date. That date is called Census Day. For the 2010 Census, Census Day is April 1, 2010.

So when you visit an address, one of the first things you'll need to determine is what the status of the unit was on Census Day. Determining the status of the unit means finding out if the residence was:

• Occupied on Census Day by the **same** household (or at least some members of that household) that still lives there at the time of your visit;

• Occupied on Census Day by a **different** household;

• Vacant on Census Day.

An **occupied** status means that someone lived at the residence on Census Day. This status includes situations in which the occupant was temporarily away, for example, on vacation or business. A **vacant** status means that the housing unit at the address was not occupied on Census Day. The unit may have been or may be for rent, for sale, sold but not occupied, or some similar situation. When you complete an interview at a vacant unit, you will select the **category** for the vacancy in Item B of the Interview Summary on the back of the form. How

you conduct an interview will differ depending on the status of the housing unit on Census Day.

Let's look at each of the five questions in the first section.

• Question S1 - **Hello, I'm** (N*ame*) **from the U.S. Census Bureau**. (*Show ID*) **Is this** (A*ddress*)**?**

When reading this to a respondent, you will fill in your name where it says "name," show your Census Bureau Identification badge when it says "show ID," and read the address of the unit from the top of the form where it says 'Address." **(Point to address block)** There will be an address here.

Note the skip instructions after the question. After the respondent verifies the address, put an "X" in the *"Yes"* box and continue with question S2. If the respondent says "No," ask:

"Can you tell me where to find (*Address*)**?",** then end the interview and try to find the address.

Question S2 - **I'm here to complete a Census questionnaire for this address. It should take about 10 minutes.** (*Hand respondent Information Sheet*.) **The first part explains that your answers are confidential. We will be referring to this handout throughout the interview. Did you or anyone in this household live here on April 1, 2010?**

You have to be very careful of the skip patterns. Pay attention to the respondent's answers and where you need to go next. Remember to read the questions exactly as they appear on the questionnaire.

This question determines if the current household lived at this address on Census Day. Make sure to hand the respondent an Information Sheet at this point.

Remove the Information Sheet, DY-1(F) from your supplies.   It looks like this. **(Hold up Form DY-1(F), Information Sheet.)**

<div align="center">(Allow time)</div>

This Information Sheet is for you to give the respondent for him or her to keep. There is a lot of important information on this sheet. Note the multiple sections, on both the front and back. On the front:

- The confidentiality statement
- List A: Who To Count on April 1st

 On the back:

- List B: Relationship
- List C: Hispanic, Latino, or Spanish Origin
- List D: Race

It is a legal requirement for you to provide the respondent with the confidentiality statement on this sheet. You must use the Information Sheet as indicated on the form.

Question S3 - **Is this (house/apartment/mobile home) a vacation or seasonal home, or does someone in this household usually live here?**

For this question, you choose either "house," "apartment," or "mobile home" depending on what the place looks like that you are interviewing. You should not read all three terms, just pick the one that looks the most appropriate.

If the respondent answers "vacation or seasonal home" to this question skip to "Respondent Information" on the back page and complete the respondent questions. Then go to Interview Summary, Item A, and mark "Vacant – usual home elsewhere." You must ask Item B for all "Vacant – usual home elsewhere" units to let respondent select the most appropriate vacancy status.

Question S4. Ask this question only if no household member lived here on April 1 - **On April 1, was this unit vacant or occupied by a different household?**

This question lets you determine if the unit was vacant or occupied by a different household on Census Day. There are special instructions for these cases which we will discuss later.

Question S5 - **We need to count people where they live and sleep most of the time. Please look at List A. It contains examples of people who should and should not be counted at this place. Based on these examples, how many people were living or staying in this (house/apartment/mobile home) on April 1?**

Remember to give the respondent time to locate and read List A on the Information Sheet that you gave to him or her during Question S2.

You record the number of people living in the residence on Census Day, April 1, 2010. After you enter the number of people in S5, continue with Question 1 on the next page of the questionnaire. Question S5 and List A work together to help respondents determine who should be counted at the household on Census Day.

Should respondents have questions, remind them of the general rule provided in Question S5--that is, "count people where they live and sleep most of the time." List A repeats this rule and provides specific guidance when more detail is needed.

Let's review List A, Who To Count on April 1st. The first "bulleted" list, on the left, describes the living situations of people who <u>should be excluded</u> from the household. Respondents might be tempted to include people because they consider them part of the "family." BUT, these people actually live somewhere else most of the time, for example, college students living away from home and armed forces personnel. People who stayed in a "facility" on April 1 should also be excluded from the household, regardless of where they live and sleep most of

the time. A special census operation will count people staying in facilities, for example, nursing homes and jails. The second "bulleted" list, on the right, describes types of people that should be included at the household, but are sometimes forgotten. These people include babies, foster children, roommates, boarders, and anyone staying there who had no other place to live on Census Day.

Are there any questions about who to include and who not to include on the Enumerator Questionnaire?

(Answer questions)

Q: Would you include my nephew in my household if he lives with me during the week and goes to visit his mother on weekends?

A: Yes, because he lives most of the time (during the week, in this case) with me.

Q: Let's say my grandfather lives with me most of the time but he was admitted to a nursing home the day before Census Day. Would you include him in my household?

A: *No, because he was staying in a "facility" on April 1 and will be counted there.*

Are there any questions regarding Questions S1 through S5?

(Answer any questions)

Let's first concentrate on completing the questionnaire for a house that was **occupied** on Census Day. Later, we'll consider how to handle such situations as vacant living quarters. Move directly from the Introduction section to Question 1. In this question, you'll list the names of all people who lived at the address on Census Day, April 1. Make sure you print the first name, middle initial, and last name of each person in the appropriate boxes, beginning with Person 1, Person 2, and so on.

After listing the names of all household members in Question 1, complete Question 2 for each household member before continuing on to Question 3. If there are more than 5 people in the household you will use a Continuation Form to capture their information. We will discuss this later in the training.

The question reads, **Let's make a list of all those people. Please start with the name of an owner or renter who was living here on April 1. Otherwise, start with any adult living here.**

We always list the person in whose name the home is owned or rented **first** in the space for Person 1. This person must be age 15 or older. We call person 1 the **reference person.** If two people jointly own or rent, like a husband and wife, enter either of their names in the space for Person 1. In the unlikely event there is no reference person, list any adult member first. Sometimes renters are confused about who to mention first in response to Question 1. It is

incorrect to name a landlord or management company that owns the property. Always

remember that the reference person **must** be an adult who **lives** at the address.

Do you have any questions about the **reference person** concept?

(Answer any questions)

Always list the **reference person** first in Question 1. Continue filling in the names of all

household members for Question 1. Note that the names of all household members are entered

first name, middle initial and last name. Neatly print all letters in the boxes provided. If the

person doesn't have a middle initial, leave the box for the initial blank. **Always** ask whether a

person has a middle initial if the respondent does not include it. It's not uncommon for the last

name of a child to be different from the mother's last name. Never **assume** that the last name of

any child in the household is the same as the mother's or father's last name. If the respondent

doesn't mention the last name of any child, politely ask. For example, "**Is your daughter**

Michelle's last name also Smith?"

After each household member is named by the respondent, ask "Anyone else?"

Are there any questions?

If the number of people listed to this question does not match the number of people in Question

S5, you should verify which is correct with the respondent and make the correction on the

form. It may be necessary to correct the number of people in Question S5. The number of persons listed in Question 1 **must always** be the same number written in Question S5.

Let's move on to Question 2, the relationship question. Read, **Please look at List B on the Information Sheet. How is** *(Name)* **related to** *(Read name of Person 1)***?**

Direct the respondent to look at List B, Relationship, and allow him or her sufficient time to look at it. When you ask Question 2, use the name of Person 1, the reference person. So, if you are talking to Person 1, ask, **"How is Mary related to you?"** But if you are asking another household member, use the name of Person 1. For example, if Jim is Person 1ask, **"How is Mary related to Jim?"** or **"How are you related to Jim?"**

Do you have any questions?

(Answer any questions)

The **most important** thing about Question 2 is that you are asking the relationship of **each** household member to Person 1. Remember, Person 1 is the reference person, that is, the person living in the unit who owns or rents the housing unit. If you list the wrong person as the reference person in Question 1, then all the relationships entered in Question 2 will be incorrect. Also, be aware that the person you are interviewing may or may not be the reference person. Often, your respondent will be the reference person's spouse. Look at your census questionnaire again. Notice that there are no relationship categories in Question 2 next to

Person 1. That's because we can't ask the relationship of the reference person to himself or herself. So, we always start with Person 2 when asking about relationships.

Let's assume for the moment that you have listed Bob Jones as Person 1 and Mary Jones as Person 2. Also assume that you are interviewing Mary Jones.

Q: How would you ask Question 2 in order to mark the box for Mary's relationship?

A: *How are you related to Bob Jones?*

Ask the relationship question for each household member. Do you have any questions?

(Answer any questions)

For Question 3, you must ask or verify **"Is** *(Name)* **male or female?"** of each household member even if it seems obvious. Be sure to mark one box for each person.

Here, let's note that for questions 3 through 7 you do not have to repeat the whole question for each person listed in question 1. After asking the whole question as it is written for Person 1, you can ask "**How about** (N*ame*)**?**"

Let's talk about Question 4 - the age and date of birth questions. Ask Question 4 , both age and date of birth as of April 1, 2010 - for each person. Using Bob and Mary Jones again, ask,

"What was Bob's age on April 1, 2010? What is this person's date of birth?" After entering Bob's age and date of birth, ask Mary, **"What was your age on April 1, 2010, and what is your date of birth?"**

If a child is less than a year old, you should record his or her age as "0".

Enter each person's date of birth using two digits for the month, two digits for the day, and four digits for the year. For most interviews, the respondent will be able to provide each household member's age and full date of birth. Respondents are allowed to estimate age. However, the date, month and year of birth they provide must be exact. Respondents are allowed to provide partial date of birth information – for example, just the month or just the year – but whatever they provide must not be estimated.

Question 5 is known as the Hispanic, Latino, or Spanish origin question. **Never** make your own guess for this question. You must **always** ask **"Please look at List C. Is** (Name**) of Hispanic, Latino, or Spanish origin?"**

You **must** always mark an answer box in Question 5 for each household member, including people who are **not** of Hispanic, Latino, or Spanish origin. Do not encourage more than one response. However, if the respondent gives more than one response, you should enter both. For example, a respondent may answer that he or she is both Puerto Rican and Cuban. If the respondent selects the "Yes, another Hispanic, Latino, or Spanish origin", ask, **"What is that**

origin?" Notice that this phrase is in bold next to the option, meaning that it should be read aloud.

Question 6 is the race question. You will ask: **"Please look at List D and choose one or more races. For this census, Hispanic origins are not races. What is** *(Name's)* **race? "**

You only need to read the full question for the first person. For additional people, you may ask **"How about Name?"** and repeat the full question only when necessary. Be sure to tell the respondent they may answer with more than 1 race. **Always** ask this question for each person. **Never** make an assumption about someone's race.

Also, like in the Hispanic question, notice the bold type questions in the response option area, which indicate that followup question should be read aloud if necessary. If the respondent answers "American Indian or Alaska Native", ask "**What is the name of the enrolled or principal tribe?**" If the respondent selects an "other" category ("Other Asian", "Other Pacific Islander", or "Some other race"), be sure to ask "**What is that group?**"

The purpose of Question 7 is to find out whether you have included someone living at this housing unit that should possibly be counted elsewhere. You should say to the respondent, **"Does** (Name**) sometimes live or stay somewhere else for any of these reasons?"**
Then read aloud all the reasons except "No." Read:
"In college housing; In the military; At a seasonal or second residence; For child custody; In jail or prison; In a nursing home; For another reason."

Obtain an answer for each household member on the questionnaire. You only need to ask the full question and list all the reasons for Person 1. After that, you may just read the question, or say **"How about [Name]?"**

Are there any questions about completing Questions 1 through 7 for each household member?

(Answer any questions)

Let's go back to Question 1 on your questionnaire for a minute. Question 1 has space for recording information for up to five household members. For larger households, you'll need to use the Continuation Form for Enumerator Questionnaire, DY-1(E)SUPP. It looks like this. **(Hold up the Continuation Form for Enumerator Questionnaires, DY-1(E)SUPP).** Get this form from your trainee kit now.

The continuation form contains only Questions 1 through 7. There are no other questions on this form because it is used only to record information about additional household members. You should always keep continuation forms handy because you never know when a household may include more than five members.

When using the continuation form, list the first 5 household members on the original form. **(Hold up original form and show Question 1)** Then continue listing the next 5 on a continuation form. **(Hold up continuation form and show Question 1)** After you have listed

all household members, begin asking questions 2 through 7 for Persons 1 through 5 on the original form. **(Hold up original form and show Questions 2-7)** When you are done with questions 1 through 7 for Persons 1 through 5, ask questions 1 through 7 for the next 5 people on the continuation form. **(Hold up continuation form and show Questions 2-7)** When you are done with questions 1 through 7 for all household members, complete questions H1 through H3 on the original form, then complete the back page on the original form. **(Hold up original form and show H1-H3 and back page)**

Let's look at the last few sections of the questionnaire. Turn to Question H1. H1 is called a coverage question. The purpose of this question is to find out if the respondent failed to mention someone who possibly should have been counted here. Follow along as I read Question H1 now. **"We do not want to miss any people who might have been staying here on April 1. Were there any additional people staying here that you didn't mention, for example:"**

Then read each category, and pause between categories to allow the respondent to say "yes" or "no."

"Babies? Foster children? Any other relatives? Roommates? Any other nonrelatives? How about anyone else staying here on April 1 who had no permanent place to live?"

If the respondent says yes to any category, ask "**What is this person's name?**". Record the name in the space provided, and ask, "**Anyone else?**"

Record the next name, if necessary. Do not list any of the people recorded in this question –
H1- on the inside portion (questions 1 through 7) or on any continuation form.

Sometimes, respondents forget to mention someone who should be included as a household member - young children, people away on business or vacation, or people staying at the house who have no other place to live. Question H1 asks the respondent about such persons. Make sure you put a mark in either the Yes or the No box for each example. If the respondent provides multiple names, record the first two in the spaces provided. Any additional names given should be recorded in the NOTES section at the bottom of the page. Does anyone have any questions?

Let's read Question H2 now. **Is this (house/apartment/mobile home):"**

Now read each of the categories, *without* pausing in between categories:

"Owned by you or someone else in this household with a mortgage or loan (including home equity loans); Owned free and clear (without a mortgage or loan); Rented; or, Occupied without payment of rent?"

This question determines whether Person 1 was an owner of the unit (and, if so, whether he or she has a mortgage or loan), a renter of the unit, or lived at the unit without paying rent on Census Day. The key is to choose the answer that best describes how the unit was paid for

while it was occupied by someone living there on Census Day. For example, owners who have paid off the original mortgage but have a home equity loan should be considered "with a mortgage" and owners who own their own home without any house payment should be considered "without a mortgage." Apartment managers who live in a unit as payment for services should be classified as "occupied without payment of rent" and, a person who pays a monthly rent payment should be classified as "Rented." Any questions about Question H2?

We will not be testing question H3.

Look at the Respondent Information section on the back page of the questionnaire. Ask or verify Question R1 with the respondent, reading: "**What is your name?**" Then ask Question R2: "**What is your phone number and best time to call?**"

Question R3 indicates if the respondent is a household member who lived at this address on April 1, 2010 or moved in after April 1, 2010, or is a neighbor or other proxy.

Once you have completed the respondent portion of the interview, you must fill in the Interview Summary section. You need to fill in Item A, Unit Status on April 1, 2010; Item B, if applicable; Item C, Number of people listed on form(s) on April 1, 2010, and Item D, the language in which the majority of the interview was conducted.

Let's look at Sections A through D in the Interview Summary, one by one.

For **Item A, Unit Status on April 1, 2010** - Mark the box that best applies.

- Mark "Occupied" if the housing unit was occupied.

- Mark "Vacant-regular" if the housing unit was not occupied as a usual residence and is intended to be used as a living quarters.

- Mark "Vacant-usual home elsewhere" if the housing unit was occupied on Census Day but the occupants had a usual residence elsewhere.

- Mark "Demolished/burned out/cannot locate" if the housing unit fits one of these descriptions.

- Mark "Nonresidential" if no one lives there and this building is not used as living quarters (for example, as a business or commercial facility).

- Mark "Empty mobile home/trailer site" if in a Mobile Home Park and the site was empty on Census Day.

- Mark "Uninhabitable" if the housing unit is open to elements, condemned, or under construction.

- For now, disregard the box that says "Duplicate" - We won't be testing that today.

Item B, VACANT – If vacant, ask: **Which category best describes this vacant unit as of April 1, 2010:"**

Read each of the categories, without pausing between them:

- **For rent**

- **For Sale only**

- **Rented, not occupied**

- **Sold, not occupied**

- **For seasonal, recreational or occasional use**

- **For migrant workers**

- **Other vacant**

The respondent should pick one of those categories.

ITEM C, Number of people listed on form(s) : To complete **Item C,** enter the **total** number of people listed in Question 1. If the household contains more than five people and you listed the additional household members on one or more continuation forms, enter the **total** number of household members in Item C and on the front of the form in Question S5. Always fill in the population count box with a two-digit number, using a leading zero as appropriate. For example, if the household has five members, enter 05 as the population count. Remember, verify that the answer in Question S5, the total number of persons listed in Question 1 and on the continuation forms, and the entry in Item C **all should match.**

Item D: In what language was the majority of the interview conducted? We will only be testing English interviews today, so mark "English."

DO NOT fill out Items E through M. We are not testing those items today.

Once you complete the Interview Summary section, the interview is done. Thank the respondent for his or her cooperation, and say goodbye.

Practice Scenario One

(Note: Use the following script to ensure the trainee is using the correct language. The script also provides your responses to the trainee. The question numbers are listed on the left.)

Now we're ready for our first practice interview. Use your questionnaire as a guide and make sure your Information Sheet is available. I will be the respondent. Go ahead and start with Question S1. The address we'll refer to is 52 Park Lane.

S1 Enumerator: **Hello, I'm** (N*ame*) **from the U.S. Census Bureau**. (*Show ID*) **Is this 52 Park Lane?**

Respondent: Yes.

S2 Enumerator: **I'm here to complete a Census questionnaire for this address. It should take about 10 minutes.** (Trainee should hand respondent the information sheet.)
The first part explains that your answers are confidential. We will be referring to this handout throughout the interview. Did you or anyone in this household live here on April 1, 2010?

Respondent: Yes, we've been here for 6 years.

S3 Enumerator: **Is this house a vacation or seasonal home, or does someone in this household usually live here?**

Respondent: No, we live here year-round.

S5 Enumerator: **We need to count people where they live and sleep most of the time. Please look at list A. It contains examples of people who should and should not be counted at this place. Based on these examples, how many people were living or staying in this house on April 1?**

Respondent: Three.

Q1 Enumerator: **Let's make a list of all those people. Please start with the name of an owner or renter who was living here on April 1. Otherwise, start with any adult living here.**

Respondent: There's me. My name is Barbara Harris. Then there's my husband, Robert Harris; and our nephew, Charles Baker.

(Trainee should ask for the middle initials of all household members. Respondent's is "J"; Robert's is "K"; and Charles is "P.")

Q2 Enumerator**: Please look at list B on the information sheet. How is Robert related to you?**

Respondent: He's my husband.

Q2 Enumerator**: How is Charles related to you?**

Respondent: He's my nephew.

(Trainee should ask respondent if he had to pick a category from list B for Charles, which he would select.- *Select "other relative")*

Q3 Enumerator: **Are you male or female?**

Respondent: I'm female.

Q3 Enumerator: **Is Barbara male or female?**

Respondent: He's male.

Q3 Enumerator: **Is Charles male or female?**

Respondent: Male.

Q4 Enumerator: **What was your age on April 1, 2010? What is your date of birth?**

Respondent: I'm 60. February 2, 1958.

Q4 Enumerator: **What was Robert's age on April 1, 2010? What is this person's date of birth?**

Respondent: He's 57. December 16, 1954.

Q4 Enumerator: **What was Charles' age on April 1, 2010? What is this person's date of birth?**

Respondent: I don't know Charles' birthday. He's 16 years old.

Q5 Enumerator: **Please look at list C. Are you of Hispanic, Latino, or Spanish origin?**

Respondent: No.

Q5 Enumerator: **Is Robert of Hispanic, Latino, or Spanish origin?**

Respondent: No.

Q5 Enumerator: **Is Charles of Hispanic, Latino, or Spanish origin?**

Respondent: No.

Q6 Enumerator: **Please look at list D and choose one or more races. For this census,**

Hispanic origins are not races. What is your race?

Respondent: We're all African-American.

(Trainee should verify for each person.)

Q7 Enumerator: **Do you sometimes live or stay somewhere else for any of these reasons?**

In college housing;

In the military;

At a seasonal or second residence;

For child custody;

In jail or prison;

In a nursing home;

For another reason.

Respondent: No, we all live here most of the time.

(Trainee should verify for each person)

H1 Enumerator: **We do not want to miss any people who might have been staying here on**

April 1. Were there any additional people that you didn't mention, for example: Babies?

Respondent: No, it's just the three of us.

H1 Enumerator: **Foster children?**

Respondent: No.

H1 Enumerator: **Any other relatives?**

Respondent: No.

H1 Enumerator: **Roommates?**

Respondent: No.

H1 Enumerator: **Any other nonrelatives?**

Respondent: No.

H1 Enumerator: **How about anyone else staying here on April 1 who had no permanent place to live?**

Respondent: No.

H2   Enumerator: **Is this house-**

- **Owned by you or someone in this household with a**

   mortgage or loan (including home equity loans),

- **Owned free and clear (without a mortgage or loan),**

- **Rented, or**

- **Occupied without payment of rent?**

Respondent: We have a mortgage.

R1 Enumerator: **What is your name?**

(Enumerator may choose to verify this instead.)

Respondent: Barbara Harris

R2 Enumerator: **What is your phone number and the best time to call?**

Respondent: The number is 301-555-1234. Weekday mornings are the best.

Enumerator: **That's all I need. Thank you.**

(Respondent should now complete the Interview Summary as follows:

- **Enter"Occupied" in Item A**

- **Enter "03" in Item C**

- **Enter 'English' in item D.)**

That completes the process. Are there any questions?

(Answer questions)

Practice Scenario Two

Now we need to talk for a few minutes on how to handle vacant housing units. For example, apartments are often unoccupied. You can speak with the property manager about vacant units, and complete a questionnaire for them. By vacant units, we mean units that were unoccupied on **Census Day.** Even if someone is living there now, it may have been vacant on April 1, 2010. Until you ask a respondent at the time of your visit about the Census Day status of the unit, you don't know if the unit was vacant or occupied on April 1, 2010. If you think an address is unoccupied at the time of your visit, find a knowledgeable person to confirm the **present** status of the unit and, if vacant, the status of the unit on Census Day.

Let's pretend you are interviewing Rhonda Runway, the manager of the apartment building. You play the role of the interviewer, and I'll be Rhonda. The address we'll refer to is 16 Feline Lane, Apartment 2B.

Enumerator S1: **Hello, I'm** (N*ame*) **from the U.S. Census Bureau**. (*Show ID*) **Is this 16 Feline Lane, Apartment 2B?**

Respondent: Yes

Enumerator S2: **I'm here to complete a Census questionnaire for this address. It should take about 10 minutes.** (Trainee should hand respondent the information sheet.)
The first part explains that your answers are confidential. We will be referring to this handout throughout the interview. Did you or anyone in this household live here on April 1, 2010?

Respondent: No

Enumerator S4: **On April 1, was this unit vacant, or occupied by a different household?**

Respondent: No, it was vacant.

(Trainee should mark Question S4 as Vacant, and skip to R1 in the "Respondent Information" block on page 4.)

R1 Enumerator: **What is your name?**
(Enumerator may choose to verify this instead.)

Respondent: Rhonda S. Runway

R2 Enumerator: **What is your phone number and the best time to call?**

Respondent: The number is 641-222-2211. Evenings are best.

(Respondent should now complete the Interview Summary as follows:

- **Enter"Vacant- regular" in Item A)**

Enumerator: **Which category best describes this vacant unit as of April 1, 2010?**

For rent

For sale only

Respondent: (interrupts) For rent

Enumerator: **That's all I need. Thank you.**

(Respondent should continue to complete the Interview Summary as follows:
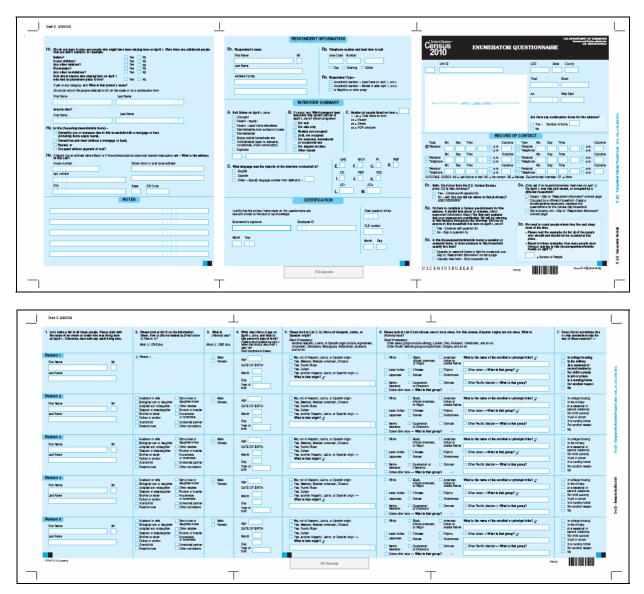
- **Enter "00" in Item C**

- **Enter 'English' in item D.)**

That concludes the training session. Do you have any last questions for me?

You can take a 10 minute break now to get a drink of water and go to the bathroom, then I'll take you to start some scenarios.

Appendix D

Front and back of NRFU form.

Appendix E

Front and back of NRFU Information Sheet.

United States Census 2010
INFORMATION SHEET

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU

Your Answers Are Confidential

Your answers are confidential and protected by law. All U.S. Census Bureau employees have taken an oath and are subject to a jail term, a fine, or both if they disclose ANY information that could identify you or your household. Your answers will only be used for statistical purposes, and for no other purpose. As allowed by law, your census data become public after 72 years. This information can be used for family history and other types of historical research.

You are required by law to provide the information requested. These federal laws are found in the United States Code, Title 13, (Sections 9, 141, 193, 214, and 221) and Title 44, (Section 2108). Please visit our Web site at <www.census.gov/privacy/> for additional information.

Thank you for your cooperation. The U.S. Census Bureau appreciates your help.

If you have any comments concerning the time it takes to complete this form or any other aspect of the collection, send it to: Paperwork Reduction Project 0607-0919-C, U.S. Census Bureau, AMSD-3K138, 4600 Silver Hill Road, Washington, DC 20233. You may e-mail comments to <Paperwork@census.gov>; use "Paperwork Project 0607-0919-C" as the subject.

Respondents are not required to respond to any information collection unless a valid approval number has been assigned by the Office of Management and Budget. The approval number for the 2010 Census is: OMB No. 0607-0919-C; Approval Expires 12/31/2011.

D-1(F) [6-17-2008]

U S C E N S U S B U R E A U

D-1(F) - Base prints Black Ink   D-1(F) - Tone prints Pantone Process Cyan 10% and 20%

List A

WHO TO COUNT ON APRIL 1st

We need to count people where they live and sleep most of the time.

Do NOT INCLUDE these people: (They will be counted at the other place)

- College students who live away from this address most of the year
- Armed forces personnel who live away
- People who, on April 1, 2010, were in a:
  – Nursing home, mental hospital, etc.
  – Jail, prison, detention center, etc.

INCLUDE these people:

- Babies and children living here, including foster children
- Roommates
- Boarders
- People staying here on April 1, 2010 who have no other permanent place to live

---

List B

RELATIONSHIP

- ☐ Husband or wife
- ☐ Biological son or daughter
- ☐ Adopted son or daughter
- ☐ Stepson or stepdaughter
- ☐ Brother or sister
- ☐ Father or mother
- ☐ Grandchild
- ☐ Parent-in-law
- ☐ Son-in-law or daughter-in-law
- ☐ Other relative

- ☐ Roomer or boarder
- ☐ Housemate or roommate
- ☐ Unmarried partner
- ☐ Other nonrelative

List C

HISPANIC, LATINO, OR SPANISH ORIGIN

- ☐ **No,** not of Hispanic, Latino, or Spanish origin
- ☐ Yes, Mexican, Mexican American, or Chicano
- ☐ Yes, Puerto Rican
- ☐ Yes, Cuban
- ☐ Yes, of another Hispanic, Latino, or Spanish origin – *For example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.*

List D

RACE
(Choose one or more races)

- ☐ White
- ☐ Black, African American, or Negro
- ☐ American Indian or Alaska Native
- ☐ Asian Indian
- ☐ Chinese
- ☐ Filipino
- ☐ Japanese
- ☐ Korean
- ☐ Vietnamese
- ☐ Other Asian – *For example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on.*
- ☐ Native Hawaiian
- ☐ Guamanian or Chamorro
- ☐ Samoan
- ☐ Other Pacific Islander – *For example, Fijian, Tongan, and so on.*
- ☐ Some other race

D-1(F) [6-17-2008]

D-1(F) - Base prints Black Ink   D-1(F) - Tone prints Pantone Process Cyan 10% and 20%

Appendix F

6 Scenarios (A-F).

Scenario A: 8 Member Household- Married couple with Son in college, Mother-in-law, Child >1,
Child
        <1, Nanny and Foster child
Scenario B: 7 Member Household- Housemates
Scenario C: 5 Member Household- Unmarried couple with 2 Children >1, and Brother of female
        partner
Scenario D: Not a household
Scenario E: Summer residence
Scenario F: Vacant

Scenario A: 8 Member Household- Married couple with Son in college, Mother-in-law, Child >1, Child <1, Nanny and Foster child

Interviewer makes a personal visit to the address.

Respondent: Please respond exactly as it appears below *in bold italics* (and act the part in parentheses).

Q S1: Hello, I'm [interviewer] from the U.S. Census Bureau. Is this [address]?
Yes, this is the correct address.

Q S2: Did you or anyone in this household live here on April 1, 2010?
Yes, I lived here on April 1, 2010.

Q S3: Is this house a vacation or seasonal home, or does someone in this household usually live here?
This is a year round residence.

Q S5: We need to count people where they live and sleep most of the time. How many people were living or staying in this house on April 1?
Um, let's see. (Count on your finger and in your head up to 8.) *8 people lived here.*

Q1: Let's make a list of all those people. Please start with the name of an owner or renter.
- *Martin Selish*
- *Barbara Selish*
- *Jason Selish*
- *Nancy Verso*
- *Robert Selish*
- *Alexandra Selish*
- *Julia Contreras*
- *Gabriel Marquez*

Ok, Martin. Are you male or female? *Male.* What was your age on April 1, 2010? *47* What is your date of birth? *February 22, 1963.* Please look at List C. Are you of Hispanic, Latino, or Spanish origin? *No.* Please look at List D and choose one or more races. What is your race? *White.* Do you sometimes live or stay somewhere else for any of these reasons? *No, I live here year round.*

Please look at List B. How is Barbara related to you? *She is my wife.* Is Barbara male or female? *She is female.* What was Barbara's age on April 1, 2010? (hesitate for a moment. Then respond.) *She was 43.* What is Barbara's date of birth? *October 21, 1966.* Is Barbara of Hispanic, Latino, or Spanish origin? *No. She is white.* What is Barbara's race? *Like I said, she is white.* Does Barbara sometimes live or stay somewhere else for any of these reasons? *No, she lives here year round.*

Please look at List B. How is Jason related to you? *He is my son.* Is Jason male or female? *He is male.* What was Jason's age on April 1, 2010? *He was 19.* What is Jason's date of birth? *January 9, 1991.* Is Jason of Hispanic, Latino, or Spanish origin? *No. He is white.* What is Jason's race? *White.* Does Jason sometime live or stay somewhere else for any of these reasons?

Well, he stays at college during the school year and lives here in the summer and on breaks. (If Participant inquires: ***Although school was in session, he was here, visiting on April 1st.***)

Please look at List B. How is Nancy related to you? ***She is my mother-in-law.*** Is Nancy male or female? ***She is female.*** What was Nancy's age on April 1, 2010? (Hesitate a bit.) ***Um, I believe she was 86.*** What is Nancy's date of birth? ***February 13, 1924.*** Is Nancy of Hispanic, Latino, or Spanish origin? ***No. She is white.*** What is Nancy's race? ***White.*** Does Nancy sometimes live or stay somewhere else for any of these reasons? ***Well, yes. She lives here on the weekends, but other times she stays in a nursing home.***

Please look at List B. How is Robert related to you? ***He is my son.*** Is Robert male or female? ***He is male.*** What was Robert's age on April 1, 2010? ***Um, let's see, he was 4.*** What is Robert's date of birth? ***September 8, 2005.*** Is Robert of Hispanic, Latino, or Spanish origin? ***No. He is white.*** What is Robert's race? ***White.*** Does Robert sometimes live or stay somewhere else for any of these reasons? ***No, he lives here year round with me and my wife.***

Please look at List B. How is Alexandra related to you? ***She is my daughter.*** Is Alexandra male or female? ***She is female.*** What was Alexandra's age on April 1, 2010? ***She was 6 months old.*** What is Alexandra's date of birth? ***November 2, 2009.*** Is Alexandra of Hispanic, Latino, or Spanish origin? ***No. She is white.*** What is Alexandra's race? ***White.*** Does Alexandra sometimes live or stay somewhere else for any of these reasons? ***No, she lives here year round with us.***

Please look at List B. How is Julia related to you? ***She is our nanny.*** (Participant should ask questions, as Nanny is not an option. Correct answer is Other Non-relative, but Responder should not give this answer). Is Julia male or female? ***She is female.*** What was Julia's age on April 1, 2010? ***I think she was 32.*** What is Julia's date of birth? ***September 25, 1977.*** Is Julia of Hispanic, Latino, or Spanish origin? ***I guess so. She is from Dominican Republic.*** What is Julia's race? ***Well, she is from Dominican Republic. But her skin is really dark.*** (Act a bit confused.) ***I guess she is Black.*** Does Julia sometimes live or stay somewhere else for any of these reasons? ***No, she lives here year round with us.***

Please look at List B. How is Gabriel related to you? ***She is our foster child.*** (Participant should ask questions, as Foster Child is not an option. Correct answer is Other Non-relative, but Responder should not give this answer). Is Gabriel male or female? ***She is female.*** What was Gabriel's age on April 1, 2010? ***She was 6.*** What is Gabriel's date of birth? ***July 15, 2003.*** Is Gabriel of Hispanic, Latino, or Spanish origin? ***Again, I'm not entirely sure. I guess so. She is Colombian.*** What is Gabriel's race? ***Well, she is Colombian, but she is very fair.*** (Act a bit confused.) ***So, I guess she is White?? Does that make sense?*** Does Gabriel sometimes live or stay somewhere else for any of these reasons? ***No, she lives here year round with us.***

Q H1: We do not want to miss anyone who might have been here on April 1, 2010. Were there any additional people we might have missed? ***Well, my baby Alexandra Selish.*** Is this home owned by you or by someone else with a mortgage, owned free and clear, rented or occupied without payment of rent? ***Owned by myself and my wife. We have a mortgage.*** What is the address of this unit? ***I'd rather not give that to you. You should have that already.***

Scenario B: <u>7 Member Household- Housemates</u>

Responder: Please respond exactly as it appears below *in bold italics* (and act the part in parentheses).

Q S1: Hello, I'm [interviewer] from the U.S. Census Bureau. Is this [address]?
Yes, this is the correct address.

Q S2: Did you or anyone in this household live here on April 1, 2010?
Yes, I lived here on April 1, 2010.

Q S3: Is this house a vacation or seasonal home, or does someone in this household usually live here?
We live here.

Q S5: We need to count people where they live and sleep most of the time. How many people were living or staying in this house on April 1?
Ok, let's see. (Count on your finger.) *7 people lived here.*

Q1: Let's make a list of all those people. Please start with the name of an owner or renter.
- o *Jorge Boscana*
- o *Jessica Jones*
- o *Sherri Mangum*
- o *Newar Mujeres*
- o *Miguel Avila*
- o *Sarah Lee*
- o *Nicholas Bidziil*

Ok, Jorge. Are you male or female? *Male.* What was your age on April 1, 2010? *27* What is your date of birth? *March 25, 1983.* Please look at List C. Are you of Hispanic, Latino, or Spanish origin? *Yes, I am from Puerto Rico.* Please look at List D and choose one or more races. What is your race? *White.* Do you sometimes live or stay somewhere else for any of these reasons? *No, I only live here.*

Please look at List B. How is Jessica related to you? *She's my housemate.* Is Jessica male or female? (Look confused.) *She is female.* What was Jessica's age on April 1, 2010? *She was 23.* What is Jessica's date of birth? *I don't know. Sorry.* Is Jessica of Hispanic, Latino, or Spanish origin? *No. She is white.* What is Jessica's race? *Like I said, she is white.* Does Jessica sometimes live or stay somewhere else for any of these reasons? *Well, she only lives her during college semesters. I guess she goes home after that. She lives somewhere in Nebraska. I don't know where though.*

Please look at List B. How is Sherri related to you? *She's my half sister.* Is Sherri male or female? (Look confused.) *She is female.* What was Sherri's age on April 1, 2010? *She was 23.* What is Sherri's date of birth *April 8, 1986.* Is Sherri of Hispanic, Latino, or Spanish origin? *Yeah, she is Puerto Rican.* What is Sherri's race? *She is African American.* Does Sherri sometimes live or stay somewhere else for any of these reasons? *No, she lives here year round.*

Please look at List B. How is Newar related to you? *He is also a housemate.* Is Newar male or female? *He is male.* What was Newar's age on April 1, 2010? *He was 26.* What is Newar's date

of birth? *I think it is June 24. I think he was born in 1983 like my brother. I'm not entirely sure.* Is Newar of Hispanic, Latino, or Spanish origin? *No, he is not Hispanic.* What is Newar's race? *He is Cambodian.* (If participant inquires about whether or not he is Other Asian: *I don't know. Cambodian*). Does Newar sometimes live or stay somewhere else for any of these reasons? *No, he lives here year round.*

Please look at List B. How is Miguel related to you? *He is my roommate.* Is Miguel male or female? *Male.* What was Miguel's age on April 1? *He was 23.* What is Migual's date of birth? *I don't know.* Is Newar of Hispanic, Latino, or Spanish origin? *He is Mexican.* What is Migual's race? *He is Mexican. But he is also Marshallese.* (If Participant inquires: (Look at information sheet and look for correct response.) *hmmm, I believe that is Pacific Islander.*) Does Miguel sometimes live or stay somewhere else? *No, he lives here all the time.*

Please look at List B. How is Sarah related to you? *She is also a housemate.* Is Sarah male or female? *She is female.* What was Sarah's age on April 1, 2010? *She was 25.* What is Sarah's date of birth? *I think it is February 5, 1985. That comes to mind for some reason.* Is Sarah of Hispanic, Latino, or Spanish origin? *No, she is White.* What is Sarah's race? *She is Korean.* Does Sarah sometimes live or stay somewhere else for any of these reasons? *No, she lives here year round.*

Please look at List B. How is Nicholas related to you? *He is a housemate.* Is Nicholas male or female? *He is male.* What was Nicholas's age on April 1, 2010? *He was 28.* What is Nicholas's date of birth? *I don't know.*   Is Nicholas of Hispanic, Latino, or Spanish origin? *No.* What is Nicholas's race? *He is Native American.* (If Participant inquires: *American Indian.* If participant inquires about tribe: *Navajo.*) Does Nicholas sometimes live or stay somewhere else for any of these reasons? *No, he lives here year round.*

Q H1: We do not want to miss anyone who might have been here on April 1, 2010. Were there any additional people we might have missed? *No.* Is this home owned by you or by someone else with a mortgage, owned free and clear, rented or occupied without payment of rent? *We all pay rent.* What is the address of this unit? *203 Park Place NW, Washington DC 20001.*

Scenario C: <u>5 Member Household- Unmarried couple with 2 Children >1, and Brother of mother</u>

Interviewer makes a personal visit to the address.
Respondent: Please respond exactly as it appears below *in bold italics* (and act the part in parentheses).

Q S1: Hello, I'm [interviewer] from the U.S. Census Bureau. Is this [address]?
Yes, this is the correct address.

Q S2: Did you or anyone in this household live here on April 1, 2010?
Yes, I lived here on April 1, 2010.

Q S3: Is this house a vacation or seasonal home, or does someone in this household usually live here?
We live here.

Q S5: We need to count people where they live and sleep most of the time. How many people were living or staying in this house on April 1?
Ok, um, 5 people lived here.

Q1: Let's make a list of all those people. Please start with the name of an owner or renter.
   o *Daniel Akaka*
   o *Ankti Catori*
   o *Jasmine Akaka*
   o *Hania Towers*

Ok, Daniel. Are you male or female? *Male.* What was your age on April 1, 2010? *31* What is your date of birth? *February 24, 1979.* Please look at List C. Are you of Hispanic, Latino, or Spanish origin? *No.* Please look at List D and choose one or more races. What is your race? *I am Hawaiian.* (If Participant inquires: *Native Hawaiian.*) Do you sometimes live or stay somewhere else for any of these reasons? *No, I live here year round.*

Please look at List B. How is Ankti related to you? *She is my girlfriend. So I guess that makes her my Unmarried Partner.* Is Ankti male or female? *She is female.* What was Ankti's age on April 1, 2010? *She was 30.* What is Ankti's date of birth? *March 14, 1980.* Is Ankti of Hispanic, Latino, or Spanish origin? *No. She is white.* What is Ankti's race? *She is American Indian.* (Participant should probe about what American Indian tribe. If so, respond: *Hopi*). Does Ankti sometimes live or stay somewhere else for any of these reasons? *Well, no. She lives here year round.*

Please look at List B. How is Jasmine related to you? *She is my daughter.* Is Jasmine male or female? *She is female.* What was Jasmine's age on April 1, 2010? *She was 2.* What is Jasmine's date of birth? *September 25, 2007.* Is Jasmine of Hispanic, Latino, or Spanish origin? *No. She is white.* What is Jasmine's race? *She is Hawaiian and American Indian, Hopi.* Does Jasmine sometimes live or stay somewhere else for any of these reasons? *No. She lives here year round.*

Please look at List B. How is Hania related to you? *She is my girlfriend's daughter. So that makes her ummmm* (hesitate a moment as you look at the information sheet.) *Other Non-Relative?* Is Hania male or female? *She is female.* What was Hania's age on April 1, 2010? *She*

was 8. What is Hania's date of birth? *October 27, 2001.* Is Hania of Hispanic, Latino, or Spanish origin? *No. She is white.* What is Jasmine's race? *She is American Indian, Hopi.* Does Hania sometimes live or stay somewhere else for any of these reasons? *Yes. She lives here most of the time but spends many weekends at her father's house.*

Q H1: We do not want to miss anyone who might have been here on April 1, 2010. Were there any additional people we might have missed? *Yes. My girlfriend's brother lived here January to June. His name is William Catori and he is 27 years old.* Is this home owned by you or by someone else with a mortgage, owned free and clear, rented or occupied without payment of rent? *I own it.* What is the address of this unit? *You should have that information. I am not going to give it to you.*

Scenario D: <u>Not a household</u>

Interviewer makes a personal visit to the address.

Respondent: Please respond exactly as it appears below *in bold italics* (and act the part in parentheses).

Q S1: Hello, I'm [interviewer] from the U.S. Census Bureau. Is this [address]?
Yes, this is the correct address.

Q S2: Did you or anyone in this household live here on April 1, 2010?
No, no one lived here on April 1, 2010.

Q S3: Is this house a vacation or seasonal home, or does someone in this household usually live here?
This is a dentist's office.

Scenario E: <u>Summer residence</u>

Interviewer makes a personal visit to the address.

No one is home. The neighbor is outside. Interviewer talks to the neighbor.

Respondent: Please respond exactly as it appears below ***in bold italics*** (and act the part in parentheses).

Q S1: Hello, I'm [interviewer] from the U.S. Census Bureau. Is this [address]?
Yes, that is the correct address.

Q S2: Did you or anyone in this household live here on April 1, 2010?
The family was here in April. I am not sure about April 1. They usually are here every year April to June.

Q S3: Is this house a vacation or seasonal home, or does someone in this household usually live here?
I guess this is just a seasonal home for them. I only see them April through June.

Scenario F: <u>Vacant</u>

Interviewer makes a personal visit to the address.

No one is home. There is a "For Sale" sign in the front yard. The neighbor is outside. Interviewer talks to the neighbor

Respondent: Please respond exactly as it appears below *in bold italics* (and act the part in parentheses).

Q S1: Hello, I'm [interviewer] from the U.S. Census Bureau. Is this [address]?
Yes, that is the correct address.

Q S2: Did you or anyone in this household live here on April 1, 2010?
No one has lived there since about November.

Q S3: Is this house a vacation or seasonal home, or does someone in this household usually live here?
The house has been on the market for some time now. It is still for sale.

Appendix G

Post-Scenario Performance Questionnaire
For Scenario A

1. Refer to person #6. On question #4, the responder said that this person was 6 months old on April 1, 2010. What were you thinking when the responder answered this way? How did you fill in her age?

2a. Refer to person #7. For question #2, the responder said that this person was their nanny. What were you thinking when the responder said this? What did you check for question #2 where it asks what this person's relation is to the responder?

2b. For questions #5 and #6, the responder said that this person is from The Dominican Republic. What were you thinking about when the responder said that this person is from The Dominican Rupublic? How did you fill in question #5 (ethnicity)? How did you fill in question #6 (race)?

3a. Refer to person #8. For question #2, the responder said that this person was a foster child. What were you thinking when the responder said this? What did you check for question #2 where it asks what this person's relation is to the responder?

3b. For questions #5 and #6, the responder said that this person is Colombian. What were you thinking about when the responder said that? How did you fill in question #5 (ethnicity)? How did you fill in question #6 (race)?

4. How did you feel about navigating onto the second page for the additional people that did not fit on the first page? Tell me what your thoughts were.

[Note to Test Administrator: Note any hesitation and/or confusion and record questions to ask below. Use back of page if needed.]
5.

6.

7.

Do you have any other comments about this particular scenario and using the form to fill in all of the information?

Post-Scenario Performance Questions
For Scenario B

1. Refer to person #2. For question #7, the responder said that this person lives here only during college semesters. What were you thinking when the responder said that? What did you mark for question #7 (lives somewhere else)?

2. Refer to person #4. For question #6, the responder said that this person is Cambodian. What were you thinking when the responder said that? How did you fill in question #6 (ethnicity)?

3. Refer to person #5. For question #5 and #6, the responder said that this person is Mexican and Marshallese. What were you thinking when the responder said that? How did you fill in question #5 (race) and question #6 (ethnicity)?

4. Refer to person #7. For question #6, the responder said that this person was Native American (*if the participant DID ask about tribe:* from the Navajo tribe). What were you thinking when the responder said that this person was Native American? How did you fill in question #6 (ethnicity and tribe)?

[Note to Test Administrator: Note any hesitation and/or confusion and record questions to ask below. Use back of page if needed.]
5.

6.

7.

Do you have any other comments about this particular scenario and using the form to fill in all of the information?

Post-Scenario Performance Questions
For Scenario C

1. Refer to person #2. For question #6, the responder said that this person is American Indian (***if the participant DID ask about tribe:*** from the Hopi tribe). What were you thinking when the responder said that this person was American Indian? How did you fill in question #6 (ethnicity and tribe)?

2. Refer to person #3. For question #6, the responder said that this person is Native Hawaiian and American Indian (***if the participant DID ask about tribe:*** from the Hopi tribe). What were you thinking when the responder said that this person was both Native Hawaiian and American Indian? How did you fill in question #6 (ethnicity and tribe)?

3. Refer to person #4. For question #7, the responder said that this person lives here most of the time but spends some weekends with her father in another home. What were you thinking when the responder said that? How did you mark question #7?

4. On the back, refer to question #H1. The responder said that his wife's brother lived in the home on April 1, 2010. What were you thinking when the responder said this? How did you mark this question?

[Note to Test Administrator: Note any hesitation and/or confusion and record questions to ask below. Use back of page if needed.]
5.

6.

7.

Do you have any other comments about this particular scenario and using the form to fill in all of the information?

Post-Scenario Performance Questions
For Scenario D

1. Refer to question #S2. The responder said that she did not live here on April 1, 2010. What were you thinking when the responder said that?

[Note to Test Administrator: Note any hesitation and/or confusion and record questions to ask below. Use back of page if needed.]
2.

3.

4.

Do you have any other comments about this particular scenario and using the form to fill in all of the information?

Post-Scenario Performance Questions
For Scenario E

1. Refer to question #S2. The responder said that the family is usually there April through June every year. What were you thinking when the responder said that?

[Note to Test Administrator: Note any hesitation and/or confusion and record questions to ask below. Use back of page if needed.]
2.

3.

4.

Do you have any other comments about this particular scenario and using the form to fill in all of the information?

Post-Scenario Performance Questions
For Scenario F

1. Refer to question #S2. The responder said that no one has lived in this house since November 2009. What were you thinking when the responder said that?

2. Refer to question #S4. What were you thinking when the responder said that the unit was vacant?

[Note to Test Administrator: Note any hesitation and/or confusion and record questions to ask below. Use back of page if needed.]
3.

4.

5.

Do you have any other comments about this particular scenario and using the form to fill in all of the information?

Appendix H

Satisfaction Questionnaire.

Please circle one number for each item that most appropriately reflects your impressions about using the Census 2010 form.

1. **Filling in the form can be performed in a straight-forward manner:**
   Never   Always

   1   2   3   4   5   6   7

2. **Organization of information on the form:**
   Confusing   Very clear

   1   2   3   4   5   6   7

3. **Use of terminology throughout the form:**
   Confusing   Very clear

   1   2   3   4   5   6   7

4. **Information on the form:**
   Inadequate   Adequate

   1   2   3   4   5   6   7

5. **Census Bureau-specific terminology:**
   Too frequent   Appropriate

   1   2   3   4   5   6   7

6. **Characters (e.g., letters, numbers, parentheses) on the form:**
   Hard to read   Easy to read

   1   2   3   4   5   6   7

7. **Learning to use the form:**
   Difficult   Easy

   1   2   3   4   5   6   7

8. **Questions on the form:**
   Confusing   Very clear

   1   2   3   4   5   6   7

9. **Navigating through the form (going from one question to the next):**
   Impossible   Easy

   1   2   3   4   5   6   7

10. **When I had to skip questions (going from one question to the next):**
    Impossible   Easy

    1   2   3   4   5   6   7

11. **Instructions on the form:**
    Confusing   Very clear

    1   2   3   4   5   6   7

12. Writing answers in boxes:
Confusing   Very clear

1   2   3   4   5   6   7

13. Use of arrows pointing to boxes on form:
Confusing   Very clear

1   2   3   4   5   6   7

14. Overall reactions to the form:
Terrible   Wonderful

1   2   3   4   5   6   7

Frustrating   Satisfying

1   2   3   4   5   6   7

Difficult   Easy

1   2   3   4   5   6   7

15. Please add any additional comments. Please specify any difficulties. Use back of paper if necessary.

Appendix I

Debriefing Questionnaire.

1. Can you walk me through your thinking on why you marked (a particular QUIS item) especially low/high? (Do this for several low/high QUIS ratings).

2. What did you like best about the questionnaire?

3. What did you like least about the questionnaire?

4. Is there anything that you feel should be changed (probe)?

5. Is there anything that you feel should stay the same (probe)?

6. How easy or difficult do you feel it was to record the responses? What made recording responses easy or difficult?

7. Is there anything you would like to mention that we have not talked about?

8. Additional Comments:

Appendix J

Standard Form 1034 September 1973 Treasury FRM 2000	PUBLIC VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL		VOUCHER NO.

U.S. DEPARTMENT, BUREAU OR ESTABLISHMENT AND LOCATION	DATE VOUCHER PREPARED	SCHEDULE NO.
U.S. Department of Commerce Bureau of the Census Washington, DC 20233-9100	CONTRACT NUMBER AND DATE	PAID BY
	REQ. NUMBER AND DATE	

PLEASE PRINT NAME & ADDRESS BELOW:

PAYEE'S NAME AND ADDRESS	DATE INVOICE RECEIVED
	DISCOUNT TERMS
	PAYEE'S ACCOUNT NUMBER

SHIPPED FROM	TO	WEIGHT	GOVERNMENT B/L NUMBER

NUMBER AND DATE OF ORDER	DATE OF DELIVERY OR SERVICE	ARTICLES OR SERVICES *(Enter description, item number of contract or Federal supply schedule, and other information deemed necessary)*	QUAN-TITY	UNIT PRICE COST	UNIT PRICE PER	AMOUNT
		For participating in a usability test as part of research on the Census forms Usability Laboratory Center for Survey Methods Research Statistical Research Division Received by:_____ Date: _____				$80.00

(Use continuation sheet(s) if necessary)   (Payee must NOT use the space below)

TOTAL

PAYMENT: ☐ COMPLETE ☐ PARTIAL ☐ FINAL ☐ PROGRESS ☐ ADVANCE	APPROVED FOR $80.00	EXCHANGE RATE = $1.00	DIFFERENCES	
	BY:			
	TITLE:		Amount verified correct for	$80.00
			(Signature or initials)	

Pursuant to authority vested in me, I certify that this voucher is correct and proper for payment

_____   _____   Social Science Analyst

(Date)   (Authorized Certifying Officer)   (Title)

ACCOUNTING CLASSIFICATION	
Project/Task: 5907054-000; Organizational Code: 11-29-0091-50-50-00-00; Obj. Class: 25-20-04-00	
CHECK NUMBER ON TREASURER OF THE UNITED STATES	CHECK NUMBER ON (Name of Bank)
CASH DATE	PAYEE
PER	TITLE

Appendix K

Usability Issues Organized by Priority.

High Priority: These problems bring the test participant to a standstill. He or she is not able to complete the task.

- Question #6: Please look at List D and choose one or more races. For this census, Hispanic origins are not races. What is (NAME)'s race?
- Maneuvering the Form and Binder
- Using the Continuation Form

Moderate Priority: These problems cause some difficulty or confusion, but the test participant is able to complete the task.

- Question #2: Please look at list B on the Information sheet. How is (NAME) related to (PERSON 1)?
- Question #4: What was (NAME)'s age on April 1, 2010? What was this person's date of birth?

Low Priority: These problems cause minor annoyances but do not interfere with the flow of the tasks.

- Question #5: Please look at List C. Is (NAME) of Hispanic, Latino, or Spanish origin?
- Question #7: Does (NAME) sometimes live or stay somewhere else for any of these reasons? In college housing; In the military; At a seasonal or second residence; In jail or prison; In a nursing home; For another reason.
- Question #H1: We do not want to miss any people who might have been staying here on April 1. Were there any additional people that you didn't mention, for example: Babies? Foster children? Any other relatives? Roommates? Any other nonrelatives? How about anyone else staying here on April 1 who had no permanent place to live?
- Question #H2: Is this (house/apartment/mobile home) – Owned by you or someone else in this household with a mortgage or loan (including home equity loans), Owned free and clear (without a mortgage or loan), Rented, or Occupied without payment of rent?
- Average Time to Complete Interviews

Appendix L

Impromptu Meeting to discuss Form Folding of D-1(E) based on observations of the Cognitive Testing of the D-1(E) form

D. Coon: I want to thank Jennifer for pulling together selected video clips of folding issues on such short notice and I want to thank everyone for coming to this meeting on such short notice.

Attendees:
David Coon, Bob Packard, Stephanie Smilay, Keith Woodling (DMD)
Joyce Armstrong, Tony Lesko, Ray Muenzer, Mark Wolfram (DACMO)
Betty Murphy, Jennifer Romano (SRD)
Mario Hendricks (Lockheed Martin)

David explained that the meeting was called because of an action item from today's 2010 Planning meeting.

Evidently, there was concern from the 2010 Planning meeting that Lockheed should be invited to observe videos of the cognitive testing of the D-1(E) enumerator form to see how enumerators (test subjects) folded forms other than intended when placed on their binder conducting the enumeration.

Jennifer Romano showed selected videos of test subjects (enumerators) folding the forms in various ways. Essentially, the enumerators (test subjects) folded the names panel to be visible particularly when completing Race (Question 6) and Coverage (Question 7)

It was noted that test subject enumerators only underwent one hour of training, and the training did not cover data capture related issues (like how to correct mistakes, how to use the pencil, write in all uppercase, do not fold the forms etc.)

It was also noted that such folding might not be as necessary for a 1 or 2 person household and all of the scripted scenarios had households with more people.

There was lots of discussion of potentially re-designing the forms, but Keith noted that because of guidance from OMB that we cannot separate Race and Hispanic Origin questions, this could limit our redesign options. There was also discussion of a different folding pattern of the current forms design (such as adding a horizontal cross fold or folding the names panel), but this could introduce more problems than it could solve.

There was also a suggestion of an enumerator clipboard and a method by which the forms could be clipped to an enumerator clipboard to reduce folding and awkwardness of completing the forms.

We looked at the actual forms filled out as a part of the test, and while there were some visible folds, there were no sharp creases evident, and it didn't appear as though there would be monumental problems in scanning such forms. Note that these forms had been sitting (properly folded) in folders for a few weeks, so some of the enumerator introduced folds may have had sufficient time to settle out. Bob noted that for ACS, they used chip board and rubber bands to flatten out ACS booklets prior to scanning and this is something we may need to consider pending the testing (noted below).

Several observed though that the awkwardness of navigating the form and handling it on an undersized binder could contribute to poorer handwriting of enumerators. More keying from enumerator forms (to account for poorer handwriting) has already been assumed in Lockheed modeling assumptions based on Census 2000, but perhaps this is not enough because of the greater awkwardness of this 25½" form versus the 18" form used last time.

Lockheed would like to test some enumerator forms through their scanners. When they receive the printed versions of the current 2010 design for enumerator forms in a few weeks, they will have some filled out standing up with a binder, and introduce folds to test these and see if there appears to be a significant effect on scanner throughput.

At the present time, based on the limited information we have right now, it does not seem or appear like folds introduced by enumerators (if they are similar to those introduced by the test subjects in this study) will present monumental issues for Lockheed. But we won't know definitively until Lockheed does further testing.

If these folded forms significantly slow scanner throughput, they may have to add an extra third shift of scanning. Mario reported that the cost of a third shift runs approximately $590K per night of third shift scanning.