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2022 AMERICAN COMMUNITY SURVEY RESEARCH AND EVALUATION
REPORT MEMORANDUM SERIES #ACS22-RER-06

MEMORANDUM FOR   ACS Research and Evaluation Workgroup

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Subject: 2022 ACS Content Test: Round 3 Cognitive Testing Results

Attached is the final American Community Survey (ACS) Research and Evaluation report, "Cognitive Testing for the 2022 ACS Content Test, Round 3 Briefing and Recommendations Report."

Working through the Office of Management and Budget (OMB) Interagency Committee for the ACS, the Census Bureau solicited proposals from federal agencies to change existing or add new questions to the ACS. These proposed changes are tested according to the ACS content change process. Changes are pretested using cognitive testing methods before field testing.

To evaluate the proposed content, RTI International and Research Support Services Inc. conducted cognitive testing for the Census Bureau. This report summarizes the results from the third round of cognitive testing, focusing on group quarters facilities and individuals in Puerto Rico. The following topics were tested:

- Household Roster
- Septic Systems (sewer)
- Electric Vehicles
- Home Heating Fuel
- Solar Panels
- Condominium and Homeowners Association Fees
- Supplemental Nutrition Assistance Program (SNAP)
- Educational Attainment
- Health Insurance Coverage
- Disability
- Means of Transportation to Work
- Labor Force (weeks worked)
- Income

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Cognitive Testing for the 2022 ACS Content Test

Round 3 Briefing and Recommendations Report

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Overview: Round 3 Briefing and Recommendations

Project Background

Call Order 1, cognitive testing for the 2022 American Community Survey (ACS) Content Test Items, is designed to help the Census Bureau cognitively test new and revised questions in 10 topic areas in English and Spanish to ensure that they meet the Census Bureau Pretesting Standards and the Census Bureau Guidelines for Translation. The proposed research will help the Census Bureau determine which new or revised questions should be used in a subsequent field test and whether the participants who read the Spanish-translated documents have a similar understanding of the question intent as the English-speaking participants. The cognitive interviews are also designed to evaluate how well the questions perform in both self-administered and computer-assisted interviewing (CAI) modes.

To test the ACS questions in each group fully, the initial goal was to conduct 247 cognitive interviews in English and 180 interviews with monolingual Spanish speakers across three rounds, with the following target interview numbers: at least 128 English interviews and 60 Spanish interviews in Round 1, 114 English interviews and 72 Spanish interviews in Round 2, and 32 English interviews and 60 Spanish interviews in Round 3. In Round 1, 104 English interviews and 33 Spanish interviews were completed. In Round 2, 121 (unique)[1] English interviews and 72 Spanish interviews were completed. This produced a total of 225 English interviews and 105 Spanish interviews for the first two rounds combined.

The first two rounds involved pretesting question topics in the context of the ACS Housing Unit survey. Round 3 involved pretesting question topics in the context of the ACS Group Quarters (GQ) survey and the Puerto Rico Community Survey (PRCS). All Round 3 GQ interviews were conducted in English with participants who lived in a GQ either currently or in the recent past, and all Round 3 PRCS interviews were conducted in Spanish with participants who resided in Puerto Rico and screened as either monolingual or bilingual Spanish speakers. Initially, Spanish interviews with residents of Puerto Rico were only conducted with participants who screened as monolingual Spanish speakers, but this criterion was removed during Round 3, and some Spanish interviews were conducted with bilingual speakers.

Round 3 Methodology

This section provides an overview of the recruitment and interviewing methodologies used during Round 3 of data collection. The subsections below present an overview of

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[1] One Round 2 participant who met the sub-characteristic criteria for not having any formal education was interviewed a second time to administer the Education questions in Group 2. This participant had previously completed a full interview for another question group. In all relevant tables in this report, this participant is only counted once as a unique participant.

recruitment strategies and advertisements; an overview of interview protocols and procedures; a description of the protocol changes made to accommodate virtual interviewing; and a description of how participants were assigned to interview group, version, and mode.

Overview of Round 3 Recruitment Methods

The original plans for Round 3 were as follows:

1. To recruit facilities and institutions covering the various types of institutional and non-institutional GQ units and interview residents in person at these facilities and institutions. Institutional GQs included correctional facilities like prisons and jails and nursing home or long-term care facilities. Non-institutional GQs included college/ university dormitories, military quarters/barracks, group homes, and transitional or emergency shelters.

2. To recruit monolingual Spanish-speaking participants who reside in Puerto Rico and interview them in person at community organizations and other convenient locations in Puerto Rico.

Because of the COVID-19 global pandemic and associated travel and access restrictions, in-person interviewing was not possible for most of the GQ participants and all of the PRCS participants during Round 3. Like Rounds 1 and 2, most Round 3 participants were recruited to complete virtual interviews via videoconference software or, when necessary, telephone interviews. The only Round 3 participants interviewed in person were clients of an organization that serves people recently released from prison or jail.

The recruitment plan for Round 3 involved three main components:

1. The Census Bureau and RTI International/Research Support Services (RSS) developed plans and materials for a recruitment pretest, to be cleared by the Office of Management and Budget (OMB) and implemented about 6 weeks before the start of data collection. The goal of the pretest was to identify any barriers and challenges to recruitment for each type of GQ and for PRCS participants. The results of this pretest also informed potential contingency plans for recruiting specific GQ types and PRCS participants.

2. Based on the recruitment pretest and other considerations, RTI/RSS worked with the Census Bureau to develop multiple contingency plans for recruiting specific GQ types and PRCS participants. These contingency plans were included in the OMB clearance materials for Round 3 so that RTI/RSS could implement them as needed and with Census Bureau approval.

3. During Round 3 recruitment and interviewing, RTI/RSS closely monitored recruitment plans for GQ units and PRCS participants and communicated with the Census Bureau any approaches that were not working as anticipated. RTI/RSS recommended to the Census Bureau when specific contingency plans should be considered, and the Census Bureau approved each specific contingency plan. In addition, for initial or contingency recruitment plans that were taking considerable time to implement, RTI/RSS also attempted multiple strategies within these plans to keep data collection on schedule.

Prior to data collection, RTI/RSS provided the Census Bureau with an updated Study and Recruitment Plan focused on meeting Round 3 goals for GQ and PRCS recruitment. During Round 3 data collection, RTI/RSS provided the Census Bureau with a weekly recruitment and interviewing progress update report most weeks that reflected results to date. For Round 3, RTI/RSS modified this report to track the recruitment and interviewing results most relevant to the goals for GQ and PRCS data collection. During Round 3, RTI/RSS relied primarily on community-based recruiting to implement the main and contingency plans for recruiting and interviewing GQ residents. We also posted online advertisements on Craigslist to recruit GQ residents as a part of the contingency recruiting effort. Similarly, RTI/RSS conducted community-based recruiting for PRCS interviews, seeking assistance from local community organizations in Puerto Rico to recruit residents for interviews. We also posted a targeted recruitment advertisement in print and online versions of a local newspaper in Puerto Rico to supplement the contingency plan.

Given that most Round 3 interview participants could not be interviewed in person in a GQ facility or in their local area, online advertisements were used to recruit residents of some GQ types and residents of Puerto Rico. ***Appendix A*** provides example recruitment ads.

The access restrictions to most types of GQs were addressed by a set of contingency plans for each specific type of GQ. ***Table OV.1*** presents recruitment criteria that were expected to be particularly challenging for residents of specific types of GQ units and suggestions for alternate recruitment approaches. For each type of GQ, contingency plans described in the table were implemented sequentially. That is, if the original plan could not be implemented, RTI/RSS requested Census Bureau permission to move to the first contingency plan and then, if necessary, a second contingency plan.

Table OV.1. Specific Recruitment Strategies and Contingency Plans for Hard-to-Reach GQ Unit Residents

GQ Population	Recruitment Strategies and Contingency Plans
Residents of nursing homes/long-term care facilities	▪ Because of COVID-19 concerns, most facilities are unlikely to be open for any type of onsite research, so nursing homes/long-term care facilities will likely need to allow for remote interviews with residents to be recruited for Round 3. So, the first contingency plan would be to recruit nursing homes/long-term care facilities to interview residents remotely. This would ideally involve the facilities setting up a computer and/or telephone in a private room to facilitate interviews. Many residents might have tablets or smartphones that they could use to participate in an interview. ▪ If a sufficient number of nursing homes/long-term care facilities cannot be recruited for remote interviews, the second contingency plan would be to identify and contact (1) assisted living facilities and/or (2) local senior centers (that are open) and work with them to develop acceptable methods to recruit the seniors they serve for interviews. This could include asking either type of organization to post a recruitment ad on a bulletin board or email the information to their email list. RTI/RSS would prioritize assisted living facilities and include a screening question on age to recruit participants aged 65 or older, to ensure that these participants are similar in age to nursing home/long-term care residents. In addition, screening questions on disability items (questions 39, 39.1, and 39.2 from Round 2) would be included in the screener to prioritize recruits who answer "yes" to at least one of these disability questions.

(continued)

Table 1. **Specific Recruitment Strategies and Contingency Plans for Hard-to-Reach GQ Unit Residents (continued)**

GQ Population	Recruitment Strategies and Contingency Plans
Inmates in prisons or jails	▪ Because of COVID-19 concerns, many state Boards of Correction have put review of all data collection requests on hold, making direct or indirect access to inmates infeasible. ▪ The first contingency plan would be to focus on local jails, which do not require access through federal or state Boards of Correction, and work with these facilities to interview inmates remotely. This would require the facilities to have a private room/area to facilitate telephone interviews, which some might not have. ▪ If a sufficient number of local jails cannot be recruited for remote interviews, the second contingency plan would be to identify and contact local organizations that assist people released from prison or jail and work with these organizations to develop acceptable methods to recruit their patrons for interviews. Under this contingency plan, we would (1) recruit males aged 25 to 44 who have been in prison or jail within the past 12 months and (2) add interview probes to ask these participants what their answers would have been during their most recent time in prison/jail.
Residents of military quarters/barracks	▪ Recruiting residents of military housing would require completion of military facility approval processes for this research, which likely will not be possible because of COVID-19 concerns. The first contingency plan would be to complete the same recruitment process with military bases but offer to conduct interviews remotely. ▪ If a sufficient number of military bases cannot be recruited for remote interviews, the second contingency plan would be to use online methods to recruit active-duty military personnel who do <u>not</u> currently live in a barracks unit but did so within the past few years. The time frame for living in a military barracks would be within the past 12 months and the age range would be 18 to 24 years old, to maximize the demographic similarity between these recruits and current residents of military barracks. Recruits could also include veterans who have recently left military service with the same screening criteria specified to avoid recruiting participants with demographics that are significantly different from current residents of military barracks.
Residents of group homes	▪ Recruiting residents of group homes would require completion of facility approval processes. On-site access could be denied because of COVID-19 concerns. The contingency plan would be to recruit group homes for remote interviews using a computer and/or telephone in a private space.

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1. Group Quarters (GQ) Goals and Protocols

One goal of Round 3 data collection was interviewing residents of institutional and non-institutional GQs in English. Institutional GQ units include prisons/jails and nursing homes/long-term care facilities. Non-institutional GQ units include military barracks, group homes, emergency or transitional shelters, and college/university dormitories. Round 3 GQ interviews tested questions on six topics for institutional GQs and seven topics for non-institutional GQs.[2] The six topics for all GQ types were educational attainment, health insurance coverage, weeks worked, income, disability, and SNAP participation. The seventh topic, asked only of participants from non-institutional GQs, was means of transportation to work. To keep the interview timing reasonable for each participant, these questions were organized into three groups. For each group, interviewers administered all applicable questions, but only probed on <u>four or five</u> of the question topics. This approach ensured that each topic was probed in two of the three groups. The GQ question topics were organized into the following groups for institutional GQs and non-institutional GQs:

Institutional GQs

Group 1 Topics Probed:

- – Educational Attainment
- – Health Insurance Coverage
- – Weeks Worked
- – Income

Group 2 Topics Probed:

- – Educational Attainment
- – Disability
- – Weeks Worked
- – SNAP Participation

Group 3 Topics Probed:

- – Health Insurance Coverage
- – Disability
- – Income
- – SNAP Participation

Non-Institutional GQs

Group 1 Topics Probed:

- – Educational Attainment

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[2] Household roster, electric vehicles, septic systems, condominium and HOA fees, solar power, and home heating fuel topics are not administered in the GQ questionnaire.

– Health Insurance Coverage

– Means of Transportation to Work

– Income

– Weeks Worked

Group 2 Topics Probed:

– Educational Attainment

– Disability

– Means of Transportation to Work

– Weeks Worked

– SNAP Participation

Group 3 Topics Probed:

– Health Insurance Coverage

– Disability

– Income

– SNAP Participation

The target population for GQ interviews was English-speaking adults (aged 18 or older) who lived or recently lived in GQ facilities. The goal for GQ data collection was to conduct 36 interviews distributed fairly evenly and appropriately across the GQ types, CAI versus paper mode, and question groups. Although the goal was to conduct 36 interviews, a total of 29 interviews were conducted, primarily because only one interview was conducted with participants representing nursing homes/long-term care facilities, and no interviews were conducted with participants living in emergency shelters because of access limitations mainly from COVID-19 infection rates. Additionally, no interviews were conducted with participants living in military barracks because the military bases contacted did not grant the request for research or had policies in place that prohibited outside researchers.

In addition, several specific criteria were applied in the recruitment of college students living in dormitories. Recruits who fulfilled one or more of the criteria below were prioritized for interview selection. In the following list, the relevant question topic for each characteristic is indicated in parentheses:

▪ Worked for pay in the last year, with a target of half of participants living in college or university dorms (means of transportation to work, weeks worked)

▪ No health insurance coverage (health insurance)

▪ Marketplace enrollees (health insurance)

▪ Persons with dental, drug, or vision plans (health insurance)

▪ Used ride-hailing services for commuting to work (means of transportation to work)

- Had side-gigs or self-employment (income)

- Received public assistance or SNAP (income, SNAP)

For all GQ participants, numbers for each of the characteristics below were tracked and reported for completed interviews. Recruits who met one or more of these characteristics were favored in selection and scheduling, but willing recruits who did not meet any of these characteristics were selected and scheduled when those who met specific criteria could not be reached or declined to participate. No specific targets for participants who met one or more of these characteristics were established.

- Worked for pay in the last year (means of transportation to work, weeks worked)

- Persons aged 65 or older (health insurance)

- Persons enrolled in Medicaid (or other plans for people with low incomes) (health insurance)

- Uninsured persons (no health insurance coverage) (health insurance)

- Marketplace enrollees (health insurance)

- Persons with dental, drug, or vision plans (health insurance)

- Used ride-hailing services for commuting to work (transportation to work)

- Had side-gigs or self-employment (income)

- Received public assistance or SNAP (income, SNAP)

- Persons who have never attended school or who never completed any grade of formal school (education)

- Persons who have dropped out of high school without a diploma or GED or equivalent (education)

A total of 29 GQ interviews were completed in Round 3. **Tables 1.1** through **1.4** provide key participant demographics for the final set of Round 3 GQ interview participants.

Table 1.1.   Age and Sex of GQ Participants

Age Group and Sex	Completed Interviews[a]	
	Frequency	**Percentage**
Age Group		
18–20	11	37.9
21–30	6	20.7
31–40	3	10.3
41–50	5	17.2
51–60	1	3.4
61–70	3	10.3
Total	**29**	**100**
Sex		
Male	17	58.6
Female	12	41.4
Total	**29**	**100**

[a] Based on 29 unique GQ participants who were not monolingual Spanish speakers.

Table 1.2.   Hispanic/Latino Ethnicity of GQ Participants

Hispanic/Latino Ethnicity	Completed Interviews[a]	
	Frequency	**Percentage**
Non-Hispanic/Latino	25	86.2
Hispanic/Latino	5	17.2
Total	**30**	**100**

[a] Based on 29 unique GQ participants who were not monolingual Spanish speakers.

Table 1.3.   Race of GQ Participants

Race	Completed Interviews[a]	
	Frequency	**Percentage**
White	14	48.3
Black or African American	10	34.5
American Indian or Alaska Native	1	3.4
Asian	5	17.2
Other	2	6.9
Total	**32[b]**	**–**

[a] Based on 29 unique GQ participants who were not monolingual Spanish speakers.

[b] The 32 completed interviews reflect the total count of responses because some participants selected
   multiple races.

Table 1.4.   Education of GQ Participants

Education	Completed Interviews[a]	
	Frequency	**Percentage**
High school diploma	11	37.9
Some college, no degree	13	44.8
Associate's degree (AA, AS, or equivalent)	3	10.3
Bachelor's degree (BA, BS, or equivalent)	2	6.9
Total	**29**	**100**

[a] Based on 29 unique GQ participants who were not monolingual Spanish speakers.

The distribution of GQ interviews by institutional versus non-institutional type and by survey mode is presented in ***Table 1.5***.

Table 1.5.   GQ Interviews by Institutional/Non-institutional Type and Mode

GQ Type	Mode		Total
	Paper	**CAI w/ Flashcards**	
Institutional	0	8	8
Non-institutional	12	9	21
Totals	**12**	**17**	

In Round 3, GQ participants were interviewed who indicated having the characteristics of interest in their screener responses, as detailed in ***Table 1.6***.

Table 1.6.   Characteristics Tracked and Results for All GQ Participants

Characteristics Tracked[a]	Completed
Health Insurance Coverage	
▪ Enrolled in Medicaid	8
▪ Persons with dental, drug, or vision plans	20
Means of Transportation to Work	
▪ Individual uses ride-hailing (Lyft/Uber/other) to get to work	2
Income and Weeks Worked	
▪ Worked for pay in prior year	29
▪ Earned self-employment income in prior year	4
▪ Received public assistance or SNAP in prior year	4
SNAP Participation	
▪ Prior year SNAP benefits	5

[a] The characteristics listed were tracked to document the background of interviewed participants but do not have specific interview targets.

2. GQ Findings and Recommendations

This section presents results and recommendations for the institutional and non-institutional GQ interviews for each of the seven question topics tested in Round 3. The health insurance coverage, weeks worked, and SNAP participation questions all performed very well in Round 3. GQ participants had little to no difficulty answering these questions and interpreted the questions as intended. RTI/RSS does not recommend changes to any of these questions.

Participants currently enrolled in school had some difficulty answering the educational attainment question, primarily because they did not read the italicized instruction about how to answer the question if currently enrolled in school. RTI/RSS recommends changes to the way this instruction is presented to address this issue.

Some participants had difficulty understanding the "Taxi or ride-hailing services" response category in the means of transportation to work question. Additionally, some participants who worked from home did not notice the "Worked from this address" response category. Thus, RTI/RSS recommends changes to each of these response categories to address these issues.

The income questions performed relatively well. However, some participants incorrectly answered the self-employment income question, the public assistance income question, and the total income question. RTI/RSS recommends slight changes to each of these questions to improve the accuracy with which participants report their income. Finally, the questions in the disability series that ask about difficulty seeing and hearing were incorrectly interpreted by some participants who reported at least some difficulty *because* they had to wear glasses or hearing aids, rather than because they still had difficulty seeing or hearing *even when* wearing glasses or hearing aids. Thus, RTI/RSS recommends a slight change to the wording of these questions to address this comprehension issue.

2.1 Educational Attainment

The first test topic for Round 3 GQ interviews was educational attainment. A single version of this question was tested in Round 3 with a specific focus on participant understanding of the "Less than grade 1" response category. ***Table 2.1*** displays the educational attainment question by mode.

The key research goals of cognitive testing were to determine the following:

1. Is the category "Less than grade 1" understood correctly by participants?

2. Can participants provide examples of people who would fall into the "Less than grade 1" category?

3. Is it clear that people who are still enrolled or who left school in the middle of a grade should not mark "Less than grade 1"?

Table 2.1.   Educational Attainment Question by Mode

Paper Mode	CAI Mode
What is the highest grade of school or degree you have COMPLETED? *If currently enrolled, select the previous grade or highest degree received. Mark (X) ONE box.* **LESS THAN GRADE 1** ☐ Less than grade 1 **GRADE 1 THROUGH GRADE 12** ☐ Grade 1 through 11 – *Specify grade 1 – 11* ☐☐ ☐ 12th grade – **NO DIPLOMA** **HIGH SCHOOL GRADUATE** ☐ Regular high school diploma ☐ GED or alternative credential **COLLEGE OR SOME COLLEGE** ☐ Some college credit, but less than 1 year of college credit ☐ 1 or more years of college credit, no degree ☐ Associate's degree *(for example: AA, AS)* ☐ Bachelor's degree *(for example: BA, BS)* **AFTER BACHELOR'S DEGREE** ☐ Master's degree *(for example: MA, MS, MEng, MEd, MSW, MBA)* ☐ Professional degree beyond a bachelor's degree *(for example: MD, DDS, DVM, LLB, JD)* ☐ Doctorate degree *(for example: PhD, EdD)*	*Using this list,* what is the highest grade of school or degree you have COMPLETED? If you are currently enrolled, select the previous grade or highest degree received. Less than grade 1 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 6 Grade 7 Grade 8 Grade 9 Grade 10 Grade 11 Grade 12, no diploma Regular high school diploma GED or alternative credential Some college, no degree Associate's degree (for example: AA, AS) Bachelor's degree (for example: BA, BS) Master's degree (for example: MA, MS, MEng, MEd, MSW, MBA) Professional degree beyond a bachelor's degree (for example: MD, DDS, DVM, LLB, JD) Doctorate degree (for example: PhD, EdD) Vocational or technical license

2.1.1 Note: The paper and CAI questions were not identical across modes. Findings by Mode

A total of 12 CAI participants (6 institutional and 6 non-institutional) and 8 paper participants were probed on the educational attainment question.

Five of the 6 non-institutional GQ CAI participants and 4 of the 6 institutional GQ CAI participants found the flashcard to be helpful in answering this question. One institutional GQ participant corrected his initial response after reviewing the flashcard. This participant initially answered, "8th grade" and then noticed the "GED or alternative credential" category after reviewing the flashcard and changed his response to "GED or alternative credential." This participant had earned his GED while incarcerated and indicated that he may not have selected "GED or alternative credential" if he did not have the flashcard. Another participant indicated that the flashcard "helped to refresh my mind, [and] made me get focused on the question." CAI participants who did not find the flashcards useful indicated that they already

knew the answer to the question and did not need to review the flashcard to select their response.

One non-institutional CAI participant found the instructions about how to answer if currently enrolled in school to be unclear. This participant felt the instructions needed to be clarified because "[the educational attainment question] is asking for the grade completed and the [previous enrollment question] asks about current grade, but it seems like the same question. I think they are making it more complicated than it is." Despite finding these instructions unclear, the participant correctly answered the question for their situation by selecting "Associate's degree," although they were currently enrolled in school to complete their Bachelor's degree.

Six of the non-institutional paper participants were currently enrolled in college at the time of their interview. Of these participants, 4 answered either "Some college credit, but less than 1 year of college credit" or "1 or more years of college credit, no degree." Another participant initially answered 12th grade but then changed their answer to "Regular high school diploma." However, during probing, this participant noticed the "Some college credit, but less than 1 year of college credit" response and indicated that this response option would be the best to describe their situation because they had completed one semester of college courses. Another participant also answered "Regular high school diploma" but realized during probing that they should have selected "1 or more years of college credit, no degree" since they were a junior in college. This participant noted that they had not read past the "Regular high school diploma" when answering the question because they knew they did not have a degree higher than a high school diploma.

None of these participants read the instructions about how to answer if currently enrolled in school. Two participants noted that they only read the bolded part of the question and skipped over the italics. Another participant stated that they did not read the instructions because the italics made it seem as if the instructions "weren't that important."

When asked to review the instructions during probing, 4 of the 6 non-institutional paper participants indicated that the instructions were clear and that they would not have changed their answer to the question. One participant found the instructions to be confusing. This participant had initially answered "1 or more years of college credit, no degree"; however, after reading the instructions, they changed their answer to "Regular high school diploma" because, even though they had been in college for more than 1 year, the question was asking them to select the highest grade or degree they had received, which would be their high school diploma. It seemed the instructions made it unclear to this participant when it would be appropriate to select "Some college credit, but less than 1 year of college credit" or "1 or more years of college credit, no degree." Another participant originally answered "Regular high school diploma" but changed their response to "Some college credit, but less than 1 year of college credit" during probing. However, this participant noted that their

response of "Regular high school diploma" would be more accurate according to the italicized instructions.

2.1.2 General Findings

1. Is the category "Less than grade 1" understood correctly by participants?

When asked to consider who would select the option for the education level category, "Less than grade 1," institutional GQ participants had different interpretations. Five institutional participants were probed on this topic. When asked who they thought would select the option for "Less than grade 1," 1 participant misunderstood the probe and was unable to respond, 1 thought this option was for someone who was mentally challenged, and 2 said this response option was for someone who was illiterate. Only 1 of the 5 participants said this option would be for a child in kindergarten, preschool, or Headstart.

When asked for examples of when people should select the "Less than grade 1" option, 4 of the 14 non-institutional GQ participants probed on this topic indicated that this response category would include people who had never attended school. Nine participants indicated that this response category would include children who were in preschool or kindergarten. One participant thought this category may be for individuals who completed their education in a different country that had a different educational structure than the United States. Only 1 participant was unsure of who should be included in this response category.

2. Can participants provide examples of people who would fall into the "Less than grade 1" category?

Institutional GQ participants had a clearer understanding of the "Less than grade 1" category when presented with hypothetical scenarios. When asked specifically how someone should answer for "a 4-year-old currently in preschool," 4 of the 5 participants said they would select the "Less than grade 1" option. The fifth participant said this person should respond, "No previous education" without considering or choosing from the list of response options. Similarly, when presented with the hypothetical scenario for "a 2-year-old who has not attended school or daycare," 4 of the 5 participants said "Less than grade 1" would be the best option. The fifth participant again said "No previous education" without considering or choosing from the list of response options.

Four institutional GQ participants were asked to think about "an adult who has never been to school." Two participants correctly selected "Less than grade 1" as the best response option for this individual. One participant had some difficulty thinking of these hypothetical scenarios; rather than selecting a response option from the list, this participant said an adult who had never been to school should answer, "No formal or previous education." The 4th participant also seemed to think more about what he or someone else with low education might say and responded, "I don't have modern day education, but I have common sense."

Most non-institutional GQ participants had a broader understanding of the "Less than grade 1" response category when presented with hypothetical scenarios. Ten of the 14 non-institutional GQ participants probed on this topic answered that "Less than grade 1" would be the best response option for a 4-year-old currently enrolled in preschool. Three of the remaining participants had trouble understanding the probe, and the 4th participant answered, "Grade 1–12." Seven non-institutional GQ participants were asked how they would answer this question for a 2-year-old who has not attended school or daycare. All 7 of these participants correctly answered, "Less than grade 1." One of these participants noted that there should be a different response option for this type of scenario, such as "Not currently enrolled" or "Never been enrolled."

Twelve non-institutional GQ participants were asked how they would answer for an adult who had never gone to school. Ten of these participants correctly answered, "Less than grade 1." One participant said there was not a response option that represented this situation and suggested adding a response option for "Never attended." This participant indicated that, if this situation had applied to them, they likely would have left the question blank rather than answering. Another participant indicated that they would answer "No diploma" for this hypothetical situation. It is unclear whether this participant was referring to the "12th grade – NO DIPLOMA" response option or was suggesting that a new response option be added to the list.

3. Is it clear that people who are still enrolled or who left school in the middle of a grade should not mark "Less than grade 1"?

Four of 5 institutional GQ participants said they would select the option for "7th grade" as the highest level of education completed for someone who attended but did not complete 8th grade. One participant did not select 7th grade or choose an option from the list but rather offered that this person would have completed more than grade 1 but not through 12th grade and could say, "I quit in the middle."

When asked how they would answer this question for an adult who attended 8th grade but did not complete that year and never went back to school, none of the non-institutional GQ participants answered, "Less than grade 1." Most participants indicated a person in this scenario should answer "Grade 1–11" and specify 7th grade.

2.1.3 Recommendations

Overall, the educational attainment question performed well, with participants having a strong understanding of situations in which one should select the option "Less than grade 1." However, none of the participants who were currently enrolled in school noticed or read the italicized instructions about how to answer if currently enrolled. Based on this, RTI/RSS recommends bolding this instruction in the paper mode as follows:

Original paper version: "**What is the highest grade of school or degree you have COMPLETED?** If currently enrolled, select the previous grade or highest degree received. Mark (X) one box."

Proposed change to paper version: "**What is the highest grade of school or degree you have COMPLETED? If currently enrolled, select the previous grade or highest degree received**. *Mark (X) one box."*

2.2 Health Insurance Coverage

The next Round 3 test topic was health insurance coverage. A single version of this question was tested in Round 3 with a specific focus on whether proposed question changes would (1) improve measurement of public coverage and accuracy of direct purchase coverage, and (2) reduce overcount of single service insurance plans. ***Table 2.2*** displays the health insurance coverage question by mode.

The key research goals of cognitive testing were to determine the following:

1. What types of coverage do people have when they respond "Yes" to "insurance purchased directly from an insurance company, a broker, or through a State or Federal Marketplace, such as HealthCare.gov" (option d)?

2. Do all 65+ participants select Medicare? What other types of coverage, if any, do these participants have?

3. What types of coverage or health insurance plans do people have when they report purchasing coverage through the Marketplace (option d)?

4. For participants who check more than one option, are they double reporting one health insurance plan, or do they have more than one type?

5. Specifically, for people who report Medicare and another plan—what types of other plans do they have, and how do they obtain them?

6. Does including additional instructions ("Do NOT include plans that cover only one type of insurance, such as dental, drug, or vision plans") reduce reporting of single-service health insurance plans?

7. Do participants notice the instruction to "Mark 'Yes' or 'No' for EACH type of coverage in (a) through (h)"?

8. For participants who do not select "'Yes" for any option, are they uninsured or do they have some type of coverage that they did not report?

Table 2.2.   Health Insurance Coverage Question by Mode

Paper Mode	CAI Mode
Are you CURRENTLY covered by any of the following types of health insurance or health coverage plans? *Do NOT include plans that cover only one type of service, such as dental, drug, or vision plans.* *Mark "Yes" or "No" for EACH type of coverage in items a – h.* a. Insurance through a current or former employer, union, or professional association (of yours or another family member) b. Medicare, for people 65 and older, or people with certain disabilities c. Medicaid, Children's Health Insurance Program (CHIP), or any kind of government-assistance plan for those with low incomes or a disability d. Insurance purchased directly from an insurance company, a broker, or a State or Federal Marketplace, such as Healthcare.gov e. Veteran's health care (enrolled for VA) f. TRICARE or other military health care g. Indian Health Service h. Any other type of health insurance or health coverage plan – *Specify*	**I am now going to ask you some questions about your health insurance and health coverage. Do NOT include plans that cover only one type of service, such as dental, drug, or vision plans.** 22a. Are you currently covered by health insurance through a current or former employer, union, or professional association of yours or another family member? 22b. Are you currently covered by Medicare, for people age 65 or older or people with certain disabilities? 22c. Are you currently covered by Medicaid, the Children's Health Insurance Program (CHIP), or any kind of government-assistance plan for those with low incomes or a disability? 22d. Are you currently covered by health insurance purchased directly from an insurance company, a broker, or a State or Federal Marketplace, such as HealthCare.gov? 22e. Are you currently covered through Veteran's health care (enrolled for VA)? 22f. Are you currently covered by TRICARE or other military health care? 22g. Are you currently covered through the Indian Health Service? 22h. Are you currently covered by any other health insurance or health coverage plan? If Yes: What is the name of that health care plan? _____

2.2.1 Findings by Mode

A total of 11 CAI participants (6 non-institutional and 5 institutional) and 8 paper participants were probed on the health insurance coverage questions. Four of the 5 institutional participants probed on this topic answered "No" to all health insurance coverage options. The fifth institutional participant (one representing a prison/jail setting) only answered "Yes" to item (h) and specified "Medical care provided by the prison."

Of the 14 non-institutional participants probed on this topic, 6 only answered "Yes" to insurance provided through a current or former employer; 1 answered "Yes" to insurance provided through a current or former employer and to insurance purchased through the State or Federal Marketplace; 1 only answered "Yes" to item (h) and did not specify the name or type of health insurance plan; 1 answered "Yes" to both Medicare and Medicaid; 3 only answered "Yes" to Medicaid; 1 answered "Yes" to insurance provided through a current or former employer, the Indian Health Service, and item (h) and specified "Student Health Center"; and 1 answered "No" to all health insurance coverage options.

Overall, the health insurance question performed equally well in paper and CAI modes. The only participant who had difficulty selecting a response incorrectly answered "Yes" to two response options but was able to determine the correct answer during probing. No other participants noted this question was difficult to answer. One non-institutional paper participant, however, did note that reading the question was the most difficult part because the font was small and there was little spacing between the lines of text.

One non-institutional paper participant indicated that she liked the yes/no check boxes for each response option because it prompted her to read through all the options. One non-institutional CAI participant was unsure of how to answer for option (b) but knew that option (c) was the correct choice after hearing the interviewer read that option.

2.2.2 General Findings

1. **What types of coverage do people have when they respond "Yes" to "insurance purchased directly from an insurance company, a broker, or through a State or Federal Marketplace, such as HealthCare.gov" (option d)?**

None of the 8 institutional GQ participants responded "Yes" to option (d) or indicated they had purchased a health care plan through a State or Federal Marketplace.

Only 1 non-institutional GQ CAI participant answered "Yes" to "Insurance purchased directly from an insurance company, a broker, or through a State or Federal Marketplace, such as HealthCare.gov." However, during probing, this participant seemed unsure if this was accurate. The participant explained that he thought his health insurance coverage was both through his employer and through the State Marketplace but was unable to provide specific details. The participant stated that he purchased his insurance through his employer, but the insurance was "community based." If this participant's employer was a small business, the insurance plan could have been through the Marketplace SHOP program; however, with additional probing, it became clear that this participant only had coverage through his employer and did not have coverage through the State or Federal Marketplace.

2. **Do all 65+ participants select Medicare? What other types of coverage, if any, do these participants have?**

Only 1 institutional GQ participant interviewed was aged 65 or older. This participant resided in a nursing home and responded "Yes" to options (a) and (b). This participant was assigned to Group 2 and therefore was not probed on the health insurance questions.

None of the non-institutional GQ participants were aged 65 or older.

3. What types of coverage or health insurance plans do people have when they report purchasing coverage through the Marketplace (option d)?

None of the 8 institutional GQ participants responded "Yes" to option (d) or indicated they had purchased a health care plan through a State or Federal Marketplace.

Only 1 non-institutional GQ participant answered "Yes" to "Insurance purchased directly from an insurance company, a broker, or through a State or Federal Marketplace, such as HealthCare.gov." However, during probing, it became clear that this was incorrect and that he only had coverage through his employer.

4. For participants who check more than one option, are they double reporting one health insurance plan or do they have more than one type?

Participants from institutional GQs were tested using CAI mode only and responded "Yes" or "No" as interviewers read through the health insurance plan types. None of the five participants assigned to Group 1 or Group 3 responded "Yes" to more than one type of health insurance plan.

One institutional GQ participant residing in a nursing home responded "Yes" to options (a) and (b), coverage through an employer and Medicare. This participant was assigned to Group 2 for disability recruitment characteristics and therefore was not probed about having selected more than one type of coverage.

Two non-institutional GQ paper participants correctly answered "Yes" to more than one type of health insurance coverage. One of these participants indicated they had coverage through Medicare and Medicaid. This participant noted that they signed up for both plans at their county assistance office. The Medicare plan was a Preferred Provider Organization (PPO) plan through an insurance company, but the participant did not provide specific information on their Medicaid plan. The participant indicated they were two separate health insurance plans but noted that both plans covered the same types of medical expenses. It is possible that this participant's coverage was provided through a Dual Eligible Special Needs Plan (D-SNP); however, this was not made clear in the participant's responses during probing.

The other participant indicated they had coverage through a family member's employer, the Indian Health Service, and another source of health coverage (and specified "Student Health Center"). This participant explained that their parent's employer's plan was their primary source of coverage. This plan covered expenses for medical, dental, drug, vision, and mental health services. The participant noted that they were also enrolled in the Indian

Health Service, which covered any expenses their primary insurance would not cover. The participant did not have an insurance card for this coverage and noted that they would submit invoices for payment if the plan needed to be used. The participant was automatically enrolled in the Indian Health Service because they are enrolled in their Tribe. Finally, this participant indicated they received another form of health coverage through the college's student health clinic. The participant paid a fee as part of their tuition to cover all visits to the student health clinic. The fee covers visits to the clinic but does not cover other expenses (e.g., for medication, hospital stays, X-rays, MRIs). The participant is not required to carry an insurance card for this coverage as their student ID serves as their card.

One non-institutional GQ participant incorrectly answered "Yes" to more than one type of coverage. This participant indicated they had coverage through their employer and the State or Federal Marketplace. However, during probing, this participant seemed unsure if this was accurate. The participant explained that he thought his health insurance coverage was both through his employer and through the State Marketplace but was unable to provide specific details. The participant stated that he purchased his insurance through his employer, but the insurance was "community based." With additional probing, it became clear that this participant only had coverage through his employer and did not have coverage through the State or Federal Marketplace.

5. Specifically, for people who report Medicare and another plan—what types of other plans do they have, and how do they obtain them?

Only one institutional GQ participant interviewed reported coverage through Medicare and another plan. This participant resided in a nursing home and responded "Yes" to options (a) and (b). This participant was assigned to Group 2 and therefore was not probed on the health insurance questions.

Only 1 non-institutional GQ participant reported that they had coverage through Medicare and another plan (Medicaid). This participant indicated that they enrolled for both Medicare and Medicaid through their county's assistance office, and both plans provide similar coverage. As mentioned under Research Question 4, it is possible this participant's coverage was provided through a D-SNP plan. However, this was not made clear in the participant's responses during probing.

6. Does including additional instructions ("Do NOT include plans that cover only one type of insurance, such as dental, drug, or vision plans") reduce reporting of single-service health insurance plans?

None of the 5 institutional GQ participants probed on health insurance coverage reported single-service health insurance plans, and all answered "No" when asked if they did not report any single-service plans because of the additional instructions.

One of the 14 non-institutional GQ CAI participants probed on the health insurance coverage questions indicated that they had included a single-service health plan in their

answer. This participant included a vision plan in their response; however, if they had excluded this plan, their response would not have changed as both their medical insurance coverage and single-service vision coverage were provided by their parents' employer. None of the other non-institutional GQ participants included single-service coverage plans in their response primarily because these services were included in their medical insurance coverage.

7. Do participants notice the instruction to "Mark 'Yes' or 'No' for EACH type of coverage in (a) through (h)"?

All interviews with residents of institutional GQs were conducted using the CAI mode, so this research question was not relevant to participants representing institutional GQs.

All 8 of the non-institutional paper participants seemed to notice the instruction to "Mark 'Yes' or 'No' for EACH type of coverage in (a) through (h)," as all participants provided responses for each type of health insurance coverage. Participants were not filling out the paper form themselves on their own screen but were telling interviewers what they would mark when completing the questionnaire. Interviewers would then mark the appropriate response in the PDF of the paper questionnaire they were displaying on their screen. Although participants were not completing the form on their own, they provided interviewers with a response for each item in (a) through (h).

8. For participants who do not select "'Yes" for any option, are they uninsured or do they have some type of coverage that they did not report?

Five of the 8 institutional GQ participants responded "No" to all coverage type options (a) through (h) on the health insurance question and confirmed having no health care coverage. Another participant responded "No" to options (a) through (g) but "Yes" to option (h) and specified, "medical care provided by the prison." All these participants had recently resided in a prison or jail GQ setting, and each explained that they had no insurance coverage beyond care provided in prison.

- One participant explained that he was incarcerated at a young age and never had health insurance. This participant detailed that while in prison, an appointment would be made with a doctor if needed, charging $5 from an inmate's account for each visit or $7 per visit if a medical emergency.

- Another participant said he would receive care as needed through the prison nurse's station, which operated like a 24-hour health care clinic. This participant mentioned having health insurance through his mother's employer as a teenager and knew that option (a) would be the appropriate response option for that coverage.

- Another participant mentioned that he had Medicaid coverage in an earlier year and would have responded "Yes" to option (c) if he had Medicaid coverage currently.

Only 1 non-institutional GQ participant answered "No" for all health insurance options. This participant confirmed that he did not have any health insurance coverage during probing because he "does not usually get sick" and thus does not feel the need to have insurance.

2.2.3 Recommendations

Given that the question performed well, and participants had no to very little difficulty selecting a response, RTI/RSS does not recommend any changes to the question text or response options.

2.3 Means of Transportation to Work

The next Round 3 test topic was means of transportation to work. A single version of this question was tested in Round 3 and was only tested among non-institutional GQ participants. The test version of this question had a specific focus on the "ride-hailing" response category. *Table 2.3* displays the means of transportation to work question by mode.

The key research goals of cognitive testing were to determine the following:

1. For all participants, is the meaning of the taxi or ride-hailing services category clear? If not, what descriptive words would have made the meaning clearer? Are there descriptive words missing?

2. Among those who chose ride-hailing as their primary means of transportation to work, what is their second most common mode of work travel?

3. Among those who did not choose ride-hailing as their primary means of transportation to work, do they ever use ride-hailing services to travel to or from work? How often? In what context?

4. Are there any travel modes you have used to get to work that are not represented in the ACS travel mode question? What are they?

5. Do participants view "ride-hailing" and "carpooling" as the same thing? If not, how do these types of travel differ?

Table 2.3.   Means of Transportation to Work Question by Mode

Paper Mode	CAI Mode
How did you usually get to work LAST WEEK? *Mark (X) ONE box for the method of transportation used for most of the distance.* ☐ Car, truck, or van ☐ Taxi or ride-hailing services ☐ Bus ☐ Motorcycle ☐ Subway or elevated rail ☐ Bicycle ☐ Long-distance train or commuter rail ☐ Walked ☐ Light rail, streetcar, or trolley ☐ Worked from this address → *SKIP to question 40* ☐ Ferryboat ☐ Other method	***Using this list*, LAST WEEK, how did you USUALLY get to work?** Car, truck, or van Bus Subway or elevated rail Long-distance train or commuter rail Light rail, streetcar, or trolley Ferryboat Taxi or ride-hailing services Motorcycle Bicycle Walked Worked from this address Other Method

2.3.1 Findings by Mode

A total of 6 CAI participants and 8 paper participants were probed on the means of transportation to work question. Four of the non-institutional CAI participants had at least some difficulty answering this question. One participant answered the question with "company car." During probing, this participant revealed that they had not looked at the list of response options when asked the question. Once the participant reviewed the response options during probing, they indicated they would have answered "Car, truck, or van," and it was clear to them that this was the correct response. However, this participant said there should be separate categories for personal vehicles and company vehicles.

Another CAI participant answered both "Car, truck, or van" and "Worked from this address." During probing, this participant explained that they work from home, but they also travel in their van to complete work-related tasks; thus, they were unsure which response option to select. Another participant answered "Car, truck, or van" but had some trouble answering the question because they worked for an app-based delivery service and did not travel to one place for work. This participant decided to answer "Car, truck, or van" because they drove from location to location during each shift.

The final CAI participant who had some difficulty answering this question stated that they worked from home when responding to the means of transportation to work question. The interviewer asked the participant to choose from the list of response options, and the participant selected "Walked." During probing, this participant said they selected this

response because they were not really commuting to work each day as they work from home. When asked why they did not choose "Worked from this address," the participant indicated that they had not seen this response option on the list and would change their response to this option. However, this participant also noted that the modified phrasing of "Worked from this address" seemed to have a different meaning than "Worked from home," and "Worked from home" seemed like the more accurate phrasing.

Another CAI participant answered "Walked" but indicated that they did not look at the list of response options when they answered the question. During probing, the participant explained that they sometimes commuted by bicycle or car, but they answered the question based on how they had commuted in the previous week. This participant explained that they did not bike in the winter and would only drive if it was raining.

Two non-institutional paper participants had at least some difficulty answering this question. One participant selected "Other" and wrote in "Virtual." This participant explained that they decided to answer in this way after skimming through the response options and deciding that none of the other options fit their situation because they "just walk from [their] bed to [their] desk." When asked if they had seen the "Worked from this address" response option, the participant indicated they had not seen this option and would have selected this response had they noticed it.

Another participant said she was unsure of the difference between a "light rail" and a "commuter rail," but thought she would know the difference if this applied to her. Additionally, during her initial review of the response options, this participant suggested adding an option for "Carpooling"; however, when later asked which option she would select for carpooling, this participant answered "Car, truck, or van."

2.3.2 General Findings

1. For all participants, is the meaning of the taxi or ride-hailing services category clear? If not, what descriptive words would have made the meaning clearer? Are there descriptive words missing?

Eleven non-institutional GQ participants were probed on their understanding of the "taxi or ride-hailing services" response option. Of these 11 participants, 8 thought "ride-hailing" services referred to services such as Uber and Lyft. The other 3 participants were thinking only of taxi services and were unsure of the meaning of "ride-hailing services."

Two participants mentioned that they knew these services as "ride-sharing" rather than "ride-hailing." Despite being unfamiliar with the "ride-hailing" terminology, both participants were able to identify that this question was asking about services such as Uber and Lyft.

2. Among those who chose ride-hailing as their primary means of transportation to work, what is their second most common mode of work travel?

None of the non-institutional GQ participants chose "taxi or ride-hailing services" as their primary means of transportation to work.

3. Among those who did not choose ride-hailing as their primary means of transportation to work, do they ever use ride-hailing services to travel to or from work? How often? In what context?

Two of the non-institutional GQ participants indicated that they had used ride-hailing services to travel to or from work. One of these participants noted that they may use ride-hailing services to travel to or from work a few times per year if they had an issue with their personal car or there were weather conditions in which they felt uncomfortable driving. The other participant had not worked in the past week, but indicated that when they were working, they "would take a Lyft to work some of the time. Several times a week. I don't have a car readily available, so I would need to use Lyft to get to and from jobs."

4. Are there any travel modes participants have used to get to work that are not represented in the ACS travel mode question? What are they?

None of the non-institutional GQ participants mentioned any modes of transportation to work that were not represented in the list of response options.

5. Do participants view "ride-hailing" and "carpooling" as the same thing? If not, how do these types of travel differ?

Ten of the non-institutional GQ participants were probed on whether "ride-hailing" and "carpooling" were the same or different. Of these participants, 8 felt that ride-hailing and carpooling were different, one was unsure, and one was unable to answer because he was unfamiliar with ride-hailing services.

The primary reasons these 8 participants felt ride-hailing and carpooling were different were (1) ride-hailing is a paid service hosted by a company; (2) carpooling typically involves traveling with other people you know, whereas pooling in an Uber or Lyft involves sharing a ride with people you do not know; and (3) carpooling is less expensive than ride-hailing.

When asked which option they would select for carpooling, 7 of the 10 participants probed answered "Car, truck, or van"; two answered "Other"; and one answered "Taxi or ride-hailing services." The participant who answered "Taxi or ride-hailing services" was unfamiliar with ride-hailing services and was unable to define this term. This participant initially looked for a response option for "carpool," but when he did not see this listed, he decided on "Taxi or ride-hailing services" because he thought of this category as representing any "shared ride" and the service he provided transporting his fellow group home residents as part of his job responsibilities at the group home.

2.3.3 Recommendations

Although participants generally understand the "Taxi or ride-hailing services" response option as intended, it might be helpful to specify "Uber/Lyft" because these are commonly understood and associated with "ride-hailing services" and may help in comprehension.

If including brand names such as "Uber/Lyft" in question text is not preferred, another, more accurate description of these services is "app-based ride services," which has been used in airport signage to direct travelers to the appropriate pickup area. Alternatively, these brand names can be provided in the question help text.

Additionally, given the growing popularity of working from home, and the fact that several participants overlooked this response option, RTI/RSS recommends moving this option higher in the list.

2.4   Weeks Worked

The weeks worked question series was tested to evaluate changes in wording, instructions, and reference period. A single version of this question was tested in Round 3. ***Table 2.4*** displays the weeks worked questions by mode.

The key research goals of cognitive testing were to determine the following:

1. Do the changes to the WEEKS WORKED series (in addition to the year change) obtain the appropriate information for that year?

2. Do participants have difficulty navigating through the series of questions?

    a. Do questions 39/40 set up the universe for the WEEKS WORKED questions properly?

    b. Do people go straight to question 40 after reading Instruction H?

3. FOR PAPER: Do participants read the Note? Do they understand that the Note is for 41a and 41b?

4. Adding "for at least one day" to 41b is supposed to let the participants know that we consider a week being worked even if they just worked one day in that week. Do participants understand this concept?

5. Do participants think paid leave should be counted as WORK?

6. Do workers with irregular schedules struggle with the HOURS WORKED each week question? Do the new instructions and the new question placement make it easier for irregular workers to report usual hours worked each week?

Table 2.4.   Weeks Worked Questions by Mode

Paper Mode	CAI Mode
When did you last work for pay, even for a few days? ☐ Within the past 12 months ☐ 1 to 5 years ago ☐ Over 5 years ago or never worked → *SKIP to question 44* **In 2021, did you work for pay, even for a few days?** ☐ Yes ☐ No → *SKIP to question 44* **NOTE: For questions 41a and b, include as WORK:** ✓ all jobs for pay ✓ paid vacation ✓ paid sick leave ✓ military service **a. In 2021 (52 weeks), did you work EVERY week?** *Remember to include paid vacation and paid sick leave as work.* ☐ Yes → *SKIP to question 42* ☐ No **b. In 2021 (52 weeks), how many WEEKS did you work for at least one day?** *Include weeks when you only worked for a few hours.* Weeks ☐☐ **In 2021, for the weeks worked, how many HOURS did you usually work each WEEK?** *Include all jobs for pay and military service.* Usual hours worked each WEEK ☐☐☐	**39a. When did you last work for pay, even for a few days?** Within the past 12 months Between 1 to 5 years ago Over 5 years ago or never worked **39b. In <2020/2021>, did you work for pay, even for a few days?** Yes No **40a. During the 52 weeks in <2020/2021>, did you work EVERY week? Count paid vacation, paid sick leave, and military service as work. Include all jobs for pay.** Yes No **40b. During the 52 weeks in <2020/2021>, how many WEEKS did you work for at least one day? Include weeks when you only worked for a few hours. Include all jobs for pay. Count paid vacation, paid sick leave, and military service as work.** Weeks: _____ **40c. In <2020/2021>, for the weeks worked, how many HOURS did you usually work each WEEK? Include all jobs for pay and military service.** Usual hours worked each week: _____

2.4.1 Findings by Mode

A total of 12 CAI participants (6 non-institutional and 6 institutional) and 8 paper participants were probed on the weeks worked questions. The weeks worked series of questions performed similarly well in paper and CAI modes. All paper participants correctly navigated the weeks worked questions and only answered questions that applied to them. In fact, when asked how a person should answer question 41b if they worked every Thursday in a year, some participants responded that this person technically would not answer question 41b because they would have answered "Yes" to question 41a and thus skipped question 41b. This further indicates that participants had a strong understanding of the skip patterns throughout this section.

Several paper participants noted that the list of things to include in the note before question 41a did not apply to them because they either (1) did not take paid leave or vacation during the time they worked in the prior year, or (2) they were not paid for the leave they took from work for illness or vacation. Despite the instructions not applying to them, participants illustrated a strong understanding that these situations should be counted as work.

The instructions included in CAI questions 40a–40c were clear to CAI participants. All CAI participants who had taken paid leave from work in the prior year included this time in their responses to the weeks worked questions. One non-institutional CAI participant noted that they included weeks they only worked a few hours because the instructions told them to do so. Had the instructions not been there, the participant would not have included those weeks in their responses.

2.4.2 General Findings

1. Do the changes to the WEEKS WORKED series (in addition to the year change) obtain the appropriate information for that year?

The 5 institutional GQ participants assigned to Groups 1 and 2 were asked what they considered and whether they had difficulty responding to questions 39a and 39b. One participant was uncertain whether to include jobs worked in prison when responding to these questions. The other 4 participants said they found the questions easy to answer. Two said they considered work in prison, and 2 (interviewed in December 2021) said they were thinking of work in the year 2020.

Three participants responded "Over 5 years ago or never worked" on question 39a and therefore were not asked question 39b.

Two of the 7 participants interviewed from prison or jail settings were unsure whether work in prison should be counted.

- One participant who reported having last worked "more than 5 years ago" expressed some uncertainty when responding. This participant explained that he had a required janitorial job in prison but was unsure whether this should be considered work. He first thought of his work in prison as "preparing for work" upon release. Upon further probing and discussion, this participant said he would count work in prison as he was technically paid for the work.

- Another participant also said he was initially unsure whether he should count jobs worked in prison but decided to report weeks and hours worked for his work in the kitchen while incarcerated.

All non-institutional GQ participants thought about their employment in the prior year and answered the weeks worked series based on their work arrangements. No participants were unsure of whether they should include certain types of work, and all included any source of income, even if it was a short-term job or a job for which they only worked a few hours.

One non-institutional CAI participant originally answered "8 hours" for question 40c; however, during probing, this participant realized that the question was asking for hours worked each week rather than the hours worked each day. Once the participant realized this, he changed his response to 40 hours. Another non-institutional CAI participant answered question 40b in months rather than weeks. This participant answered "9 months" rather than converting this into a number of weeks. The participant did not provide more detail on why they answered in months rather than weeks.

2. Do participants have difficulty navigating through the series of questions?

- **Do questions 39/40 set up the universe for the WEEKS WORKED questions properly?**

- **Do people go straight to question 40 after reading Instruction H?**

All interviews with residents of institutional GQs were conducted using CAI mode, so this research question was not relevant to participants representing institutional GQs.

All non-institutional paper participants correctly navigated the weeks worked questions and did not answer questions that did not apply to them. All participants correctly interpreted Instruction H and only skipped to question 40 if they had worked in the last week. Otherwise, participants answered all applicable questions leading up to question 40.

3. FOR PAPER: Do participants read the Note? Do they understand that the Note is for 41a and 41b?

All interviews with residents of institutional GQs were conducted using CAI mode, so this research question was not relevant to participants representing institutional GQs.

Three of the 8 non-institutional paper participants did not read the note before question 41a. One of these participants indicated that she did not see the note when answering the questions but, after reviewing the note during probing, stated that it would not have changed her answers to questions 41a and 41b. Another participant did not read the note because "he already knew the answer was 'No.'" This participant did not work for the first 6 months of 2021, so he knew his answer to 41a would be "No." After reviewing the note during probing, the participant added that he did not receive paid sick leave or vacation, so these would not apply to him. The third participant did not read the note but indicated that none of the situations included in the note applied to them.

All non-institutional paper participants who read the note understood that the instruction applied to questions 41a and 41b. Even if participants did not go on vacation or take paid sick leave during their time employed, they understood that, had they done this, the time they took away from work should have been included in their response.

4. Adding "for at least one day" to 41b is supposed to let the participant know that we consider a week being worked even if they just worked one day in that week. Does the participant seem to understand this concept?

Five institutional GQ participants were asked for their interpretation of having worked "for at least one day."

- One participant living in a nursing home setting had not worked within the past 5 years but said she considered short-term work, "if you get a temporary job…or work a craft fair."

- One participant thought of either a part-time job or disability, explaining that someone receiving disability is not supposed to work a full-time job and hours they can work per week are limited.

- The other 3 participants understood the concept clearly, explaining "working for at least one day" means working for money or earning income.

No institutional GQ participants reported any weeks having worked only one day. When asked how someone should report weeks worked if they worked "every Thursday but did not work any other days of the week," 4 of 5 participants said they would consider this a week worked and report 52 weeks.

- Only 1 participant was unclear on how to report having worked every week for only one day. When considering this scenario, this participant thought to count the 52 Thursdays they had worked and divide either by 5 for a 5-day work week or by 7 to determine how many weeks worked to report.

When asked for their interpretation of the phrase "work for pay even for a few days," non-institutional GQ participants demonstrated a strong understanding. Generally, participants thought of any work for which a person received pay, regardless of how long it took them to complete the job:

- "Just an odd job like babysitting. Being employed for a short time."

- "Even if you only worked for a couple days, like three days per se, and then you quit or you just did three days from home, you would still include that."

- "Even for one or two days did you work."

Seven of the non-institutional GQ participants reported having weeks in which they only worked for one day. All these participants indicated that they included these weeks in their count of the number of weeks they worked. Eleven of the non-institutional GQ participants were asked how someone should report weeks worked if they worked "every Thursday but did not work any other days of the week." Only 1 of these participants did not correctly answer. This participant seemed to struggle to understand the hypothetical scenarios included in the probes but demonstrated an understanding of this concept when discussing their own work arrangement in the prior year. All other participants asked this question correctly answered 52 weeks:

- ▪ "52 weeks. They are still working each week, technically."

- ▪ "They would work every week if it's at least one day, so they would answer all 52 weeks."

5. Do participants think paid leave should be counted as WORK?

Participants interviewed from institutional GQ settings did not report having taken any paid leave and were not asked whether they thought paid leave should be counted as work.

Only 2 non-institutional GQ participants reported having taken paid leave during their weeks worked in the prior year. Both participants included weeks in which they were out on vacation or paid sick leave. The remaining participants did not include time out of work on vacation or paid sick leave because they either (1) did not take vacation or sick leave during the time they were working in the prior year, or (2) they were not paid for vacation or sick leave. Overall, non-institutional GQ participants illustrated an understanding that paid leave should be counted as work.

- ▪ "Yes, [I included] paid sick leave and paid vacation."

- ▪ "Yes. Included vacation. I'm not in military service, and don't remember being sick and getting paid while being out sick. I did get paid vacation, so I included that."

6. Do workers with irregular schedules struggle with the HOURS worked each week question? Do the new instructions and the new question placement make it easier for irregular workers to report usual hours worked each week?

None of the participants interviewed from institutional GQs reported working an irregular schedule. Three participants from institutional GQs reported having worked in prison. For these participants, it was clear and straightforward to report the number of hours worked. One participant reported 20 hours and detailed that he worked 3 hours per day, 7 days per week, which equated to about half of a regular work week.

Eight non-institutional GQ participants reported having irregular schedules during their employment in the prior year. One of these participants who lived in a group home struggled to answer the hours worked each week question. This participant knew he wanted to calculate an average number of hours but indicated that he would have needed assistance to do this calculation. Another non-institutional group home participant was able to calculate an average number of hours worked each week during the interview with the assistance of his proxy; however, this participant noted that he would not have been able to determine the average without assistance. The other 6 non-institutional participants with irregular hours did not have difficulty answering the hours worked each week question and generally reported the average number of hours they worked each week:

- ▪ "I was bored at work one day, so I did the math and calculated the average work hours each week because everybody was complaining about the number of hours."

▪ "I had two jobs with very different hours. Summer job was 8–10 hours a day. During winter break I worked 6–8 hours a day but every other week I worked 1–3 hours a day. So, I just averaged them and thought 5 was a good representative number."

▪ "I would take the average number of hours, but if the average was very different from what somewhat worked 'usually,' they might go with the number of hours worked most often."

2.4.3 Recommendations

The weeks worked questions performed well in Round 3 testing. Changes to the question greatly improved the ability of paper participants to navigate the skip patterns correctly, and participants demonstrated a strong understanding of what should be included as work and what should be excluded. RTI/RSS does not recommend any changes to the weeks worked questions.

2.5 Income

The next topic tested among Round 3 participants was income. A single version of this question was tested, and probes focused on attention to instructional wording and accuracy in reporting income types. **Table 2.5** displays the income questions by mode.

The key research goals of cognitive testing were to determine the following:

1. Do participants report income for the appropriate reference period (prior year)? Do they read the instructions? If so, do they understand what is written?

2. Total Income Amount (adding "include all sources"): Do participants report "all sources," or do they leave out some?

3. Self-Employment Income (adding "including work paid for in cash"): Do participants report all self-employment income (including side jobs that they may not report as income for tax purposes)?

4. Net Rental Income (splitting up category as its own question in paper mode): Does splitting up the categories make it easier for participants to recall the amounts and report accurately?

5. Does having Net Rental Income as its own category (paper mode) make participants who are reading quickly misreport their monthly rent to a landlord (instead of rental income)?

6. Public Assistance Income (new wording and instructions): Do the new instructions help participants to report the amounts that we intend to be reported with this question? Specifically, do they understand that SNAP and unemployment should not be included?

7. Retirement Income (moving instructions to not include Social Security in paper mode): Does moving up the instructions "Do NOT include Social Security" help avoid Social Security being included in retirement income? Do participants notice the instruction?

Table 2.5.   Income Questions by Mode

Paper Mode	CAI Mode
INCOME IN 2021 *Report ALL types of income received, TAXABLE AND NON-TAXABLE, from January 1, 2021 to December 31, 2021.* *Mark (X) the "Yes" box for each type of income you received, and give your best estimate of the TOTAL AMOUNT.* *Mark (X) the "No" box for each type of income NOT received.* *BREAK-EVEN NET INCOME: For break-evens, mark (X) the "Yes" box and write in $0 for the TOTAL AMOUNT.* *INCOME RECEIVED JOINTLY: Report only your share of the amount received or earned.* **a. Wages, salary, commissions, bonuses, or tips from all jobs.** *Report amount before deductions for taxes, bonds, dues, or other items.* ☐ Yes → $ __,___,___.00 TOTAL AMOUNT for 2021 ☐ No **b. Self-employment income, including work paid for in cash. Report income from own businesses (farm or non-farm), including proprietorships and partnerships.** *Report NET income after business expenses. If net income was a loss, mark (X) the "Loss" box next to the dollar amount.* ☐ Yes → $ __,___,___.00 ☐ Loss TOTAL AMOUNT for 2021 ☐ No **c. Interest, dividends, royalty income, or income from estates and trusts.** *Report even small amounts credited to an account.* ☐ Yes → $ __,___,___.00 TOTAL AMOUNT for 2021 ☐ No	The next few questions are about all types of income, taxable and non-taxable, received in <2020/2021> (that is from January 1, <2020/2021> to December 31, <2020/2021>). **45a.** Did you receive any wages or salary in <2020/2021>? If yes: How much did you receive in wages and salary from all jobs before taxes and other deductions? **45b**. Did you receive any additional tips, bonuses, or commissions in <2020/2021>? If yes: How much did you receive in tips, bonuses, or commissions from all jobs before taxes and other deductions? **45c.** Did you receive any self-employment income in <2020/2021>, including work paid for in cash? (Report income from own businesses (farm or non-farm) including proprietorships and partnerships.) If yes: What was the amount? **45d.** Did you receive any interest or dividends in <2020/2021>? Report even small amounts credited to an account. If yes: What was the amount? **45e.** Did you receive any royalty income or income from estates and trusts in <2020/2021>? If yes: What was the amount? **45f.** Did you receive any net rental income in <2020/2021>? If yes: What was the net amount? **45g.** Did you receive any Social Security or Railroad Retirement benefits in <2020/2021>? If yes: What was the amount?

(continued)

Table 2.5.   Income Questions by Mode (continued)

Paper Mode	CAI Mode
d. Rental income. *Report NET income after expenses. If net rental income was a loss, mark (X) the "Loss" box next to the dollar amount.* ☐ Yes → \$☐☐,☐☐☐.00 ☐ Loss TOTAL AMOUNT for 2021 ☐ No **e. Social Security or Railroad Retirement.** ☐ Yes → \$☐☐,☐☐☐.00 TOTAL AMOUNT for 2021 ☐ No **f. Supplemental Security Income (SSI).** ☐ Yes → \$☐☐,☐☐☐.00 TOTAL AMOUNT for 2021 ☐ No **g. Any financial assistance from the state or local welfare office.** *Do NOT include SNAP (Food Stamps), unemployment compensation, or non-cash benefits like energy or housing assistance.* ☐ Yes → \$☐☐,☐☐☐.00 TOTAL AMOUNT for 2021 ☐ No **h. Retirement income, pensions, survivor, or disability income.** *Do NOT include Social Security. INCLUDE income from a previous employer or union and any regular withdrawals or distributions from IRA, Roth IRA, 401(k), 403(b), or other accounts specifically designed for retirement.* ☐ Yes → \$☐☐☐,☐☐☐.00 TOTAL AMOUNT for 2021 ☐ No **i. Any other sources of income received regularly such as Veterans' (VA) payments, unemployment compensation, child support or alimony.** *Do NOT include lump sum payments such as money from an inheritance or the sale of a home.* ☐ Yes → \$☐☐☐,☐☐☐.00 TOTAL AMOUNT for 2021 ☐ No **Including all types of income, what was your total income in 2021?** *Add entries in questions 44a to 44i; subtract any losses. If net income was a loss, enter the amount and mark (X) the "Loss" box next to the dollar amount.* ☐ OR \$☐☐☐,☐☐☐,☐☐☐.00 ☐ Loss None TOTAL AMOUNT for 2021	**45h.** Did you receive any Supplemental Security Income (SSI) payments in <2020/2021>? If yes: What was the amount? **45i.** Did you receive any financial assistance from the state or local welfare office in <2020/2021>? If yes: What was the amount? Do NOT include SNAP (Food Stamps), unemployment compensation, or non-cash benefits like energy or housing assistance. **45j.** Did you receive any survivor or disability income in <2020/2021>? If yes: What was the amount? Do not include Social Security. **45k.** Did you receive a pension or any retirement income from a previous employer or union or any regular withdrawals or distributions from retirement accounts such as 401(k), 403(b), IRA, Roth IRA, or other accounts designed specifically for retirement in <2020/2021>? If yes: What was the amount? Do not include Social Security. **45l.** Did you receive income on a REGULAR basis from any other sources such as Veterans' Administration (VA) payments, unemployment compensation, child support, or alimony in <2020/2021>? If yes: What was the amount of income from all other sources? **45m.** Including all types of income, what was your TOTAL income in <2020/2021>?

2.5.1 Findings by Mode

A total of 11 CAI participants (6 non-institutional and 5 institutional) and 8 paper participants were probed on the income questions. Two of the non-institutional CAI participants had at least some difficulty answering the income questions. One participant double reported their self-employment income. This participant explained that she was unsure of where to report income she had received from nannying, which was paid in cash. She considered this income to be self-employment income because she was paid in cash but was not entirely sure. So, the participant reported this income in her responses to questions 44a and 44c. Another participant asked the interviewer about federal stimulus checks received during the pandemic. This participant felt this income should be reported but did not feel that it fit into any of the existing categories. Thus, this participant did not include this income when reporting.

One institutional CAI participant had trouble deciding if they should report pay they received while working in prison. This participant felt the job was so low-paying and the funds were used to support living in prison (e.g., making calls, purchases from the commissary) that he was unsure if it classified as "wages." This participant eventually decided to include income received from this work because he was paid for it.

Both institutional and non-institutional CAI participants disagreed on whether income that is not reported for tax purposes should be included in the ACS income questions. Two of the non-institutional CAI participants felt income that is not reported for tax purposes should be included, 2 participants felt it should not be included, and 1 participant noted that they would be hesitant to report income that did not appear on their taxes (note that this participant did report income they did not report on their taxes when answering the income questions). Two of the institutional CAI participants felt income that is not reported for tax purposes should be included, and 3 felt this income should not be included. Generally, CAI participants were split fairly evenly in whether they felt this income should be included.

Two of the non-institutional paper participants had some difficulty answering the income questions. One participant noted that she was confused by the instruction to report net income after business expenses on the self-employment income item. This participant did not report her net income and indicated that her answer would have been different had she done this. The participant did not provide more detail on what about the instruction was confusing. Another participant who was a college student indicated that his parents have money "in his name" that they send to him. This participant was unsure whether this money should be included in his response and, if it were to be included, he was unsure which category would be the appropriate fit. This participant decided not to include this money in his response.

There was more agreement among paper participants that income not reported for tax purposes should be included in the income questions. Five of the 6 participants probed on

this topic stated that income not reported for tax purposes should be included. The one participant who disagreed did not provide detail as to why this income should not be included. Among those who said the income should be included, 3 noted that this income could be reported in the self-employment income category. One participant said this income could be reported in question 44a; however, this participant reported additional income she had received from gifts in question 45 and not in question 44a. Another participant said this income should be included but did not think people would actually report income that was not reported on their taxes.

2.5.2 General Findings

1. ***Do the participants report income for the appropriate reference period (prior year)? [Do they read the instructions? If so, do they understand what is written?]***

None of the 8 institutional GQ participants were tested using paper mode, so none were presented with instructions to read. Five institutional GQ participants were probed about what reference period they considered at the income questions, and 4 of 5 reported they were thinking of the prior year. One participant who reported no income said they were thinking about the current year and not the prior year.

Ten of the non-institutional GQ participants were probed on which time period they were thinking of when answering the income questions. Nine of these participants indicated they were thinking of the prior year (either 2020 or 2021 depending on the time of the interview). One participant, however, reported that they were thinking of 2020 when reporting their wages but thinking of 2021 when reporting their taxes and dividends. This participant completed their interview in February 2022 and, thus, was correct in reporting taxes and dividends for 2021. The participant indicated that they were thinking of their W2 from 2020 to report their wages. The participant did not elaborate on why they thought of their 2020 W2, but this could have been because they had not yet received their 2021 W2 and expected their wages to be similar for 2021.

Paper participants were not explicitly probed on whether they had read the instructions for the income questions, but their responses to other probes seem to indicate that they did read and understand the instructions. Nearly all participants reported income for the correct time period (with the exception of the participant discussed in the previous paragraph who used her 2020 W2 to report her wages rather than reporting 2021 wages), and all but one participant felt that taxable and non-taxable income should be reported in the income questions. All participants provided a response to each income question (i.e., marked "Yes" or "No" for each item). However, no participants needed to report break-even income or income received jointly, so we were unable to assess whether participants understood these instructions.

2. Total Income Amount (adding "include all sources"): Do participants report "all sources" or do they leave out some?

Three of the 8 institutional GQ participants reported earning no income. Two participants reported income but could not provide an amount in the total income question. Both of these participants were assigned to Group 2 and not probed on responses in the income section; however, in one case, the interviewer noted that the participant did not seem comfortable reporting income information, and in the other case, the participant explained that she did not know total income because she did not handle her own finances. The remaining 3 institutional GQ participants reported only one source of income.

Four of the non-institutional GQ participants indicated they excluded some sources of income in their total income amount. One participant suggested that he omitted some income that he did not wish to report but did not elaborate on what this income was. Another participant who was a college student did not include money she received as gifts (i.e., money gifted to her at high school graduation) and did not include money received as part of a scholarship. This participant indicated she was unsure whether these two items should be included as income and decided to leave them out. Another college student indicated that they excluded money they were given by their parents because they did not consider this to be income. The participant did not provide many details on the money they received from parents, but it seemed to be money to help pay for expenses while at school. Finally, 1 participant excluded cash they received for a small job they performed for their father.

3. Self-Employment Income (adding "included work paid for in cash"): Do participants report all self-employment income (including side jobs that they may not report as income for tax purposes)?

Only 1 institutional GQ participant reported self-employment income but did not provide an amount. This participant was assigned to Group 2 and therefore not probed on the income questions; however, the interviewer noted that this participant seemed uncomfortable providing amounts for the income questions.

Three non-institutional GQ participants did not report at least some of their self-employment income for various reasons:

- One participant omitted cash they had been paid for walking a friend's dog a couple of times over the summer. This participant did not include this income because they had forgotten about it when answering the income questions; however, the participant noted during probing that if they had remembered it when answering the questions, they would not have included it because it was such a small amount.

- Another participant mentioned during probing that she may have babysat for somebody during the prior year and would have been paid in cash for doing so; however, she did not include this income in her responses because it was not a regular source of income, but instead a "one-time thing."

▪ A third participant indicated that they had done some work for their dad and had been paid a small amount of money for the work. The participant felt this would fall into the self-employment income category but did not include it there because it was a small amount of money and was not a stable, or regular, source of income. This participant thought only of their primary jobs in 2021 when answering the income questions.

Two non-institutional GQ participants reported self-employment income that they do not report for tax purposes:

▪ One participant indicated he received self-employment income from his freelance work that he did not report on his taxes but did report when answering the ACS income questions.

▪ A second participant indicated she would be nervous to report income on the ACS questionnaire that she did not report on her taxes; however, this participant did include self-employment income that she had not reported on her taxes because she did not feel it was a large enough amount to report on her taxes.

4. Net Rental Income (splitting up category as its own question in paper mode): Does splitting up the categories make it easier for participants to recall the amounts and report accurately?

None of the institutional or non-institutional GQ paper participants reported receiving net rental income in the prior year.

5. Does having Net Rental Income as its own category (Paper mode) make participants who are reading quickly misreport their monthly rent to a landlord (instead of rental income)?

None of the institutional or non-institutional GQ paper participants misreported their monthly rent paid to a landlord as net rental income.

6. Public Assistance Income (new wording and instructions): Do the new instructions help participants to report the amounts that we intend to be reported with this question? Specifically, do they understand that SNAP and unemployment should not be included?

None of the non-institutional GQ participants reported receiving public assistance income. When asked about their understanding of the question, participants had varied responses. One participant indicated that they first thought this question was asking about financial aid they had received for their college tuition; however, after re-reading the question, this participant realized it was asking about other types of financial assistance. This participant felt that programs such as food stamps and welfare would be included in this question.

Only 1 participant indicated they were including SNAP. However, some participants' responses to what should be included in this question were quite broad and did not provide enough information to determine whether they were omitting programs such as SNAP and unemployment.

▪ One participant said this question was asking about "any help from the government."

- Another participant said this question was asking about "any assistance from government assistance programs."

One non-institutional GQ participant indicated that they initially thought of unemployment benefits, but then saw that the instructions said to exclude these benefits. After reading this instruction, the participant was unable to think of other examples of what should be included in this item.

Other non-institutional GQ participants felt that this question was asking about the following:

- Welfare

- Disability

- Help with medical bills

- Vouchers or conditional checks

- COVID relief programs

When asked about their understanding of "non-cash benefits," non-institutional GQ participants gave examples such as the following:

- Assistance purchasing insurance

- Food, housing, or energy assistance

- Gift certificates or vouchers to grocery stores

- Anything for which the government pays directly rather than providing money to the individual

7. ***Retirement Income (moving instructions to not include Social Security in paper mode): Does moving up the instructions, "Do NOT include Social Security" help avoid Social Security being included in retirement income? Do participants notice the instruction?***

One institutional GQ participant who lived in a nursing home was unsure whether question 45j should include the income she received from her husband's estate. This participant wanted clarification between "survivor income" and income from an estate and also asked the interviewer to explain the difference between Social Security and SSI but knew she received neither.

None of the non-institutional paper participants reported retirement income.

2.5.3 Recommendations

Overall, the income question performed somewhat well. The income categories that caused the most issues were the total income amount, self-employment income, and public assistance income. To address these issues, RTI/RSS recommends the following:

- ▪ Capitalize "all" in the total income question (paper) to emphasize that all sources of income should be included.

- ▪ Consider providing examples of what SHOULD be included in the public assistance question. This item confused participants, and many were unable to identify types of income that should be included in that question.

- ▪ Consider rewording the self-employment income question to remove "including" as this seemed to suggest that only work paid for in cash that was part of a regular source of income should be reported. Additionally, consider restructuring the question to present "work paid for in cash" first (i.e., "Work paid for in cash, self-employment income, and income from own businesses [farm or non-farm]"). Alternatively, if the Census Bureau prefers presenting "self-employment income" first, maintain the original structure of the question, but remove "including" (i.e., "Self-employment income, worked paid for in cash, and income from own businesses [farm or non-farm]").

Additionally, CAI participants were divided on whether non-taxable income should be reported in these questions. To make this clearer for CAI participants, consider rewording the stem question that separates this instruction into a separate sentence:

"The next few questions are about all types of income received in <2020/2021> (that is from January 1, <2020/2021> to December 31, <2020/2021>). For these questions, report both taxable and non-taxable income received in <2020/2021>."

2.6 Disability

The next Group 3 test topic was disability. Disability questions were tested to examine potential changes that may help to ensure accurate measurement of disability consistent with the World Health Organization's International Classification of Functioning, Disability, and Health (ICF) disability framework. Additionally, disability questions tested the inclusion of a question on communication aimed to capture difficulties related to psychosocial and cognitive disability in addition to problems with speech. A single version of the disability questions was tested in Round 3. ***Table 2.6*** displays the disability questions by mode.

The key research goals of cognitive testing were to determine the following:

1. For all questions, if participants reported any difficulty, how did they choose their specific response category? Why did they not choose a different response category?

2. For the question about difficulty communicating, do participants understand the concept of "usual language," and are they reporting difficulty for circumstances that are in scope of a disability in the communication domain?

3. Do bilingual participants understand we are not referring to mastering English as a second language?

4. Do the participants read/hear and understand the question preamble in responding to difficulty with "doing errands alone such as visiting a doctor's office or shopping"? In other words, do participants report difficulty with errands for reasons other than health or disability?

5. If people are in GQ and unable to leave, does this affect how they interpret the question?

Table 2.6.   Disability Questions by Mode

Paper Mode	CAI Mode
a. Do you have difficulty seeing, even if wearing glasses? ☐ No difficulty ☐ Some difficulty ☐ A lot of difficulty ☐ Cannot do at all **b. Do you have difficulty hearing, even if using a hearing aid?** ☐ No difficulty ☐ Some difficulty ☐ A lot of difficulty ☐ Cannot do at all *Answer questions 19a – d if you are 5 years old or over. Otherwise, you are done.* **a. Do you have difficulty walking or climbing steps?** ☐ No difficulty ☐ Some difficulty ☐ A lot of difficulty ☐ Cannot do at all **b. Do you have difficulty remembering or concentrating?** ☐ No difficulty ☐ Some difficulty ☐ A lot of difficulty ☐ Cannot do at all **c. Do you have difficulty with self-care, such as washing all over or dressing?** ☐ No difficulty ☐ Some difficulty ☐ A lot of difficulty ☐ Cannot do at all **d. Using your usual language, do you have difficulty communicating, for example understanding or being understood?** ☐ No difficulty ☐ Some difficulty ☐ A lot of difficulty ☐ Cannot do at all	**The next questions ask about difficulties you may have doing certain activities.** **25a. Do you have difficulty seeing, even if wearing glasses?** No difficulty Some difficulty A lot of difficulty Cannot do at all **25b. Do you have difficulty hearing, even if using a hearing aid?** No difficulty Some difficulty A lot of difficulty Cannot do at all **25c. Do you have difficulty walking or climbing steps?** No difficulty Some difficulty A lot of difficulty Cannot do at all **25d. Do you have difficulty remembering or concentrating?** No difficulty Some difficulty A lot of difficulty Cannot do at all **25e. Do you have difficulty with self-care, such as washing all over or dressing?** No difficulty Some difficulty A lot of difficulty Cannot do at all **25f. Using your usual language, do you have difficulty communicating, for example understanding or being understood?** No difficulty Some difficulty A lot of difficulty Cannot do at all

(continued)

Table 2.6.   Disability Questions by Mode (continued)

Paper Mode	CAI Mode
Answer question 20 if you are 15 years old or over. Otherwise, you are done. **Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping?** ☐ No difficulty ☐ Some difficulty ☐ A lot of difficulty ☐ Cannot do at all	**25g. Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping?** No difficulty Some difficulty A lot of difficulty Cannot do at all

2.6.1 Findings by Mode

A total of 11 CAI participants (6 non-institutional and 5 institutional) and 8 paper participants were probed on the disability questions. Two institutional CAI participants and one non-institutional CAI participant misinterpreted the questions about difficulty seeing or hearing and did not consider their use of glasses or hearing aids when answering these questions. These participants answered "some difficulty" *because* they had to wear glasses or hearing aids, and not because they still had difficulty seeing or hearing even when wearing glasses or hearing aids.

One non-institutional CAI participant in a group home noted that they had difficulty with paperwork, money management, and other financial and administrative tasks. This participant indicated that, had he been asked about these types of tasks, he would have answered "A lot of difficulty" or "Cannot do at all," but the disability series does not include items that ask about these tasks. The participant receives assistance with these tasks from the staff in the group home in which he resides. This participant indicated that items that ask about difficulty doing these types of activities may apply to others in a group home setting who have an intellectual disability.

Two non-institutional CAI participants indicated that they initially thought of "self-care" using the popular definition (e.g., painting your nails, sleeping late, taking time for yourself); however, both participants noted that they understood the intention to be more aligned with physical or mental conditions that may limit a person's ability to care for themselves and answered accordingly.

One non-institutional CAI participant noted that if the preamble had been removed from the question about difficulty doing errands alone, their answer would not have changed, but their understanding of the question would have broadened to no longer require a diagnosis.

As written, this participant interpreted the preamble to be asking "Do you have a diagnosed condition that makes it difficult to do errands alone?"

One non-institutional paper participant felt that the phrase "even if wearing glasses" was confusing but understood the intention when they re-read the question. This participant suggested that changing the phrase to "even *when* wearing glasses" may clarify the question. Another paper participant noted that they almost answered, "Some difficulty" when asked about difficulty seeing, but they re-read the question and noticed the phrase "even if wearing glasses," so they changed their response to "No difficulty."

One paper participant first interpreted "self-care" in the popular sense, but after they read "washing all over," they realized the question was "geared toward people who are physically limited in their ability." For this participant, the examples of "washing all over or dressing" were important for their correct interpretation of the question.

Two paper participants felt that removing the preamble from the question about difficulty doing errands alone would likely change people's understanding of the question to only include physical limitations rather than physical, mental, or emotional limitations. Another participant agreed that the preamble was important for this question as it provided more specific guidance as to what should be included in the response.

2.6.2 General Findings

1. ***For all questions, if participants reported any difficulty, how did they choose their specific response category? Why did they not choose a different response category?***

Five of the 8 institutional GQ participants responded "No difficulty" to all questions in the disability series.

One participant from an institutional prison setting reported some difficulties due to injuries sustained in an accident:

- This participant responded "some difficulty" to question 25a and explained that he is blind in one eye and has difficulty with light perception.

- This participant responded "some difficulty" to question 25c and explained, "I was in an accident and had a rod installed in my [leg]. Because of this I have bad knees and back issues, it happened many years back, but I still have issues."

- This participant explained that he suffered a head injury and as a result has difficulty with memory and so selected "some difficulty" for question 25d about "remembering or concentrating." He also selected "some difficulty" doing errands alone as he sometimes forgets what he is shopping for.

Another participant from an institutional prison setting reported some difficulty due to a pre-glaucoma diagnosis:

- This participant responded "some difficulty" on question 25a and explained that he had been diagnosed with pre-glaucoma and needed to wear reading glasses when reading small text.

- Later, during probing, this participant noted that he had no difficulty reading the survey question without wearing his reading glasses and can generally see okay without his glasses.

One participant residing in a nursing home reported difficulty for most items in the disability question series:

- When asked why she selected "some difficulty" seeing and hearing for items (a) and (b), she described difficulty seeing and hearing the television. The interviewer confirmed that the participant does not wear glasses or hearing aids and was thinking about her vision and hearing *without* the use of glasses or hearing aids.

- This participant selected "Cannot do at all" for question 25c and explained that a year ago she would have said she could climb steps with "a lot of difficulty," but her disability and condition have worsened and now she would need to be carried upstairs in her wheelchair. She is wheelchair bound and cannot stand for long or walk unassisted.

- For question 25d, this participant responded "some difficulty" and explained, "sometimes I know the answer, but I can't think of it. And due to medicines, I have trouble remembering things and they just don't come to mind."

- When asked about difficulty with self-care in question 25e, this participant initially responded "some difficulty" but during probing was unsure which response option to select. This participant indicated that due to her disability she has greater difficulty bathing herself than she does dressing herself so considered these separately: "for showers it's a lot of difficulty, a moderate amount, I don't know. People shower me. And dressing I can do a lot of it, but some bits are hard, very hard."

Five non-institutional GQ participants reported "some difficulty" to questions about difficulty hearing or seeing:

- One participant reported "some difficulty" seeing because he needs glasses and cannot see without his glasses. The interviewer probed about whether the participant had difficulty seeing even when wearing his glasses and the participant indicated he did *not* have difficulty seeing when wearing his glasses, suggesting he did not consider the "even if wearing glasses" part of the question.

- A second participant reported "some difficulty" both seeing and hearing. This participant told the interviewer that they had two cataracts that impede their ability to see and, from time to time, this participant will need to ask people to repeat themselves in conversation because he has difficulty hearing them.

- A third participant reported difficulty hearing because he is deaf in one ear. When asked why he did not select "A lot of difficulty," this participant explained that he has perfect hearing in the other ear, so, overall, he is able to hear without too much difficulty.

- A fourth participant reported "some difficulty" seeing because he has had recent changes to his vision, and his prescription has changed several times over the past

couple of years to accommodate these changes in vision. This participant noted that his eyes are beginning to adjust to the new prescription, but he still has some difficulty seeing.

- A fifth participant reported "some difficulty" seeing and hearing. This participant noted that they do have prescription contacts and glasses, but their prescription is somewhat outdated, so they have some trouble seeing from far away. This participant noted that the question included the phrase "even if wearing glasses," so they took their prescription into consideration when answering. The participant answered "some difficulty" for hearing because they have somewhat impaired hearing in one ear, and they often have to turn their head to hear out of their other ear instead.

Three non-institutional GQ participants reported "some difficulty" with walking or climbing steps, remembering or concentrating, or communicating:

- One participant reported "some difficulty" walking or climbing steps and remembering or concentrating. This participant noted that they think they have arthritis in their knees (has not been diagnosed) and their legs feel stiff after walking downstairs. This participant reported that they have difficulty remembering or concentrating because they "get easily distracted and when that happens [they are] slow to recall things." This participant selected "some difficulty" rather than "a lot of difficulty" because the extent to which this happens depends on factors such as how focused they are or whether they have had enough sleep.

- A second participant reported "some difficulty" walking or climbing steps, remembering or concentrating, and communicating. This participant explained that they are having medical issues and their knees are swollen, which interferes with their ability to walk and climb steps. The participant also indicated that they have "some difficulty" remembering or concentrating because they sometimes have trouble focusing enough to watch TV. This participant also reported "some difficulty" communicating because they just "believe[ed] that at times [they] are misunderstood or that [they] don't understand. [They] are constantly looking at something different than others."

Three non-institutional GQ participants reported "some difficulty" doing errands alone:

- One participant reported "some difficulty" because in the past they have had trouble motivating themselves to go to an appointment mostly because of emotional or mental conditions.

- A second participant reported "some difficulty" because some days his anxiety levels are higher than usual and, on those days, he prefers to be accompanied by another person when running errands or going to appointments. This participant noted that he can do these kinds of activities on his own, but he prefers to have another person there with him because of his anxiety.

- A third participant reported "some difficulty" because sometimes he does not like to do things alone. This participant gave the example of going to the hospital. If he were doing this, he would want somebody to accompany him. However, during probing, this participant indicated he had not read the question preamble when answering the question. After doing so, he indicated he would change his response to "no difficulty" because "this means a health condition."

2. For the question about difficulty communicating, do participants understand the concept of "usual language" and are they reporting difficulty for circumstances that are in scope of a disability in the communication domain?

Four participants from institutional GQs were asked what they thought was meant by "usual language." Two said they thought about communicating in one's native language, and the other two understood the term to mean the way someone speaks in their daily life.

Two institutional GQ participants mentioned that they also thought about difficulty someone might have communicating in a medical or health care setting. One participant who resided in a nursing home found the question to be clear and responded "no difficulty" to question 25f. She explained that, at times, she does have difficulty communicating with medical providers or health aides in the nursing home where she resides who may not be native English speakers. This participant understood the question as intended but thought that for those in assisted living settings it is important to clarify that this question is asking about difficulty communicating in one's usual language and not about communicating about daily health needs or language barriers with health care workers.

Non-institutional GQ participants understood "usual language" to be the language that you use most often or that is your "native language." One participant added that this could also include your mannerisms or way of speaking that are part of communication.

- "It means like using your language, whether English or Spanish or whatever you were brought up using, but also your mannerisms or certain phrases that you may say that might be specific to you. If that's understood by the people around you or not."

- "Usual language is native tongue—what you grew up speaking."

- "I think it means the language you use most often."

- "Your primary language or first language."

Only one non-institutional GQ participant reported any difficulty communicating. This participant did not provide a lot of information but noted that he sometimes has a hard time understanding others or others have a hard time understanding him.

When non-institutional GQ participants were asked to provide some examples of conditions that may make it difficult to communicate, they provided the following examples:

- Learning disabilities

- ADD/ADHD

- Dialects/regional pronunciations

- Speech impediments

- Autism

- Mental disabilities

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- Cognitive disorders

- Use of American Sign Language (ASL)

- Deafness

3. Do bilingual participants understand we are not referring to mastering English as a second language?

Only 1 of the 8 participants from institutional GQs reported speaking a language other than English. This participant did not seem to interpret the question as referring to mastering English as a second language. This participant also spoke Spanish and said he considered both English and Spanish when responding to question 25f. This participant reported "no difficulty" and explained that he has no trouble understanding or communicating. When asked how he interpreted "usual language," he mentioned that he thought about a doctor using medical terms that he may have trouble understanding but that he has no difficulty understanding everyday communication.

Three non-institutional GQ participants were bilingual. All these participants understood the intent of the question, and all 3 of these participants were thinking of English when answering the question because English is the language they used most often:

- "I was thinking about English because I only speak Haitian Creole with my parents."

- "I saw 'usual,' so I thought of English since I use that most of the time. [How would you have answered for Arabic?] For Arabic, I would have said 'some difficulty' because I have an accent in Arabic that is different from where I grew up in the Middle East, so it can be hard for me to be understood sometimes."

- "I was thinking of English because I speak English more on a daily basis and only speak Spanish when I am home with my family."

4. Do participants read/hear and understand the question preamble in responding to difficulty with "doing errands alone such as visiting a doctor's office or shopping"? In other words, do participants report difficulty with errands for reasons other than health or disability?

One institutional GQ participant residing in a nursing home setting reported having "a lot of difficulty" with question 25g. This participant did hear the question preamble and said she understood that, if the first phrase was removed, it could simply mean someone did not have transportation. In her case, she would answer the question the same because her difficulty is due to her physical disability.

Another institutional GQ participant from a prison setting responded "some difficulty" for question 25g. He explained that, because he suffered a head injury, he sometimes goes shopping and forgets why. The remaining participants from institutional prison or jail settings did not report severe disabilities, so being unable to leave did not affect how they interpreted this question.

One institutional GQ participant assigned to Group 1 responded "some difficulty" for question 25g but was not probed as to his reasoning. The remaining 5 reported "no difficulty" doing errands alone.

Three non-institutional GQ participants reported "some difficulty" doing errands alone. Two of these participants clearly read/heard the question preamble as they each indicated they had reported "some difficulty" due to emotional or mental health issues that occasionally interfere with their ability to do errands alone. The third participant indicated during probing that he had not read the preamble before answering. After reading the preamble, this participant changed his response to "no difficulty," because he felt this question was asking about "a health condition." The participant did not elaborate on what he would include as a "health condition."

Overall, non-institutional GQ participants demonstrated an understanding of the question preamble to include any physical, mental, or emotional condition that may interfere with one's ability to do tasks alone.

5. If people are in group quarters and unable to leave, does this affect how they interpret the question?

One institutional GQ participant residing in a nursing home reported having "a lot of difficulty" for question 25g. This participant explained that she used a wheelchair and relied on transportation services from the nursing home facility for shopping or appointments. This participant is able to leave her nursing home, so this factor did not influence her response as she was reporting based upon her physical disability. Because RTI/RSS implemented contingency plans to recruit participants representing institutional GQ settings, only one institutional participant was currently residing in an institutional GQ at the time of the interview. Thus, our ability to assess this research question was limited.

None of the non-institutional GQ members were unable to leave their GQ.

2.6.3 Recommendations

RTI/RSS recommends the following changes to each of the disability questions:

1. Difficulty seeing/hearing (19a/19b or 25a/25b): Edit the questions to read, "Do you have difficulty seeing, even when wearing glasses?" and "Do you have difficulty hearing, even when using a hearing aid?"

2. Difficulty walking or climbing steps (19a/25c): No changes as this question was understood well by participants.

3. Difficulty remembering or concentrating (19b/25d): No changes as this question was understood well by participants.

4. Difficulty with self-care (19c/25e): No changes as this question was understood well by participants.

5. Difficulty communicating (19d/25f): No changes as this question was understood well by participants.

6. Difficulty doing errands alone (20/25g): No changes. Continue using the preamble in this question to ensure that participants think beyond physical disabilities.

2.7   SNAP Participation

The final GQ test topic was SNAP participation. Only one version of the question was tested to determine whether participants report benefits received in the prior year (as opposed to the past 12 months). ***Table 2.7*** displays the SNAP question by mode.

The key research goal of cognitive testing was to determine the following:

1. Do participants report for the appropriate reference period (prior year)?

Table 2.7.   SNAP Participation Question by Mode

Paper Mode	CAI Mode
In 2021, did you receive benefits from the Food Stamp Program or SNAP (the Supplemental Nutrition Assistance Program)? *Do NOT include WIC, the School Lunch Program, or assistance from food banks.* ☐ Yes ☐ No	**In <2020/2021>, did you receive benefits from the Food Stamp Program or SNAP (the Supplemental Nutrition Assistance Program)? Do NOT include WIC, the School Lunch Program, or assistance from food banks.** Yes No

2.7.1 Findings by Mode

A total of 11 CAI participants (6 non-institutional and 5 institutional) and 8 paper participants were probed on the SNAP question. One non-institutional CAI participant indicated that they had some difficulty answering the SNAP question because "of how many things [the interviewer] was asking. It was a lengthy question." All other CAI participants found this question easy to answer.

One non-institutional paper participant also had some difficulty answering this question. This participant initially answered "Yes" because she included the School Lunch Program in her response. When the participant reviewed the question during probing, she realized she had overlooked the instruction "Do NOT include…" The participant indicated she would change her response to "No" as the School Lunch Program was the only benefit she had received in 2021. All other paper participants found this question easy to answer.

2.7.2 General Findings

1. Do participants report for the appropriate reference period (prior year)?

Only 1 of the 8 institutional GQ participants reported having received SNAP benefits in the prior year. This participant said he found it easy to respond to the question as he knew he had been receiving SNAP benefits for the past few years. This participant was the only one who indicated they were thinking of the incorrect reference period. The participant noted he was thinking of the current year (2021) rather than the prior year; however, had he thought of the prior year, his answer would not have changed as he had been receiving benefits for several years. The remaining 7 participants all responded "No" to the SNAP question, and all were able to respond without difficulty.

Four of the 5 institutional GQ participants who were probed on the SNAP question confirmed they were thinking appropriately of the prior year when responding, even when interviews occurred in late December. One participant mentioned that he had applied for SNAP benefits just the day before his interview but had not yet begun to receive the benefits and so answered "No." Another participant who responded "No" noted they had been receiving SNAP benefits for the past 3 months but not in the prior year of 2020.

Only one non-institutional GQ participant was thinking of the incorrect reference period. This participant indicated that he was thinking of October 2020–December 2021 when answering this question. The participant explained that he was in the state hospital for 3 years and did not have food stamps during that time. He was released from the hospital in October 2020, and that is when he started receiving SNAP benefits.

2.7.3 Recommendations

The SNAP question performed very well, with only a couple of participants having some difficulty answering the question. Thus, RTI/RSS does not recommend any changes to the SNAP question.

3. Puerto Rico Community Survey (PRCS) Goals and Protocols

A second goal of Round 3 data collection was interviewing monolingual residents of Puerto Rico in Spanish. The Round 3 Spanish interviews tested questions on 12 topics. To keep the interview timing reasonable for each participant, the questions were organized into three groups, as in Round 2, and participants were assigned to receive only one of the three question groupings. The PRCS question topics were organized into the following groups:

Group 1

- – Household Roster
- – Septic Systems
- – Home Heating Fuel
- – Condominium or Homeowners Association (HOA) Fees
- – SNAP Participation

Group 2

- – Educational Attainment
- – Health Insurance Coverage
- – Disability

Group 3

- – Electric Vehicles
- – Solar Power
- – Means of Transportation to Work
- – Income and Weeks Worked

The goal for PRCS data collection was to conduct about 20 interviews across each of the three question groups and complete a total of 60 interviews. These goals were attained. Unlike Round 2, no targets were set for national origin because all participants were recruited from Puerto Rico. One goal was to recruit participants from multiple locations in Puerto Rico, not just the greater San Juan metropolitan area, which was also attained.

The target population for PRCS Spanish interviews was adults (aged 18 or older) currently residing in Puerto Rico who are primarily Spanish speakers. In addition, recruits for PRCS interviews were screened on a number of specific characteristics, and the numbers of participants who completed an interview and had any of these characteristics were tracked and reported. Participants meeting any one of these specific characteristics were prioritized for an interview for the question group in which the relevant topic(s) were being tested.

For the following three characteristics, a target number of at least 5 interview participants was proposed for each of the following characteristics:

1. Household Roster: Participants in complex living situations, including housing units with tenuously/temporarily attached household members, foster children, or unrelated household members, with a special focus on unrelated children. Ideally, a few interviews would be conducted with households with unrelated children.

2. Means of Transportation to Work: Participants who worked for pay in the last year

3. Income/Weeks Worked/SNAP: Participants who are currently employed

For the additional characteristics listed below, participants meeting any one of these characteristics were prioritized for an interview for the question group in which the relevant topic was being tested. Recruits who met one or more of these characteristics were favored in selection and scheduling, but willing recruits who did not meet any of these characteristics were selected and scheduled when those who met specific criteria could not be reached or declined to participate. The numbers of participants who completed an interview and had any of these characteristics were tracked and reported, but <u>no specific targets</u> for participants who met one or more of these characteristics were established.

4. Education:

   – Participants with little or no formal education

   – Participants with children in household who are 3 to 5 years old

5. Health Insurance Coverage:

   – Uninsured persons (no health insurance coverage)

   – Persons with dental, drug, or vision plans

   – Persons aged 65 or older

6. Disability:

   – Parents/legal guardians of children with disabilities

   – Persons with disabilities (of varying type and level of severity)

   – Persons aged 50 or older

7. Means of Transportation to Work:

   – Used ride-hailing services for commuting to work

8. Income/Weeks Worked/SNAP (PAN):

   – Participants who received PAN/public assistance

   – Irregular workers

   – Participants who are self-employed

   – Participants with rental income

   – Participants with retirement income

9. Septic Systems:

   – Participants with septic

   – Participants with public sewer

10. Electric Vehicles (EVs):

    – Participants with EVs in household

11. Home Heating Fuel:

    – Participants with heating in housing unit

12. Solar Power:

    – Participants with solar energy

13. Homeowners Association (HOA):

    – Homeowners who live in a housing unit that is part of a homeowners' association with a required HOA fee

    – Homeowners who live in a condominium

For both sets of characteristics, considerations were discussed on how to prioritize selection of recruits for interviews to ensure that the overall goals for PRCS interviews were met.

A total of 60 PRCS interviews were completed in Round 3. **Tables 3.1** through **3.3** provide key participant demographics for the final set of Round 3 PRCS interview participants.

Table 3.1.   Age and Sex of PRCS Participants

	Completed Interviews[a]	
Age Group and Sex	**Frequency**	**Percentage**
Age Group		
18–20	2	3.3
21–30	11	18.3
31–40	12	20.0
41–50	16	26.7
51–60	10	16.7
61–70	7	11.7
71 and above	2	3.3
Total	**60**	**100**
Sex		
Male	15	25.0
Female	45	75.0
Total	**60**	100

[a] Based on 60 unique PRCS participants who were Spanish speakers.

Table 3.2.   Race of PRCS Participants

Race	Completed Interviews[a]	
	Frequency	**Percentage**
White	34	56.7
Black or African American	13	21.7
American Indian or Alaska Native	1	1.7
Other	15	25.0
Total	**63[b]**	**–**

[a] Based on 59 unique PRCS participants who were Spanish speakers.

[b] The 63 completed interviews reflect the total count of responses because some participants endorsed multiple races.

Table 3.3.   Education of PRCS Participants

Education	Completed Interviews[a]	
	Frequency	**Percentage**
High school diploma	14	23.3
Some college, no degree	4	6.7
Associate's degree (AA, AS, or equivalent)	9	15.0
Bachelor's degree (BA, BS, or equivalent)	18	30.0
Post Bachelor's degree (MA, PhD, MD, etc.)	15	25.0
Total	**60**	**100**

[a] Based on 60 unique PRCS participants who were Spanish speakers.

For Round 3, RTI/RSS recorded screening responses from 87 prospective PRCS Spanish-speaking participants and contacted 73 of them to schedule an interview. The interviewing team successfully completed 60 cognitive interviews in Spanish (approximately 82% of the contacted sample). For another 2 selected participants (approximately 2.7%), interviewers were unable to establish contact after at least three attempts. Another 7 participants did not show up for a scheduled appointment, and 3 others declined to be interviewed. One participant withdrew during the interview because someone who was present while they were being interviewed asked them to end the conversation. This participant left the interview without an explanation. ***Table 3.4*** presents PRCS participants' characteristics that were targeted and monitored for Round 3 data collection.

Table 3.4.   Characteristics Targets and Results for All PRCS Participants

PRCS Participant Tracking[a]	Completed	Minimum Target
Spanish		
Group 1		
Household Roster		
▪ Complex household	5	5
Septic System		
▪ Live in a housing unit with a septic tank	2	–
▪ Live in a housing unit connected to public sewer	18	–
Home Heating Fuel		
▪ Has heating in housing unit	7	–
SNAP		
▪ Prior year SNAP benefits	12	–
Group 2		
Education Attainment		
▪ Never attended school/no formal education	0	–
▪ Did not complete high school and no GED/diploma	0	–
▪ Left college without completing academic year	4	–
▪ Parents of children aged 3 to 5	0	–
Health Insurance Coverage		
▪ Age 65+	1	–
▪ Uninsured persons	0	–
Disability		
▪ Parents/guardians of children with disabilities	0	–
▪ People with severe difficulty with daily activities because of a physical, mental, or emotional condition	7	–
▪ People with less severe difficulty with daily activities because of a physical, mental, or emotional condition	1	–
▪ Age 50+	7	–

(continued)

Table 3.4.   Characteristics Targets and Results for All PRCS Participants (continued)

	Spanish	
PRCS Participant Tracking[a]	**Completed**	**Minimum Target**
Group 3		
Solar Power		
▪ Residents of housing units with solar panels	2	–
Means of Transportation to Work		
▪ Taxicab, motorcycle, bicycle, or other means	3	
Income and Weeks Worked		
▪ Currently employed for pay	18	5
▪ Worked for pay in prior year	18	5
▪ Irregular workers in the prior year	10	–
▪ Earned self-employment income in prior year	5	–
▪ Earned net rental income in prior year	3	–
▪ Earned retirement income in prior year	2	–
▪ Received TANF or other financial assistance other than SNAP in the prior year	4	–
▪ Received SNAP in prior year	8	–

[a] The sub-characteristics listed were tracked to document the background of interviewed participants, but they do not have specific interview targets.

Table 3.5 presents the distributions of the 60 completed PRCS interviews by question group and mode.

Table 3.5.   PRCS Interviews by Group and Mode

		Spanish			
Mode	**Group**	**Selected**	**Completed**	**Target**	**Total**
Paper	G1	0	6	6	20
Paper	G2	0	7	7	
Paper	G3	0	7	7	
CAI w / cards	G1	0	8	8	22
CAI w / cards	G2	0	7	7	
CAI w / cards	G3	0	7	7	
CAI w/o cards	G1	0	6	6	18
CAI w/o cards	G2	0	6	6	
CAI w/o cards	G3	0	6	6	
TOTAL		**0**	**60**	**60**	**60**

Sections 4 through 6 present results and recommendations for the PRCS interviews for each of the 12 question topics tested in Round 3.

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4. PRCS Group 1 Findings and Recommendations

Group 1 participants were tested on five topics: household roster, septic systems, home heating fuel, SNAP (PAN) participation, and HOA/condominium fees. This chapter presents a summary of findings and specific findings for each of the five Group 1 test topics.

Most questions tested in this group worked well. For the household roster question(s), participants understood that unrelated people should be listed, but we could not establish whether they would have listed them if they had any at home. Most participants did not live in complex households. In the paper mode, some did not read the instructions about who to include or exclude; those who started reading the instructions soon decided they did not apply to them and stopped. The concepts of a short visit, an overnight stay, and the 2 month reference period worked well. In CAI mode, no one experienced annoyance or confusion about the roster questions. Generally, no privacy concerns were expressed.

The septic systems question worked well. Most participants knew which system they had in their dwelling. There was one false negative, a person who answered "No" to public sewer and "No" to septic system. In probing, it became apparent they had not understood the question. When it was read again, they answered correctly that they had public sewer service. No changes to the question are needed.

The home heating fuel question was not relevant for the participants, because they did not have heating in their homes. Nonetheless, we found more response error in the paper mode version than in CAI mode. On paper, the question begins by asking which fuel is most used. In CAI, it first mentions the purpose of heating the home. There were false positives in the paper mode, with participants answering about fuel used in the home, but not for heating.

The SNAP (PAN) question worked well for the calendar year reference period.

The questions on HOA/condominium fees worked well, with most participants answering correctly. Those who paid these fees understood the questions well. Among those who did not pay these fees, some did not understand the concept of a homeowners' association, but still answered correctly.

4.1 Household Roster

The first test topic in Group 1 was the household roster. **_Table 4.1_** displays the household roster question by mode.

The key research goals of cognitive testing were to determine the following:

1. Do participants understand that they should include unrelated people on the roster?

2. (For paper) Do participants notice and comprehend all of the text about who to include or exclude outside of the main question stem? Are they using this text when responding?

3. (For CAI) What do the translations for "short visit" mean to participants? "Overnight stay"?

4. Were there any people on the roster who should not have been listed? Were there any people missing from the roster?

5. For CAI, assess this on the final roster (i.e., not after the initial roster question).

6. Were participants hesitant or unsure about including anyone who lives or stays with them?

   a. If so, what are the relationships and/or living situations of those people?

   b. What was the reason they were hesitant or unsure to include them?

   c. Were they unsure how long someone had to live there to be included?

7. Do participants have privacy concerns about reporting certain household members?

   a. If so, what are the relationships and/or living situations of those people?

   b. What wording increased or decreased their concerns?

8. (For CAI only) Did the participants express annoyance or confusion about why we were asking the series of questions to build the roster?

9. If the participant doesn't have a complex living situation now (they didn't add or delete people via the undercount or overcount questions), have they ever have had one (lived with someone else or have someone else live with them)? How would they have thought about that situation?

10. (CAI) Were there any questions or concerns about each of the rostering questions? Were there any terms that were not understood or were unclear?

11. For people with tenuous living situations, are they included on the roster? For CAI, which roster question solicits including them? For CAI, are they removed through the overcount questions and follow-up? People with tenuous living situations include someone who is sleeping on the couch or comes and goes. It may also include someone (or group of people) who it's unclear how long they will be living or staying.

12. For people with temporary or tenuous living situations, do they have another place to live? Do they have another place to stay? (Which of these words is more appropriate in the Another Place to Stay question?)

13. When answering the roster questions, how do participants interpret the "two months" time period? Does it imply a continuous number of days staying at the address?

14. Are the Roster Check Questions understood by participants? Are they able to answer the question with details about the living situation? Are they comfortable providing that information? (This analysis should include anyone who is asked this question across all the groups since it was placed in all groups.)

15. What does "compañeros de casa" mean to participants? Does it include people who rent a room from a property owner and aren't also named on a lease? Does it help or hurt to have the word "roommate" in English in this response option?[3]

16. What does "hijo de crianza" mean to participants? Does it help to have the English word "foster" in the response option for foster kids? How do participants interpret the concept of foster kids based on the translation we are testing?

This section details the general findings related to these research questions.

Table 4.1   Household Roster Questions by Mode

CAI Mode	Paper Mode
1a. Hagamos una lista de todas las personas, incluyendo aquellas que no están emparentadas con usted, que viven o se quedan en <CATI: esa/CAPI: esta> dirección. ¿Cuál es <su nombre / el nombre de la siguiente persona que vive o se queda [CATI: ahí /CAPI: aquí]>?	Incluyéndose a sí mismo, ¿cuántas personas viven o se quedan en esta dirección? **INCLUYA A...** ✓ personas que no están emparentadas con usted, tales como compañeros de casa o *roommates* y otras familias. ✓ bebés y niños, emparentados o no con usted, incluyendo nietos e hijos de crianza *(foster)*. ✓ todas las personas que se estén quedando aquí ahora que no tengan otro lugar donde quedarse. **NO INCLUYA A** nadie que esté viviendo en otro lugar, tal como... ✗ un estudiante universitario que vive en otra parte. ✗ alguien en las Fuerzas Armadas en movilización. **Número de personas**
1b. Hacemos las siguientes preguntas para asegurarnos de incluir a todos. Además de las personas que ya mencionó, ¿hay niños que vivan o se estén quedando <CATI: ahí /CAPI: aquí >, tales como bebés, nietos o hijos de crianza (*foster*)? Estos niños pueden estar emparentados o no con usted.	
1c. Además de las personas que ya mencionó, ¿hay alguna otra persona que se esté quedando <CATI: ahí /CAPI: aquí >, tales como compañeros de casa o *roommates* y otras personas o familias que no tengan otro lugar donde quedarse?	
1d. ¿Alguna de estas personas vive en otro lugar ahora, tal como un estudiante universitario o alguien en las Fuerzas Armadas en movilización?	
1e. ¿Alguna de estas personas está quedándose en <address> por una visita corta o por una noche?	
1f. ¿Está <usted/NOMBRE> quedándose <CATI: ahí /CAPI: aquí > por MÁS de dos meses?	
1g. ¿Tiene <usted/NOMBRE> otro lugar donde vivir?	

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[3] Due to an oversight in the development of materials, probes for research questions 15 and 16 were not included in the study protocols.

4.1.1 General Findings

General findings that apply to both modes are discussed in this section, and mode-specific findings are addressed in **Section 4.1.2**.

1. ***Do participants understand that they should include unrelated people on the roster?***

When asked whether unrelated people should be included in the household roster, 12 of 14 participants understood that anyone residing in the home should be included regardless of relationship.

- "Pregunta de personas que vivan bajo el mismo techo independientemente del parentesco." [23:30] (It is asking about people who live under the same roof regardless of kinship.)

- "Sí, entiendo que me está haciendo la pregunta de personas... O sea, me está preguntando cuántas personas viven en esta dirección, punto, sean o no familiares." [23:33] (Yes, I understand that they are asking me about people... I mean, they're asking me how many people live at this address, period, whether or not they are relatives.)"

None of the interviewed participants reported any nonrelatives in their household currently. Ten of the 20 participants were either confused by the hypothetical nature of the probing and/or had difficulty thinking about a household situation different from their own. In these participants' views, someone unrelated would likely be a short-term or temporary guest who should not be counted. When interviewers clarified the probe, participants seemed to understand as intended.

- One participant interviewed in CAI mode initially thought someone unrelated should not be included, "No creo que deba incluirlas." [21:01] (I don't think I should include them.) "Cuando una persona no está emparentada con uno, no aporta nada al hogar." [21:17] (When people are not related, they do not contribute anything to the household.) When asked if they would include someone unrelated if they lived with them permanently, they said they would.

4. ***Were there any people on the roster who should not have been listed? Were there any people missing from the roster?***

5. ***For CAI, assess this on the final roster (i.e., not after the initial roster question).***

Most participants were very certain when listing household members on the roster, and none omitted anyone who should have been included. Only 1 participant tested in CAI mode mistakenly reported extra household members. This participant reported a household of six persons, including the participant, their mother, their daughter, son-in-law, and two grandchildren. When the interviewer probed as to whether anyone reported stays someplace else, the participant clarified that the family members do not actually live with her.

- "No, ellos no viven aquí, ellos se pueden quedar una noche que otra aquí, pero no viven aquí." [3:52 part 2] (No, they don't live here, they can stay here one night, but they do not live here.) [PROBE: Interviewer repeated the question.] "Por eso, '"viven o se están quedando,'" se están quedando o se pueden quedar de una noche para otra, pero no es que vivan." (Precisely, "living or staying," they are staying or could stay from one night to another, but they don't live here.) "Yo vivo sola." (I live alone.) [PROBE: And all the people you mentioned?] "Mi hija, mi nieta, mi mamá, que de vez en cuando, según sea la situación, se pueden quedar aquí, pero no se quedan aquí, no viven conmigo, ellos tienen su casa y vienen y visitan." (They are my daughter, my grandchild, my mom, and from time to time, depending on the situation, they can stay here but they are not staying here, they don't live with me, they have their own house, and they come to visit.)

6. ***Were participants hesitant or unsure about including anyone that lives or stays with them?***

   a. ***If so, what are the relationships and/or living situations of those people?***

   b. ***What was the reason they were hesitant or unsure to include them?***

   c. ***Were they unsure how long someone had to live there to be included?***

Participants were asked if anyone had visited or stayed with them recently and whether they were unsure about including them. Several participants detailed family members who visit or come to stay for short visits regularly, but none were confused about whether these relatives should be included. Of the 20 Group 1 participants, 14 said they had not had any recent guests or visitors.

- One participant tested in paper mode explained that she sometimes picks up their nephews to spend weekends with them and considered whether she should include them. She decided not to as she would think their father would include the children on his own census form. All 5 of the other participants tested in paper mode had no issues or uncertainty when reporting household roster—all live with a spouse and/or biological children.

- One participant tested in CAI mode mentioned his partner who comes to stay for the weekend: "Mi pareja, se queda máximo dos días, un fin de semana cada cierto tiempo." [18:53] (My partner, they stay for the weekend every so often.)

- Another participant mentioned that their son comes to visit about once per week and spends the night, but he lives primarily at their second residence by the beach. This participant explained that she did not believe she should include their son because he does not live there, he only visits.

- One participant mentioned that their brother comes to stay overnight somewhere between once a month and every few months, but he lives with his mother. Similarly, another participant said she has a cousin who comes to visit overnight every month to every 3 months or so. While she said she thought of their cousin at the mention of "short stay or overnight visit" at question 1e, she decided not to include them because they only come to visit.

- Another participant reported living with their spouse and grandchild. They explained that their grandson has lived with them since he was a baby; although he may stay with his mother occasionally, it is only for one night at a time. The participant has

other grandchildren who visit and may stay overnight, but they would not include them because they do not live with them.

7. Do participants have privacy concerns about reporting certain household members?

   a. If so, what are the relationships and/or living situations of those people?

   b. What wording increased or decreased their concerns?

Only 1 participant mentioned privacy concerns, citing the personal nature of the information reported:

- ▪ "Sí, porque entiendo que es algo como muy personal; deberían preguntar qué cantidad de personas, sin preguntar los nombres." [59:00] (Yes, because I understand that it's something very personal; they should ask the number of people, without asking for the names.)

The remaining 19 of 20 participants in Group 1 said they had no concerns about privacy. One participant noted that she felt reassured by the fact that she was told everything would be confidential. It is not possible to determine whether the participant was referring to the cognitive interview itself or the PRCS questionnaire when she said this as the promise of confidentiality delivered at the beginning of the cognitive interview applies to both the interview probes and the PRCS questions. Another mentioned that they had no concerns about privacy when reporting household members because they have responded to questions from the Census Bureau before.

9. If the participant doesn't have a complex living situation now (they didn't add or delete people via the undercount or overcount questions), have they ever have had one (lived with someone else or have someone else live with them)? How would they have thought about that situation?

Eleven of the 14 Group 1 participants who were asked whether they had ever had a more complex living situation said they had not, but a few were able to reflect on past experiences:

- ▪ One participant mentioned having lived with roommates in college who she said she would have included had she completed the survey at that time.

- ▪ Another said that when she was a young child she stayed with a family and thought they would have included her.

- ▪ One participant recalled a period in her life when she was homeless and transient. This participant had difficulty considering how she may have responded in that living situation, which she mentioned was a difficult and negative time in her life.

Participants were presented with a series of vignettes to see how they thought someone should answer in complex situations. How many were presented each vignette varied based on how much prior roster discussion had taken place and timing constraints.

- ▪ The first vignette was presented to 19 participants. It asked how someone should answer if their 19-year-old stepson stays with them half the time and with their

other parent the other half of the time. Eighteen of the 19 participants said "Yes," Maria should include her stepson. Most cited that the stepson should be included because he stays there "half" or most of the time, or because he is a household member or part of the family. One participant wondered how half the time was measured (e.g., by week, month), but overall participants felt that the stepson should be included.

- "Sí, porque la mayoría la pasa con ella, se va un tiempo pero… se tiene que incluir." [22:26] (Yes, because he spends most of the time with her, he leaves for a while but… he must be included.)

- "Porque como se queda la mitad del tiempo consume mucho de la electricidad, del agua, de la comida, etc." [28:31] ([Yes] Because he stays in for half of the time, he makes extensive use of resources like electricity, water, food, etc.)

- "Sí, porque yo anteriormente contesté que una persona que viviera más de seis meses debía ser incluido. Y en un año la mitad del tiempo serían los seis meses." [35:14] (Yes, because I previously answered that a person living there more than 6 months should be included. And half of the time in a year would be 6 months.)

- "Porque ahí él tiene dos casas, está tanto ahí como en la otra, no está de paso, se queda en su casa y también en la otra." [24:16] (Because in this situation, he has two homes, he belongs in one home and in the other; he is not around just for a short time, he stays in his place and in his other place.)

One participant felt that Maria should include her stepson because he stays for long periods of time, but that she should make sure his mother knows she included him so he will not be counted twice. Only 1 participant felt that the stepson should not be included because he has a permanent place to stay where he keeps personal belongings.

Seventeen participants were presented the next vignette, which asked about someone whose cousin is staying with him from out of state while he completes a 10-week training program. Participants were divided as to whether the cousin should be included, but the majority felt the cousin should not be included because the training is temporary, and the cousin has a home that he will return to after a set period of time.

- "Porque cuando Marcos termina su entrenamiento se regresa a su estado" (Because once Marcos finishes his training, he will go back to the state where he lives.)

- "No, en ese caso no, porque es temporero y no es una situación que va a ser permanente." [35:54] (No, not in that case because it is temporary, and it is not a situation that will be permanent.)

- "No. Sabemos que tiene fecha de que en algún momento se va." (No, we know he has a set date to leave at some point.)

Six participants felt the cousin should be included and were primarily considering the length of his stay, noting that 10 weeks or 2.5 months seems a significant length of time. Several referenced the instruction to include anyone staying for a short time as the reason they would include the cousin in this scenario.

- ▪ "Pienso que sí también porque la pregunta dice que, si se está quedando más de un día o más de un mes debe de incluir a la persona, y si él se está quedando más de 10 semanas pues cumple con ese tiempo. Así que sí debería de incluirlo." [27:25] (I think so too because the question says that if they are staying more than a day or more than a month, you should include the person, and if he is staying more than 10 weeks then he meets that time. So yes, he should include him.)

Sixteen participants were presented with the third vignette, which was about someone who was staying with different friends for about a month at a time because she lost her job and had to move out of her apartment. Participants were again divided, with 8 of the 16 saying they would not include the friend staying temporarily. Of these 8, 7 said the friend should not be included, and 1 was unsure as to their rationale. Participants who thought the friend should not be included mentioned that she was staying only a short time and not permanently.

- ▪ "No, porque ese lugar donde ella está quedándose no es fijo, es temporal porque puede ser que en menos de un mes ella se vaya para casa de otro amigo, o de otra amistad." [23:33] (No, because that place where she is staying is not her permanent place but a temporary one, it could be the case that in less than a month she leaves and stays at some other friend's place.)

- ▪ "No, porque es algo temporero, no es algo que va a ser permanente." [36:37] (No, because it is something temporary, it is not something that is going to be permanent.) The participant added that it was possible that Kelly would not be living there the day after her friend completed the survey, and it would be like providing false information.

The other half of the participants presented with this vignette (8 of 16) felt that this friend should be included. While most noted that the stay was short or temporary, several cited the instruction to include anyone staying for a short period if they have no other place of residence.

- ▪ "En ese momento sí, la debe incluir, porque tú no sabes si Kelly se queda más tiempo contigo, de momento se supone que es un mes, pero si no consigue, se queda en tu casa." [32:49] (At that moment yes, she should include her, because you do not know if Kelly is staying longer with you. She is supposed to stay for a month but if she does not get a job, she stays with you longer.)

- ▪ "Sí, también pienso que debería de incluirla porque la amiga se está quedando en ese momento con ella así que adicional por el tiempo también aplica por el requisito." [28:18] (Yes, I also think she should be included because the friend is staying with her at the time, so in addition to the time, it also applies to that requirement.)

One participant was uncertain about this scenario. Initially, she responded that the friend should be included: "Si no tiene empleo, quizá ella la esté manteniendo… creo que sí." [25:45] (If she is not employed, maybe she is supporting her, so I think she should.) Upon further consideration, this participant said she found this scenario confusing. In the previous

vignette, the cousin coming to visit was covering his own expenses, whereas in this case the person may have to cover expenses for the unemployed friend.

11. *For people with tenuous living situations are they included on the roster? For CAI, which roster question solicits including them? For CAI, are they removed through the overcount questions and follow-up? People with tenuous living situations include someone who is sleeping on the couch or comes and goes. It may also include someone (or group of people) who it's unclear how long they will be living or staying.*

Most participants had simple households and no difficulty reporting household members accurately. None of the 20 Group 1 participants were currently in tenuous living situations or included any tenuous household members on the roster.

One participant tested in CAI mode expressed some initial uncertainty about whether she should include her brother who sometimes stays overnight. Ultimately, she said she knew not to include her brother because she understood the question as asking who stays regularly and her brother lives mostly with his mother.

12. *For people with temporary or tenuous living situations, do they have another place to live? Do they have another place to stay? (Which of these words is more appropriate in the Another Place to Stay question.)*

Although no participants reported tenuous living situations themselves, when probed about the question wording for "no other place to stay" (no tenga otro lugar donde quedarse), participants generally interpreted the phrase as a temporary situation. Participants considered situations such as someone losing their home or needing a place to stay due to a relationship ending or other domestic dispute or taking in a relative for a short period.

- "Personas que a veces pasan situaciones con su hogar, o perdieron su casa, tuvieron un accidente, o terminaron su relación con alguien. Si son amigos o compañeros que uno conozca, verdad, le da la mano, como uno dice." [33:07] (People who sometimes go through situations with their home, or lose their house, had an accident, or ended their relationship with someone. If they are friends or acquaintances that you know, you give them a hand, as we say.)

- "Personas deambulantes, personas que no tiene hogar. O algún familiar que por alguna razón haya tenido una situación familiar y no tenga donde quedarse, pues entonces que uno quizás lo pueda acoger en un momento dado en la residencia y de algo temporero pase a algo permanente." [22:31] (Homeless people, people who have no home. Or a family member who for some reason has had a family situation and has no place to stay, then perhaps you take them in, and something that was temporary becomes something permanent.)

When asked how they interpreted "no other place to live" (no tiene otro lugar donde vivir) vs. "no other place to stay" (no tiene otro lugar donde quedarse), participants generally thought of "vivir" as reflecting a more permanent living situation or home ownership.

- "Que sea dueño de otra propiedad." [26:45] (That they own another place.)

- ▪ "Es diferente. Vivir es donde ya es una estadía permanente. Quedarse puede ser algo parcial, poder brincar de un lugar a otro. Es como el hospital, uno no se queda permanente en el hospital. Uno va a una visita, posiblemente de una hora, ver al médico o de emergencia, o te quedas por unos días, pero no es tu lugar fijo. A menos que estés en rehabilitación y te quedes por meses." [35:18] (It's different. "To live" means it's staying there permanently. "To stay" can be partial, being able to jump from one place to another. It is like the hospital; one does not stay permanently in the hospital. You go for a visit, possibly for an hour, to see the doctor or for an emergency, or you stay there for a few days, but it is not your permanent place. Unless you're in rehab and stay for months.)

Most participants focused on their interpretation of one term or the other, whereas those who compared the two considered having somewhere "to live" as more permanent. Several participants explained their perception of the difference between the two terms and made a clear distinction.

- ▪ "Donde quedarse y donde vivir es diferente, porque donde quedarse… porque a lo mejor se puede quedar aquí en mi casa, en la casa de mi hermana, o en casa de un primo mío. De vivir depende si no tiene casa. Que llega de Estados Unidos y no tiene donde vivir pues se quedaría aquí mientras consigue su vivienda. Lo de quedarse es: 'Me voy a quedar en tu casa', pero no es vivir en mi casa. Es quedarse por un tiempo." [22:57] (Where to stay and where to live is different, because where to stay… because they can stay here in my house, in my sister's house, or in a cousin's house. Where to live depends on whether they don't have a house. If they arrive from the United States and do not have a place to live, they would stay here until they find a place to live. Staying is: "I'm going to stay in your house," but it's not living in my house. It is staying for a while.)

- ▪ "Dónde quedarse podría ser que yo vaya a casa de mi suegra o de mi hija. Vivir es un lugar que yo elegí para yo tener una vida en un lugar." [39:25] (Where to stay could be that I go to my mother-in-law's house or my daughter's house. To live is for a place that I chose where to have a life.) After probing further about staying somewhere, the participant said it meant going on a trip or visiting someone and staying at that person's home. She added that this is what staying means for Puerto Ricans, about staying somewhere. She said it could be 1 day, 3 days, 1 week, but not more than 1 month. It is something temporary.

4.1.2 Other Findings by Mode

a. Paper Mode

2. *Do participants notice and comprehend all of the text about who to include or exclude outside of the main question stem? Are they utilizing this text when responding?*

When asked to review the text, all 6 participants tested in paper mode said they found the instruction about inclusion/exclusion to be clear. Three of the 6 said they had read the instruction when responding, whereas 3 reported they had not read the instruction. None of the 6 participants utilized this instruction when determining a response either because they did not read the instruction or because they did not find it useful.

One participant said she read the instructions only partially because she knows the only person living with her is her son. This participant said that, had there been others in her household, she would have read the instruction to determine whether to include them or not. Another participant explained, similarly, that she did not read the inclusion/exclusion instruction because it did not apply to her situation:

- "Porque no la creí muy… no la creo muy, no la creo que me esté hablando a mí, porque como no tengo a más nadie, solamente mis hijos y yo." [19:25] (Because I did not think, I don't think… I do not think this is speaking to me since I have nobody else, it is just my kids and me.)

b. CAI Mode

One participant tested in CAI mode mentioned that they have had fewer guests or visitors because of the coronavirus pandemic. This participant was thinking of someone unrelated as someone in need; although she has not been able to take in any visitors recently, she understood that she would count anyone living with her.

- "Bueno, para mí, no [interesa], porque puede haber gente que se quede en la calle, que uno tenga que darle albergue, en lo que consigue otro hogar. Yo no se lo puedo dar, pero en estos momentos estamos más que mi nene y yo viviendo en el hogar. Pero si me tocara ayudar a alguien, lo ayudo." [24:56] (Well, for me, it doesn't [matter], because there may be people who are left homeless and one must give them shelter, while they find another home. I can't do that for them, but right now it's only my child and me living at home. But if I have to help someone, I help them.)

3. *What do the translations for "short visit" mean to participants? "Overnight stay"?*

All 14 participants tested in CAI mode were asked how they interpreted the translations for short visit or overnight stay, "por una visita corta o por una noche." Participants ranged in what they considered "una visita corta" from less than 1 hour to 1 night or a few nights. A few participants mentioned that up to, but not more than, 1 week could be considered a short visit.

- ▪ "Que viene, se queda por unas horas conversando, poniéndose al día y se regresan a su lugar." [26:10] (That the person comes by, stays for a few hours chatting, we catch up, and then they go back to their place.)

- ▪ "Que hoy se quedó, mañana se fue, o quizá a la otra noche… algo corto." [21:42] (That they stay today, and tomorrow they leave… a short stay.)

- ▪ "Que estaba de pasadita. Pasó por mi casa y me preguntó si podía quedarse y le dije que sí, siempre y cuando sea un familiar o un conocido, y se fue al otro día." [31:15] (They were just passing by. They stopped by my house and asked me if they could stay and I said yes, as long as they're a family member or an acquaintance, and then they left the next day.)

Interestingly, 2 participants mentioned a colloquial term that is used in Puerto Rico specifically to mean a short visit, translating to a "doctor's visit." One described a "visita corta" as when people come over for a quick stay, up to 1½ hours. She said in Puerto Rico these are called "visita de doctor" (doctor's visit). A second participant used a variation of the same term:

- ▪ "Bueno, 'una visita de médico.' Que viene, está por lo menos media hora, una hora y se va." [24:32] (Well, like a doctor's visit. They come, stay for at least half an hour, an hour and then leave.)

8. Did the participants express annoyance or confusion about why we were asking the series of questions to build the roster?

One participant expressed annoyance, responding "No" to each question without allowing the interviewer to read the full question. No others expressed any issue or confusion.

10. Were there any questions or concerns about each of the rostering questions? Were there any terms that were not understood or unclear?

The series of rostering questions were generally clear to participants tested in CAI mode, with most answering "No" to all questions accurately and without issue. None of the participants posed questions or expressed any concerns, and all terms seemed to be generally well understood.

One participant was unsure about question 1d, which checks for anyone away at college or in the Armed Forces. They explained that their daughter who lives in the household currently will be leaving soon for the Army: "Mi hija X se va pronto." [4:03] (My daughter is leaving soon.) After the interviewer repeated the question, this participant answered "No" as they had included their daughter in the initial roster.

13. When answering the roster questions, how do participants interpret the "two months" time period? Does it imply a continuous number of days staying at the address?

Participants generally understood the "2 months" time frame as representative of someone residing somewhere more permanently.

- One participant said she understood the 2-month period to mean someone who is already part of the family group; they already are part of the family after staying there for more than 2 months.

- Another person expressed a similar view: "Pues pienso que es, o sea si se están quedando dos meses ya viene siendo parte del mismo hogar y debería de incluirse en la encuesta." [25:21] (I think it, in other words, if they are staying for 2 months, they are already part of the same household and should be included in the survey.)

- "Es como si está viviendo en forma permanente en la casa de uno. Como si fuera otro miembro [del hogar]." [26:20] (It is as if they are living permanently in one's house. As if it were another member [of the household].)

One participant thought of the 2-month time frame differently and considered the question as intended for people to report undocumented immigrants.

- "Pienso que están tratando de identificar personas que albergan indocumentados, gente sin papeles... inmigrantes, recién llegados al país; creo que la pregunta tiene que ver con eso." [28:58] (I think they are trying to identify people who are sheltering undocumented people, immigrants, newcomers to the country; I think the question has to do with that.)

14. Are the Roster Check Questions understood by participants? Are they able to answer the question with details about the living situation? Are they comfortable providing that information? (This analysis should include anyone who is asked this question across all the groups since it was placed in all groups.)

Five the 60 Spanish interview participants across Groups 1, 2, and 3 were asked the overcount follow-up question. These participants understood the question and were very comfortable providing sufficient detail about their living situation.

- The first participant answered, "Yes" for themselves to question 1d: "Do any of these people live somewhere else now, such as a college student or someone in the Armed Forces on deployment?" While answering the follow-up question, the participant explained that they live in college housing, but it is outside the campus. They answered the questions thinking about their home where they stay with their other family member on the weekends, and where they were while completing the interview. (This participant, outside of this research, would likely be counted as living in GQ.) If the skip instructions were followed, this person would not have been listed in question 1e, but for the sake of testing, they were included in the list in question 1e and the rest pf the questions.

- Another participant, who lived by themselves, included a friend who spends a couple of nights at a time with them every now and then. They explained that they go to school in a city that is far from their friend, and the friend stays at their home, just to spend some time together.

- Another participant explained that they and the second person listed in the roster (P2) recently had a baby (third person in the roster P3). Sometimes P2 stays at another place, so that someone can take care of P3, and they can work. When asked how many days per week P2 and P3 usually stay at that other place, the participant said three times per week.

- Another participant explained that the second and third persons listed in the roster (P2 and P3) have their own home. The participant (P1) is not married to P2, but they are a couple. P3 is P2's child. The participant said that they will probably live together at some point in the future, but for now they just spend some nights together. The participant added that P2 and P3 spend almost the same amount of time in both places, and they stay at P1's address 1 week at a time.

- The fifth participant answered, "Yes" to question 1d "Are any of these people staying here for a short visit or for an overnight stay?" and question 1g "<Do you/Does NAME> have another place to live?" for Person 3, Person 4, Person 5, and Person 6 in the roster (P3, P4, P5, P6). The participant explained that P3 has their own apartment with their children, P5 and P6. P3 is P2's significant other, so sometimes (four times per week, about every 2 weeks approximately) P3 and the children (P5 and P6) stay with P2 at P1's address. P4 works in the United States, and they also stay at that address when they are in Puerto Rico. The participant explained that P2 travels every 6 to 8 months, and when they are in Puerto Rico, they are there for 2 months.

When asked what they thought about the overcount follow-up questions, participants had the following answers:

- One participant said that they understood we wanted to clarify their living situation, which can be complicated to understand. They added that the follow-up question was easy to understand.

- Another participant said the question was easy to answer, and they felt comfortable providing that information.

- Another participant said that the question was okay, that we wanted to understand how much time each person stays at their home or other places people might stay.

- The fourth participant said that the question did not bother them and that it was a normal question.

- The fifth participant said the question did not bother them.

Of the 60 Spanish interview participants, only 1 participant was asked the undercount follow-up question. This participant understood the question and was very comfortable providing sufficient detail about their living situation.

- The participant explained that they were not sure if they should include their grandkids because they were very young. It was only after they heard the interviewer mention children in question 1b that they realized they had to include them. The grandkids live with them and do not have any other place to stay.

When asked what they thought about the follow-up question, this participant said that they did not think anything specific, only that we wanted to know why they did not include the children in the first place.

Of the 60 Spanish interview participants, 34 were asked how they felt answering questions about the other people they included in the roster. Most participants noted that they felt

comfortable and did not have privacy concerns, 2 participants had privacy concerns, and 1 participant did not share all the information about the other people living in the household.

- One participant said that they were concerned about the privacy of the other person in the household because that person did not give them consent to release their information.

- Another participant expressed privacy concerns about including their 3-month-old baby but did not specify what concerned them. The second participant said that they did not provide the names or dates of birth of the people living in the household because they did not think it was necessary for the purpose of the interview.

Participants were also asked if they had doubts about including other people living or staying in the household. Only three participants said that they had doubts.

- "Sí, a mi bebé. Pues no sabía si ponerlo porque como… Es que en todos lados es como un tire y jala, porque en algunos sitios sí debes de incluirlo y en otros no, no debes incluirlo. Y pues como lo que tiene son meses, pues por eso dudé en incluirlo." [57:27] (Yes, my baby. Well, I didn't know if I should include him because like… It's like a tug-of-war everywhere, because in some places you should include him and in others you should not, you should not include him. And since he is only months old, that is why I hesitated to include him.)

- Another participant said that they did not have concerns but were not sure whether they should include their grandkids because they are very young.

- The third participant said that they were hesitant about including the other members of the household because they were adults, and they should determine the information they want to share.

4.1.3 Recommendations

No changes are recommended.

4.2 Septic Systems

The next Group 1 test topic was Septic Systems. **Table 4.2** displays the question by interview mode. In both modes, the question asks, "Is this house, apartment, or mobile home connected to a public sewer?" For the paper mode, the response options were "Yes, connected to a public sewer," "No, connected to septic system or cesspool," and "No, use other type of system." For CAI, however, this is a Yes/No question with a follow-up for those who answer No: "Is it connected to a septic tank?"

The key research goals of cognitive testing were to determine the following:

1. Do participants know the difference between a decentralized wastewater treatment system and one connected to public sewer?

2. How do participants decide their answer choice?

3. Are participants selecting public sewer when their home is connected to a septic system? How many false positives are there with this question?

This section details the general and mode-specific findings as they relate to these research questions.

Table 4.2.   Septic System Question by Mode

CAI Mode	Paper Mode
14a ¿Está <esta casa móvil/esta casa/este apartamento/esta vivienda> conectado(a) a un alcantarillado o desagüe público? Sí No 14b. ¿Está conectado(a) a un tanque séptico? Sí No	**⑧ ¿Está esta casa, apartamento o casa móvil conectada(o) a un alcantarillado o desagüe público?** ☐ Sí, conectada(o) a un alcantarillado o desagüe público ☐ No, conectada(o) a un tanque séptico ☐ No, usa otro tipo de sistema

4.2.1 General Findings

1. Do participants know the difference between a decentralized wastewater treatment system (septic system) and one connected to the public sewer?

Although they may not know about different wastewater treatment systems, participants have a basic understanding of the kind of wastewater system their dwelling has or at least tend to know which one they have. All but 1 participant (19 of 20) were able to answer this question, and their answer was consistent with the explanations they later provided in probing. The participant who could not answer the question said they did not know what system they have and could not describe either type of system.

For public sewer, the descriptions all others provided focused on how the wastewater is channeled out of the homes and taken somewhere for processing. Where this processing happens was less clear for most participants.

- A public sewer is "un sistema que corre casi siempre a lo largo de las vías de tránsito por debajo de las aceras y se conecta con una tubería común." [38:03] (A system that almost always runs along the streets, under the sidewalks, and connects to a common pipeline.)

- Another participant described it as the pipeline that goes from her house to the main pipeline where all wastewater goes: "El alcantarillado es un sistema donde se desaguan las aguas que dirige el gobierno de Puerto Rico, ya está todo canalizado. Son tuberías subterráneas." [40:25] (The sewage system is a system where the water gets drained and it's directed by the Puerto Rico government, everything is already channeled through. They are underground pipes.)

- "El sistema de alcantarillado son las tuberías que pasan por todo... para recoger agua y todo lo demás que sale de una casa y lo pasa a lo que son del municipio o del gobierno las maquinas donde lo limpian y lo vuelven a pasar." [34:11] (The sewage system is the pipes that go through everything... to collect water and everything else

that comes out of a house and then pass it through the municipality's or the government's machines where they clean it and bring it back again.)

Although participants had more difficulty describing a "septic system," the majority were still able to provide at least a basic definition and distinguish this from a public sewer. Of the 20 participants, only 13 were asked to describe a septic system (in the other 7 cases, timing concerns or interviewer error led to not administering this probe). Of these, 5 could not provide a description or had never heard of it. The remaining 8 participants described septic systems as underground tanks or pits that the property owner must have emptied when full.

- ▪ "Un tipo de tanque subterráneo que van ahí los depósitos del desagüe de la casa, del inodoro, del baño, del fregadero, y después se paga para que una compañía venga y se lleve todos los desperdicios." [28:45] (A type of underground tank that holds the wastewater from the house, the toilet, the bathroom, the sink, and then you pay for a company to come and take all the waste away.)

- ▪ "Es un sitio donde van los desperdicios humanos, en el agua, y viene cada cierto tiempo un camión y extrae el agua… lo que haya ahí, los desperdicios." [34:49] (It is a place that collects human waste and every certain time a collector truck comes to extract the water, or whatever is there, the waste.)

- ▪ "Es algo que hacen como en tu propiedad solamente. Hacen algo dentro de la tierra, algún proceso que cuesta mucho dinero y es diferente. No es como alcantarillado y acueducto que es un sistema para todo el mundo y es público y es parte del gobierno. Siento que son distintos." [35:26] (It is something that they do on your property only. They do something in the ground, some process that costs a lot of money and it is different. It is not like sewer and aqueduct, which is a system that is for everybody, and it is public, and it is part of the government. I feel they are different.)

2. How do participants decide their answer choice?

Participants decided on their answer choice in a variety of ways. Most participants (17 of 20) answered the question and were able to explain how they know which wastewater treatment system they have in their dwelling. Those with public sewer service knew they pay the government for this public service. Participants also explained that urban areas in Puerto Rico are all connected to the public sewer, whereas in the countryside there are septic tanks in many places.

- ▪ "Porque el alcantarillado, como también los desagües, es algo común y es pagado por uno, pero es parte del uso del pueblo y es público. En toda esta área todo es alcantarillado, es un área urbana." [42:27] (Because the sewage system, as well as the drains, is something common and is paid for by us, but it's part of the town's use and it's public. Although they are privatized companies, it's public because anyone can throw their waste into those pipes. This entire area has sewage system, it's an urban area.)

- ▪ "Porque nosotros pagamos por el servicio de alcantarillado." [30:19] (Because we pay for sewer services.)

▪ A few mentioned they pay the bill from the Autoridad de Acueductos y Alcantarillados (Aqueducts and Sewer Authority).

3. Are participants selecting public sewer when their home is connected to a septic system? How many false positives are there with this question?

Most participants did not appear to select the wrong wastewater treatment system. One participant incorrectly said "No" to being on a public sewer system (false negative). This participant knew, in probing, that their home was connected to the public sewer system. They said they had not understood the question and had answered "No" for that reason.

4.2.2 Other Findings by Mode

a. CAI Mode

Of the 14 participants, 11 answered "Yes," 2 answered "No," and 1 said they did not know which system they have. Of the 2 who answered "No," 1 explained the septic system they have in the rural area of Puerto Rico in which they live. The other participant answered in error; in probing, they said they had not understood the question and explained how their dwelling is connected to the public sewer.

The 11 participants who said "Yes" to having public sewer services knew this was the case based on several factors. Five knew they pay for public sewer services.

▪ "Porque en la factura me lo cobran siempre." [33:20] (Because it is always included in my invoice.)

▪ "Porque pagamos Autoridad de Acueductos y pagamos por tener alcantarillado." [27:00] (Because we pay the Aqueduct Authority, and we pay them for having sewer service.)

The remaining 6 said they knew what system they have or mentioned that, living in an urban area in Puerto Rico, they all have public sewer system. One participant provided a more complete explanation (provided above under Research Question 2).

The question was understood as intended, and participants described the term "alcantarillado o desagüe público" somewhat accurately. They generally used the term "alcantarillado" to refer to the public sewer system.

One participant believed that their home uses more than one type of sewage disposal system. They said their toilet wastewater goes to a septic tank, whereas their bathtub and kitchen wastewater goes to the public sewer.

b. Paper Mode

Of the 6 participants in this mode, all answered "Yes, connected to a public sewer." Some justified this choice explaining they knew they did not have a septic system.

▪ "Porque en mi casa no hay tanque séptico." [29:49] (Because we do not have a septic tank at home.)

- ▪ "Porque en mi casa no hay un tanque séptico que vienen a recoger, ni nada." [32:25] (Because in my house there is no septic tank that they come to collect, or anything.)

- ▪ "Bueno porque yo no tengo un tanque séptico, no tengo otro sistema y en Puerto Rico lo que hay es alcantarillado o desagüe público." [24:16] (Well, because I do not have a septic tank, I do not have any other system. Here in Puerto Rico we have sewer.)

Two of the 6 knew the system they have because they pay a bill for the public sewer system. The sixth participant knew they are connected to the public sewer because they were once informed by their building that their water would be cut off to do maintenance to the public sewer system.

No one reported more than one wastewater disposal system.

4.2.3 Recommendations

This item has two terms in Spanish for public sewer: "alcantarillado" and "desagüe público." In the ACS Spanish Instrument, both are necessary to accommodate different terms used by participants from varied national origins, but this is not so for the PRCS. Everyone understood and used "alcantarillado" exclusively. Unless the Census Bureau prefers to keep the item identical to the stateside version, "desagüe público" can be deleted.

4.3   Home Heating Fuel

Group 1 also tested the home heating fuel question. ***Table 4.3*** displays versions of this question by interview mode. The question is phrased differently in each mode. Additionally, the paper mode question has response options that include varieties of gas (natural vs. bottled), whereas the CAI mode question asks about that distinction in two follow-up questions for those who answer "'Yes" to using gas.

The key research goals of cognitive testing were to determine the following:

1. Do participants understand what natural (piped) gas is as opposed to bottled gas?

2. Will adding new examples to the bottled gas category help participants find the correct heating fuel category?

3. Are participants only reporting the fuel they use the "MOST"?

4. What are participants who report something other than "no fuel used" thinking about when answering this question?

5. Do participants accurately report the home heating fuel they use most? Does this differ between owners and renters?

6. Do participants who do not have heating select "no fuel used"?

This section details the general and mode-specific findings related to these research questions.

Table 4.3.   Home Heating Fuel Question by Mode

CAI Mode	Paper Mode
22a. Para calentar < esta casa móvil/esta casa/este apartamento/esta vivienda>, ¿qué tipo de combustible utiliza usted PRINCIPALMENTE: gas, electricidad, aceite combustible o queroseno, carbón o coque, leña, energía solar o algún otro combustible? 22b. ¿Se usa gas natural de tuberías subterráneas que abastecen al vecindario? Sí No 22c. ¿Es gas embotellado o en tanque, tal como propano o butano? Sí No	**(14) ¿Cuál combustible es el que MÁS se utiliza para calentar esta casa, apartamento o casa móvil?** *Marque (X) la casilla del combustible que más se utiliza.* ☐ Gas: Gas natural de tuberías subterráneas que abastecen al vecindario ☐ Gas: Embotellado o en tanque *(propano, butano, etc.)* ☐ Electricidad ☐ Aceite combustible, queroseno, etc. ☐ Carbón o coque ☐ Leña ☐ Energía solar ☐ Otro combustible ☐ No se utiliza combustible

4.3.1 General Findings

1. Do participants understand what natural (piped) gas is as opposed to bottled gas?

Participants understood what bottled gas is but were not necessarily familiar with piped gas; they reported that is not used in Puerto Rico. One participant even thought we were asking about underground gasoline lines.

- A participant said they knew what bottled or tank gas is because they use it for the stove. This person said that they had no idea what "tuberías subterráneas" (underground pipes) are. They had heard that this exists and that it is used in the United States, but not in Puerto Rico, at least not at a residential level, although perhaps in industrial operations.

- Another participant said, "Pues pienso yo que el gas natural de tubería subterránea que abastece el vecindario, pienso que son las gasolineras. Y ya gas embotellado o en tanque, propano o butano, son los que se utilizan para tú hacer una barbacoa." [41:54] (Well, I think that natural gas from underground pipelines serving the

neighborhood, I think it's the gas stations. And bottled gas or gas in tank, propane or butane, are those that are used to make a barbecue.)

2. *Will adding new examples to the bottled gas category help participants find the correct heating fuel category?*

Bottled gas was clear to participants, but the words "butane" and "propane" did not appear necessary to help participants respond accurately. Most participants were familiar with propane gas because it is widely distributed on the island during hurricane times when the electricity is down, and they need cooking fuel. They described it as bottled or tanked gas that comes in cylinders. No one volunteered the name "propano" until they were asked about it. No one was familiar with butane gas.

3. *Are participants only reporting the fuel they use the "MOST"?*

This research question cannot be answered. Only 1 of the 20 participants used home heating fuel of any kind, and this person only used electricity for heating the home. The others did not have heating for their homes given the weather in Puerto Rico.

4. *What are participants who report something other than "no fuel used" thinking about when answering this question?*

- Participants who reported something other than "no fuel used" were thinking about fuel used in the home for purposes other than home heating. They interpreted the question as asking about fuel sources used by their household. They all answered "electricity." One participant said that they answered electricity because they live in an urban area and use electricity to power things in the house, such as their TV, fan, and air conditioner.

- Other participants appeared to have heard or read the word electricity and missed the heating aspect in the question stem, perhaps because the notion of heating was not familiar to them.

5. *Do participants accurately report the home heating fuel they use most? Does this differ between owners and renters?*

This research question cannot be answered. Only 1 of the 20 participants used home heating fuel of any kind, and this person only used electricity for heating the home. The others did not have heating for their homes given the weather in Puerto Rico.

6. *Do participants who do not have heating select "no fuel used"?*

A majority of participants who do not have heating selected or volunteered "no fuel used."

It was established during probing that 19 of the 20 participants do not have heating in their home. A majority (12 out of 19) selected (if paper mode) or volunteered (if CAI mode) "no fuel used." They explained that the climate of Puerto Rico makes heating unnecessary.

- A participant explained that they live in a tropical place, so there is no need to heat the house.

- ▪ "Nuestra casa no... con el clima de Puerto Rico no hay nada que nosotros utilicemos para calentar la casa. El clima de por sí ya es caliente, o sea que ninguno." [13:46] (Our house doesn't... with the climate in Puerto Rico there is nothing we use to heat the house. The climate is already hot, so "none.")

The other 7 participants who do not have heating answered in error, because they did not realize the question was about home *heating.* They simply interpreted the question about fuel sources used by their household. They all answered "electricity."

- ▪ A participant said they answered "electricity" because that is what they use to heat the water when they take a shower but realized in probing that, since they do not have a heating system at home, the correct answer would be "no fuel used."

- ▪ Another participant said that they used electricity to power everything in the house, from air conditioners to fans, to the stove, the washing machine, and the dryer. They added that no fuel is needed to "warm up" the house because Puerto Rico is already warm, so they did not think that was what the question was referring to when it said "para calentar" (to heat).

4.3.2 Findings by Mode

a. Paper Mode

Five of the 6 participants answered in error. They selected "electricity" when they did not have home heating at all. In explaining their answer, they mostly focused on the response choices and said that they use electricity to power most things at home, hence their answer. It is possible that they did not read the complete question and jumped to the response choices without considering what the question was asking.

- ▪ One participant said that they answered "electricity" because they use electricity to power things in her house such as their TV, their fan, and their air conditioner.

- ▪ Another participant answered, "Es lo único que utilizo, no hay ningún equipo que sea de gas ni energía solar, todo… estufa eléctrica, calentador de agua eléctrico." [32:08] (It is the only fuel I use, there is no equipment that uses gas, or solar power everything… stove is electric, the water heating system is electric.)

- ▪ Another participant said that she uses electricity to power everything in her house, from air conditioners and fans to the stove, washing machine, and dryer.

Although 5 participants answered in error, only 3 thought the question was confusing. One participant said she had misunderstood. Another one said they saw the response option "electricity" and marked that as an answer. The third one thought that the question was either not well worded or did not apply to Puerto Rico, or the right answer option was not available (they did not notice the option for "No fuel used").

When asked to describe the difference between natural gas and propane/butane, several participants indicated that they were familiar only with bottled or tank gas, such as propane, that is used for cooking or small appliances. They were not familiar with natural gas from underground pipes.

b.   CAI Mode

Of the 14 participants in this mode, 11 correctly volunteered that they did not use any fuel to heat the home. The other 3 answered "electricity." One of them reiterated in probing that they use electricity-powered heating and air conditioning. Another one said they answered "electricity" because that is what they use, but probing was insufficient to be sure the participant was referring to heating. The third one answered in error, thinking the question was about types of energy used in the home, but not about heating in particular. This participant felt the question was confusing and should be omitted or revised because it does not apply to Puerto Rico.

Participants were asked about the difference in types of gas. Most participants indicated that they were familiar only with bottled or tank gas (propane) that they use for cooking or small appliances. They were not familiar with natural gas from underground pipes.

4.3.3 Recommendations

Although the vast majority of participants noted that this question did not apply to their reality in Puerto Rico, we understand this question may be important to keep in the PRCS. The differences in formulation between the paper and CAI item, however, become problematic in a context where many participants cannot even think a question about fuel may be asking about heating.

The CAI version begins by telling the participant the question is about home heating ("Para calentar esta casa…"), whereas the paper version includes this phrase within the question, buried further inside the question stem. We detected most error in the paper version, with participants not reading or processing that phrase because they already assumed the question was about any fuel used in the home. Therefore, we recommend the following question in the paper mode, similar to the CAI item:

- Para calentar esta casa, apartamento o casa móvil, ¿qué tipo de combustible se utiliza PRINCIPALMENTE?

4.4   SNAP (PAN)

The next Group 1 test topic was receipt of benefits from the Nutritional Assistance Program or PAN as the program is known in Puerto Rico. **Table 4.4** displays the question text by interview mode. In this round of testing, the question was tested in a single location in the survey at the end of the housing questions but before the HOA questions.

In testing this question, the Census Bureau was interested in answering one research question:

1. Do participants report PAN for the correct time period?

This section details the general and mode-specific findings related to this research question.

Table 4.4.   SNAP (PAN) Question by Mode

CAI Mode	Paper Mode
25. En el <2020/2021>, ¿recibió usted o algún otro miembro de este hogar beneficios del gobierno por medio del Programa de Asistencia Nutricional? NO incluya WIC, ni el Programa de Almuerzos Escolares, ni ayuda de bancos de alimentos. Sí No	**17** **En el 2021, ¿recibió usted o algún otro miembro de este hogar beneficios del gobierno por medio del Programa de Asistencia Nutricional?** *NO incluya WIC, ni el Programa de Almuerzos Escolares, ni ayuda de bancos de alimentos.* ☐ Sí ☐ No

4.4.1 General Findings

1. Do participants report PAN for the correct time period?

For this question, the reference period was 2020 for interviews completed in December 2021 and 2021 for interviews conducted in January–February 2022.

All 20 participants correctly identified the reference period (either 2020 or 2021, depending on the interview date). They did so in different ways.

- The 13 participants who were currently receiving PAN benefits knew that they had been receiving them from different points in time in the past and until the present, and that the period of receiving benefits included 2020/2021.

- Of the 6 participants who answered "No," 5 did not need to think of a specific period, because—as they reported—they have never received benefits in their lives. The sixth one specifically answered that from 2021 (correct reference period for their interview date) until now she has not received any food assistance benefits.

- Some participants had difficulty understanding the probe about whether "the past 12 months" and 2020/2021 meant the same thing. However, most answered based on when their interview took place. That is, those interviewed in December 2021 tended to say the past 12 months (December 2020 through November 2021) and 2020 were different, whereas those interviewed in 2022 stated that 2021 and the past 12 months referred to the same period.

4.4.2 Other Findings by Mode

a.   Paper Mode

Of the 6 participants in this mode, 3 answered "Yes" and 3 answered "No." Upon probing, the 3 who were not receiving PAN benefits had never received them, which made the question easy to answer and made the reference period not meaningful.

When asked whether there was a difference between "2021" (note that all paper interviews were conducted in 2022) and "the past 12 months," 5 of the 6 participants noted that these time periods were different, although they coincided for them given their interview date.

- One participant concluded that, at that point in the year, both time frames would be the same, but if they had answered the survey in February, then the time frames would be different.

- Another participant said that it would be the same since 2022 had barely started.

- Another participant said that, since the interview was being conducted in January 2022, the last 12 months and 2021 would be the same. However, if the interview had been conducted in July, then they would be different.

b.   CAI Mode

Fourteen participants answered this question. Four said "No" and 10 said "Yes." Those who answered "Yes" knew when they had started receiving the benefits and knew they were still getting them. The reference period was included in that time.

The 4 participants who answered "No" included 3 who had never received PAN benefits and stated they did not need to think of a particular time frame to answer the question. The fourth one said she had not received any PAN benefits since 2021.

When asked whether there was a difference between "2020" or "2021" and "the past 12 months," 6 of the 14 participants stated that they thought there is a difference between the two ways of expressing the time frame. They mentioned how, based on their date of interview, the two would be different. The other 8 either thought the periods would be different (based on their own interview dates) or did not understand well what the probe was asking.

4.4.3   Recommendations

No changes recommended.

4.5   HOA Fees

Group 1 also tested a question about HOA or condominium fees. The question text by mode appears in *Table 4.5.*

The key research goals of cognitive testing were to determine the following:

1. Do participants know they live in a housing unit that is part of an HOA?

    a. How did the participant determine the house they live in is or is not part of a HOA?

2. How do participants interpret the term "condominio"? Does it align with the concept of "condominium" stateside?

    b. Does the participant consider an HOA the same as a condominium?

3. Do participants know to report only required/mandatory HOA fees and not voluntary/optional fees associated with being a homeowner?

    a. Does the participant consider a voluntary association (e.g., neighborhood watch, social club, community council) the same as being an HOA?

b. Did the word "required" in the question help determine that this question is only asking about mandatory HOA or condominium fees the participant is required to pay?

4. Do participants report the cost of the HOA/condo fee in the correct fee schedule (monthly fee) or a cost from a different fee schedule?

5. Does the order of "homeowners association" and "condominium" in the question cause any order effects for certain participants?

6. Do participants living in a condominium see that condominium fees are included in this question?

This section details the general and mode-specific findings related to these research questions.

Table 4.5.   HOA Fees Questions by Mode

CAI Mode	Paper Mode
Las siguientes preguntas se refieren a <esta casa móvil/esta casa/este apartamento/esta vivienda>. 26a. ¿Es <esta casa móvil/esta casa/este apartamento/esta vivienda> parte de una asociación de propietarios o de un condominio? 1. Sí 2. No 26b. ¿Se debe pagar una cuota de la asociación de propietarios o del condominio? 1. Sí 2. No 26c. ¿Cuánto es la cuota MENSUAL de la asociación de propietarios y/o del condominio? Cuota MENSUAL de la asociación de propietarios y/o del condominio: $_____	**18** **¿Es esta casa, apartamento o casa móvil parte de una asociación de propietarios o de un condominio?** ☐ Sí → **¿Cuánto es la cuota mensual de la asociación de propietarios y/o del condominio que se debe pagar?** *Para inquilinos: conteste solo si paga la cuota además del alquiler; de lo contrario, marque la casilla "Ninguna".* Cantidad mensual – *Dólares* $ ☐,☐☐☐ .00 **O** ☐ Ninguna ☐ No

4.5.1 General Findings

1. Do participants know they live in a housing unit that is part of an HOA?

a. How did the participant determine the house they live in is or is not part of an HOA?

Of the 20 Spanish interview participants, 7 answered "Yes" to the initial questions on living in a housing unit that is part of an HOA and paying an HOA or condominium fee. Of the 7n participants, 5 were owners, 1 occupied the unit without rent but was responsible for paying the HOA fee, and 1 was a renter who answered "Yes" by mistake.

- "Porque vivo en un condominio que tiene una asociación con una junta de directores que somos los que decidimos la reglamentación que va a prevalecer en el condominio." [43:05] (Because I live in a condominium that has an association with a board of directors who are the ones who decide the regulations that will prevail in the condominium.)

- Another participant said they own the house, but since the house is in a controlled access area, there is a resident's association that oversees security.

- "Sí, porque en mi urbanización hay una cuota mensual que se paga por la asociación de propietarios." [43:00] (Yes, because in my urbanization there is a monthly fee paid to the homeowner's association.)

- Another participant said that they answered "Yes" to this question because they do pay a condominium fee every month. They confirmed that they only belong to a condominium.

The seventh participant who answered 'Yes" to the initial question was a renter who misinterpreted the question and thought it was asking about the rent they paid.

- "Yo te entendí que era como cuánto yo pago por quedarme aquí…" "Entonces sería No porque no soy dueña de un condominio en alquiler." [47:41] (I understood you were asking how much I pay to stay here…) (Then it would be "No" because I don't own a rented condominium.)

The 13 participants who answered "No" to the initial questions about living in a housing unit that is part of a HOA provided different answers on how they determined that the house they live in is not part of an HOA.

- One participant said that they answered "No" because they are the owner, and there is no homeowner's association.

- "Porque mi papá es el único dueño, así que no hay más dueño, no somos parte de un condominio." [34:34] (Because my dad is the only owner, so there is no other owner, we are not part of a condominium.)

- "Porque no es un condominio es una casa propia, y es solamente una casa lo que hay." [42:53] (Because it is not a condominium, it is a house, and there is only one house.)

- Another participant said that they lived in a private house owned by them.

- Another participant said that the house is private, and it has nothing to do with the government or an association: "Es una residencia privada, no es un condominio que se rige por una junta de directores ni nada de eso. Es una propiedad privada." [35:30] (It's a private residence, it's not a condominium that's regulated by a board of directors or anything like that. It's a private property.)

- Another participant said that they answered "No" because they live in a public housing apartment, and it has nothing to do with a condominium.

- Two participants simply said that they do not live in a condominium. They both defined a condominium as a tall apartment building with many apartments.

2. *How do participants interpret the term "condominio"? Does it align with the concept of "condominium" stateside?*

   a. *Does the participant consider an HOA the same as a condominium?*

The term "condominio" (condominium) was defined generally as a tall apartment building with many apartments. There was no mention in the definition of how the units are owned. See specific details on how participants interpreted the term "condominio" in **Section 4.5.2**.

Among the 13 participants who answered "No," 2 participants interpreted "asociación de propietarios" (homeowners' association) as referring to a property that belongs entirely to a group of owners or association, rather than to an association of owners of their own units.

- A participant said they did not hesitate in answering this question. This person said their mother is the rightful owner of the house and was positive that the house does not belong to any association.

- "Pues porque es que el dueño no tiene una asociación, todo es propiedad de él." (Because the owner does not have an association, everything is owned by him.)

One participant said, "Es como una corporación que hay muchas casas, los dueños son esos propietarios, esa asociación." [33:24] (It is like a corporation with many houses, and the owner of the houses is the association itself.)

Another participant mentioned that they understood what "asociación de propietarios" (homeowners' association) meant because they were familiar with the term; however, they noted it would be difficult for other people in Puerto Rico to understand even if they were paying an HOA fee. They added that the term used in Puerto Rico was "cuota de mantenimiento" (maintenance fee) or simply "mantenimiento" (maintenance).

Lack of familiarity with the concept led to other alternative interpretations of "asociación de propietarios" (homeowners' association).

- Another participant interpreted "asociación de propietarios" (homeowners' association) as many houses next to each other or a building. When asked, "What would you call a group of houses that are part of a group and that have to pay a monthly fee?," this participant said they would call it "urbanización."

- Another participant said, "Quizá una herencia, que está en herencia, que una persona sea dueña, varias personas sean dueñas de una residencia, de un apartamento o lo que sea, de alguna vivienda." [35:05] (Maybe an inheritance, that a person is the owner, several persons are owners of an apartment or something like that, owner of a residence.)

3. *Do participants know to report only required/mandatory HOA fees and not voluntary/optional fees associated with being a homeowner?*

All 6 of the participants who reported having to pay an HOA or condominium fees confirmed that the fee they had reported was a required/mandatory fee. However, one participant said that they would also consider this fee voluntary because many people did not pay it.

- This participant explained that if they did not pay their monthly fees, the "viper" (remote start) that opens the main entrance would stop working for them, and they would have to access the premises through the guest entrance.

- Another participant said that their fee was mandatory, and they knew it because it was specified during the closing of the property. They explained that if they do not pay the fees, their electricity and water service are turned off.

- The third participant said that they were completely sure about their fees being mandatory. They explained what happens if they do not pay their fees: "Si no la paga te desconectan el servicio de control de acceso, el viper no funciona, el recogido de basura tampoco." [42:28] (If you do not pay it, your access control is canceled [referring to the clicker to enter the grounds], your "viper" [remote start]

stops working, your trash collection gets canceled.) This participant also said that if they do not pay, the fees get accumulated, and they have to pay late fees.

- The fourth participant said she learned about the fee being mandatory when she bought their house. She explained that if you do not pay the mandatory fee while living in a condominium, your services such as water and electricity are cut off. And if you do not pay it while living in a house, the debt accumulates.

- The fifth participant said that they knew they had to make two separate payments when paying their mortgage, and they understood that this was the case when you live in a "urbanización cerrada" (gated community). They also explained that their services would be cut off if they did not pay the monthly fee, and they could also face financial penalties.

- The sixth participant said that they knew their answer right away because they are the one paying for it. They mentioned that the amount they pay was for both the HOA and the Condo.

a. *Does the participant consider a voluntary association (e.g., neighborhood watch, social club, community council) the same as an HOA?*

Participants did not confuse voluntary associations with HOAs. Although it was only intended for participants who were homeowners, the probe about belonging to any groups associated with being a homeowner was asked of 14 of the 20 participants, including renters. Only 2 participants said that they belonged to these types of voluntary associations.

- One participant who was a renter said that they had created a committee, where they are the leader. It was a community garden group where someone donated soil and small trees.

- Another participant who reported having to pay mandatory HOA fees said that they also belonged to a neighborhood group, but they did not have to pay any fees to join.

b. *Did the word "required" in the question help determine that this question is only asking about mandatory HOA or condominium fees the participant is required to pay?*

As previously mentioned, all 6 participants who reported having to pay an HOA or condominium fee confirmed that the fee they had reported was required/mandatory. However, we could not tell from the responses to probing whether the word "required" made a difference.

Only 1 participant confirmed that they had been previously asked to pay a voluntary fee for their home. This participant explained that Hurricane María had caused a fence to come down and the insurance did not cover that, so the HOA requested a voluntary fee to fix it.

Seventeen of the 20 participants were asked to define mandatory and voluntary fees and did so clearly. Their explanations included mention of voluntary fees for those who wish to contribute to things such as social activities or a park beautification, something you give "because you want to," "of your own free will."

4. Do participants report the cost of the HOA/condominium fee in the correct fee schedule (monthly fee) or a cost from a different fee schedule?

All 6 participants who answered "Yes" to the questions on paying an HOA or condominium fee reported the amount as a monthly payment. Three of the 6 participants confirmed that they were the ones making the monthly payments, and that was how they knew it was a monthly fee.

5. Does the order of "homeowners association" and "condominium" in the question cause any order effects for certain participants?

No order effects were detected. Participants appeared to focus either on the HOA or on the condominium part of the question. If they answered "Yes," they explained that they belonged to an HOA and paid a fee, or that they lived in a condominium and paid a monthly maintenance fee.

6. Do participants living in a condominium see that condominium fees are included in the question?

All 3 participants living in a condominium understood that the question included condominium fees and answered accordingly.

4.5.2 Other Findings by Mode

a. Paper Mode

Among the 6 participants interviewed in this mode, 4 answered "Yes" and 2 answered "No" to the initial question on paying an HOA or a condominium fee. Of the 4 who reported paying an HOA/a condominium fee, 2 were owners and the third one occupied the unit without rent but was responsible for paying the HOA fee. The fourth one was a renter who misinterpreted the question and thought it was asking about the rent they paid.

The term "condominio" (condominium) was defined generally as an apartment building with many apartments. There was no mention in the definition of who owns the units.

- "Para mí es, muchos apartamentos en un edificio…Aquí siempre se les dice condominio a los que son de muchos pisos, altos." (To me, it is many apartments in a building… Here, we always call "condominio" the ones that have many floors, tall buildings.)

- "Un edificio con más de dos, hacia arriba, más de dos o tres unidades de vivienda." (A building with more than two, going upwards, more than two or three dwelling units.)

- "Donde hay muchas viviendas y son alquiladas por personas… En un condominio puede haber 10 pisos, y en esos 10 pisos puede haber personas que están alquilando a lo mejor por esa asociación de propietarios." (Where there are many dwellings that are rented by people… In a condominium there could be 10 floors, and in those 10 floors there could be people that are renting, maybe from the homeowner association.)

Only one participant hinted in their definition at the co-ownership of a condo building.

- "Un complejo de viviendas compartido con otras familias." (A housing complex shared with other families.)

The 3 participants who paid a monthly fee were able to provide the amount. All 3 said the fee is mandatory and that the penalty for not paying is that services such as water, electricity, trash collection, or electronic access get cut off.

One participant thought that asking about HOA fees may be hard to understand for others in Puerto Rico who would be more familiar with a term like "cuota de mantenimiento" (maintenance fee).

b.   CAI Mode

Of the 14 participants in this mode, 3 of the 9 owners and none of the renters answered "'Yes." All 3 provided the amount of the monthly fee. Two of them lived in condominiums, and one lived in a house within a gated community.

Among the 11 participants who answered "'No," 2 interpreted "asociación de propietarios" (homeowners' association) as referring to a property that belongs entirely to a group of owners or association, rather than to an association of owners of their own units.

- A participant said they did not hesitate in answering this question. This person said their mother is the rightful owner of the house and was positive that the house does not belong to any association.

- "Pues porque es que el dueño no tiene una asociación, todo es propiedad de él." (Because the owner does not have an association, everything is owned by him.)

Participants were asked to define a "condominio." They generally defined it as a tall apartment building with many apartments. There was no mention in the definition of how the units are owned.

- "Es un edificio de dos o más pisos donde viven diferentes familias, donde son propietarios o viven diferentes familias." (It is a building of two or more stories where different families live, where there are owners or different families live.)

- A multi-family building with three or more units

- "Un edificio que le pertenece a una persona y tú pagas por el espacio en el que estás viviendo." (It is a building that belongs to somebody else, and you pay for the space where you are living in.) [PROBE: Can you call any tall apartment building a "condominio"?] "Yes."

- "Un edificio de paredes hacia arriba, que los departamentos son hacia arriba." (It is a building with upward walls, that apartments go upward.)

- A participant said that in Puerto Rico an apartment building usually does not have more than a certain number of floors, whereas a condominium building could be much higher. [PROBE: Can you call any tall apartment building a "condominio"?] "Yes."

▪ "Muchos apartamentos hacia arriba. Muchos apartamentos pero que es alto, muy alto y los condominios … tienen su propietario y ellos se los alquilan por medio de fondos federales o del gobierno, o puede ser que [quienes alquilan] lo paguen de su bolsillo." (Many apartments going upwards. Many apartments that are high, very high and the condominiums… How do I explain it? The condominiums have their owner and they [the renters] rent them through federal or government funds, or they [the renters] may pay out of their own pocket.)

4.5.3 Recommendations

Although a number of participants did not understand "asociación de propietarios" (HOA) as intended, cognitive probing found no false negatives in the survey responses. Participants who pay an HOA or a condominium fee know what this is and can answer questions about it, whereas those who do not pay it may or may not know much about it but do not answer in error.

To prevent false positives from renters thinking the question asks about their rent amount, the HOA question could be placed after the tenure question and asked only of homeowners.

No other changes are recommended.

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5. PRCS Group 2 Findings and Recommendations

Group 2 participants were tested on three topics: educational attainment, health insurance coverage, and disability. This chapter presents a summary of findings and specific findings for each of the Group 2 test topics.

The educational attainment question presented some issues. The category for "Less than 1st grade" as worded in Spanish was confusing to participants, because in Puerto Rico they refer to first grade as "primer grado" rather than "grado 1." This category was not interpreted as intended, to cover anyone with less than first grade completed (e.g., a toddler, an adult who never went to school, young children in preschool or kindergarten). Additionally, participants with some college credit felt the question gave conflicting instructions in that it asked for the highest grade or title, but also provided an option for some credits.

For the health insurance coverage questions, some participants reported more than one type of coverage in a number of cases. As we gleaned from the interviews, health insurance coverage in Puerto Rico appears to be more complex than stateside, with different types of coverage available to people so that the person's medical expenses are fully covered. However, some participants also double reported in error, selecting options that reflected how they get the coverage, and not how the coverage is paid for.

The disability questions generally worked well, presenting no particular error patterns. "Lavarse el cuerpo" (wash all over) did not present issues or make anyone uncomfortable. In some cases, it was interpreted as synonymous with bathing, and in others it included hair care, brushing teeth, or applying makeup.

5.1 Educational Attainment

The first test topic in Group 2 was educational attainment. ***Table 5.1*** displays the educational attainment question text by mode.

The key research goals of cognitive testing were to determine the following:

1. Is the category "Less than grade 1" understood correctly by participants?
2. Can participants provide examples of people who would fall into the "Less than grade 1" category?
3. Is it clear that people who are still enrolled or who left school in the middle of a grade should not mark "Less than grade 1"?

This section details the general findings related to these research questions.

5.1.1 General Findings

General findings that apply to both modes are discussed in this section, and mode-specific findings are discussed in **Section 5.1.2**.

1. Is the category "Less than grade 1" understood correctly by participants?

This option only applied to 3 of the 20 Spanish participants who completed a Group 2 interview.

- One participant was able to answer without any problems for one of the household members who was currently attending first grade. For this participant, "Less than grade 1" meant kindergarten, which was the highest level of education this child had completed.

- The second participant had difficulty finding an answer option that applied to the 2-year-old in the household. This participant explained that the word "inferior" was confusing: "Pues que le ponen con esa palabra 'Inferior,' que puede confundir un poco al momento de leerlo rápido o escucharlo." [43:00] (Well, you use that word "Inferior," which can be a bit confusing when reading it quickly or listening to it.)

- The third participant was not able to find an option that applied to an 8-month-old in the household. This participant did not answer the education attainment question because she did not think it applied to this child.

Table 5.1.   Educational Attainment Question by Mode

CAI Mode	Paper Mode
14. *Usando esta lista,* ¿cuál es el grado escolar o título más alto que <usted/NOMBRE> ha COMPLETADO? Si <usted/NOMBRE> está matriculado(a) actualmente, seleccione el grado anterior que completó o el título más alto recibido. Inferior al grado 1 Grado 1 Grado 2 Grado 3 Grado 4 Grado 5 Grado 6 Grado 7 Grado 8 Grado 9 Grado 10 Grado 11 Grado 12, sin diploma Diploma de escuela superior (*high school*) GED o examen equivalente Algunos créditos universitarios, sin título Título asociado universitario (por ejemplo: AA, AS) Título de bachillerato universitario (por ejemplo: BA, BS) Título de maestría (por ejemplo: MA, MS, MEng, MEd, MSW, MBA) Título profesional más allá de un título de bachillerato universitario (por ejemplo: MD, DDS, DVM, LLB, JD) Título de doctorado (por ejemplo: PhD, EdD)	**11** **¿Cuál es el grado escolar o título más alto que esta persona ha COMPLETADO?** *Si está matriculada actualmente, marque el grado anterior que completó o el título más alto recibido. Marque (X) UNA casilla.* **NO COMPLETÓ EL GRADO 1** ☐ Inferior a grado 1 **DEL GRADO 1 AL GRADO 12** ☐ Grado 1 al 11 – *Especifique grado 1-11* [ ] ☐ Grado 12 – **SIN DIPLOMA** **SE GRADUÓ DE LA ESCUELA SUPERIOR** ☐ Diploma de escuela superior (*high school*) ☐ GED o examen equivalente **UNIVERSIDAD O ALGUNOS CRÉDITOS UNIVERSITARIOS** ☐ Algunos créditos universitarios, pero menos de 1 año de créditos universitarios ☐ 1 año o más de créditos universitarios, sin título ☐ Título asociado universitario (*por ejemplo: AA, AS*) ☐ Título de bachillerato universitario (*por ejemplo: BA, BS*) **DESPUÉS DEL TÍTULO DE BACHILLERATO UNIVERSITARIO** ☐ Título de maestría (*por ejemplo: MA, MS, MEng, MEd, MSW, MBA*) ☐ Título profesional más allá de un título de bachillerato universitario (*por ejemplo: MD, DDS, DVM, LLB, JD*) ☐ Título de doctorado (*por ejemplo: PhD, EdD*)

Of the 20 participants, 18 were asked "How do you think you should answer if you were answering about a 4-year-old child currently enrolled in preschool?" Fourteen participants said they would select the "Less than grade 1" option without hesitation, and 1 participant was not able to provide an answer. The last 3 participants said that they would select the "Less than grade 1" option, but they were not sure about their answer.

- "Es que prescolar para mí no es ningún grado." [20:56]. (It is that preschool, for me, is not a grade.) When asked what option they would select, this participant said, "Less than grade 1."

- ▪ "Bueno, para mi entender ninguna de ella, porque un niño de kínder no está pensando en eso, yo diría que quizás, podría como poco entender 'Inferior a grado 1' y tendría dudas, porque nosotros lo llamamos 'Primer Grado' al grado elemental." [34:01] (Well, to my understanding, I wouldn't select any of them, because a child in kindergarten is not thinking about that, I would maybe understand "Less than grade 1," but unsure, because we call that elementary level "First Grade.")

- ▪ "Inferior al grado 1." (Less than grade 1.) The participant added that she understood that this option would apply in this case, but it was still a little confusing because the option reads, "Did not complete grade 1," and this made her feel like the person failed 1st grade.

Sixteen of the 20 participants were asked, "How do you think you should answer if you were answering about a 2-year-old child who has not attended school or daycare?" Eight participants answered, "Less than grade 1," 3 participants said that they would leave this question blank because the child is too young to go to school, and 5 participants provided unexpected responses.

- ▪ One participant said that if the person never attended school, they would select "Without education," even though this was not offered as a category.

- ▪ Another participant said that they would write down that the person is too young and has not attended school or would leave the question blank. This participant then said that if they did not have any other option, they would select "Less than grade 1."

- ▪ Another participant said that there should be category that asks if the child is attending preschool or childcare.

- ▪ A fourth participant who said they would select "Less than grade 1" also said that there should be an additional option to explain why this child did not complete 1st grade.

- ▪ The fifth participant said that there was no option on the list for that situation. To this participant, the categories were for people who were active in school, not for people who were not attending school.

Some participants were also asked "How do you think you should answer if you were answering about an adult who has never gone to school?" Of the 17 participants who were asked this question, 12 answered "Less than grade 1," 1 was not able to provide an answer, and 4 provided different types of responses.

- ▪ One participant responded, "With no education." It was not clear if they would write that down on the survey.

- ▪ Another participant who was confused with the probe said they did not find an option for this situation. They thought there should be a more specific category—for example, "No asistió a la escuela." [48:40] (Never went to school.)

- ▪ A third participant said, "Tampoco la contestaría porque dice 'cuál es el grado escolar' y nunca entró a la escuela." [33:42] (I wouldn't answer it either because it says, "what is the school grade" and he never went to school.)

- ▪ The last participant also said that they would leave this question blank because the adult has never been to school.

When asked about examples of people who would fall into the "Less than grade 1" category, 5 participants mentioned that in Puerto Rico they do not use "grado 1" (grade 1). They suggested using the term "primer grado" (first grade) instead.

- ▪ Two participants said that in Puerto Rico they refer to "Grado 1" as "Primer Grado."

- ▪ Another participant thought that grade 1 might be for an associate degree. The interviewer asked what they would name the 1st grade of elementary school, and the participant said "Si fuera primaria sería 1er grado." [24:53] (If it was elementary school, it would be "primer grado.")

- ▪ "Entiendo yo como un preescolar hasta un kindergarten, porque el grado 1 sería primer grado." [34:08] (I understand preschool through kindergarten, because grade 1 would be first grade.)

- ▪ At the end of the interview, a participant expressed confusion with the use of "grado 1." He mentioned a couple of times that he was used to seeing or using "primer grado, segundo grado…" (first grade, second grade…) and that seeing "grade 1" might confuse people in Puerto Rico.

2. *Can participants provide examples of people who would fall into the "Less than grade 1" category?*

Probing for this section included asking participants to explain what they understood "Inferior al grado 1" referred to and provide examples of a situation in which someone would use this category. Of the 20 participants, 13—including a participant who was not able to find an answer for the 8-month-old in the household—provided examples of children in preschool, pre-kindergarten, or kindergarten.

- ▪ "Entiendo yo como un preescolar hasta un kindergarten, porque el grado 1 sería primer grado." [34:08] (I understand preschool through kindergarten, because grade 1 would be first grade.)

- ▪ "Pues me imagino que el 'pre-pre,' porque grado 1 es primero, so yo entiendo que inferior a grado 1 es kínder y prekínder." [35:28] (Well, I guess pre-pre, because grade 1 is first grade, so I understand that less than grade 1 is kindergarten and pre-kindergarten.)

- ▪ "Lo que sería el prekínder, el kínder, o el 'head start,' que es lo que nosotros utilizamos aquí previo al grado 1." [28:30] (What would be prekindergarten, kindergarten, or head start, which is what we use here prior to grade 1.)

Six participants understood this category as someone who had never attended school, regardless of whether it was an adult or a child.

- ▪ "Inferior a grado 1 para mi es una analfabeta." [22:40] (Less than grade 1 for me is an illiterate.) When probed further, this participant answered, "Que no fue a la escuela." (That he did not go to school.) "Una persona que no sepa leer ni escribir." (A person who is unable to read or write.)

- ▪ "El que nunca ha estudiado, que no fue a la escuela." [20:30] (Someone who has never studied, who has not gone to school.)

- ▪ "Una persona que no haya ido a la escuela." [25:00] (A person who had not gone to school.)

- ▪ "Pues sería una persona analfabeta que nunca ha ido a la escuela." [26:48] (Well, it would be an illiterate person who has never been to school.)

One of the 20 participants was not able to provide examples of a situation in which someone would use this category.

Some participants were also asked, "How do you think you should answer if you were answering about an adult who has never gone to school?" Of the 17 participants who were asked this question, all answered "No grade completed."

3. Is it clear that people who are still enrolled or who left school in the middle of a grade should not mark "Less than grade 1"?

Of the 20 Spanish-speaking participants, 18 were asked "How do you think you should answer if you were answering about an adult who attended 8th grade but did not complete that year, and never went back to school?" Of these, 12 participants answered, "From 1–11: 7th grade," 2 answered, "From 1–11: 8th grade," and 1 answered "From 1–11" but did not provide a specific grade; another participant was asked this question, but her answers were not clear in the recording. The other 2 participants provided different types of answers.

- ▪ One participant required a lot of back and forth with the interviewer. This participant had initially said that they would answer "Less than grade 1." The interviewer asked if a person who had attended 8th grade but did not complete was the same as a person who had never gone to school, and the participant said yes. The participant said that the person had completed 7th grade but had not completed 8th grade or 12th grade: "Grado 1 al 11, no llegó al 12; tampoco terminó la escuela superior, solamente la intermedia, la elemental e intermedia." [27:01] (Grade 1 to 11, they did not complete grade 12; they did not complete high school either, just middle and elementary.) Finally, the interviewer asked, "So, somebody who attended 8th grade, is it grade 1 to 11 or less than grade 1?" The participant responded, "grade 1 to 11."

- ▪ The last participant was not able to provide an answer, even after the probe was asked in different ways. They mentioned that in Puerto Rico, 6th, 7th, and 8th grade is called "escuela intermedia" (middle school), so for a person who did not complete the 8th grade she would select "middle school." Even after a little more probing, this participant was not able to provide an answer.

Of the 7 paper mode participants, 6 were able to say not only what they would select as a category but also where they would write in their answer for a specific grade.

5.1.2 Other Findings by Mode

a.   Paper Mode

Of the 7 participants who answered the education attainment question in paper mode, only one provided multiple answers. This participant explained that they selected those answers because they had a high school diploma and were also attending school and had some college credits. This participant did not read the instructions and was not sure if they should select only one option. They said that if they had to select only one option, they would select "1 or more years of college credit, no degree."

Of the 7 paper mode participants, only 4 read the instructions under the education attainment question. The 3 participants who did not read the instructions were asked to read them during probing. Of the 7 participants, 6 were asked if they found the instructions helpful. Four of these participants found them helpful, and the other 2 found the instructions confusing.

- One participant who had completed high school, was attending school, and had some college credits said, "Es que, lo que pasa es que dice que como que marca el grado anterior que completó o el más alto que haya recibido. Pero entonces si la persona es como yo que tiene las dos cosas, pues por lo menos yo te voy a marcar las dos." [33:26] (What happens is that it says to mark the previous grade that you completed or the highest grade that you received. But then if the person is like me who has both, then at least I am going to mark both.)

- While answering for another member of the household who was currently in college, this participant explained that the instructions established that if the person was currently enrolled, they should mark the latest school grade or highest degree completed. This meant that they had to select "High school" for that member of the household because that was the highest grade "completed." This participant was confused with the "Some college credit, no degree" category, because that meant the person had not completed the program/grade. For this participant, the instructions were as confusing as the question and the categories.

Another participant who found the instructions helpful changed their answer during probing after reading the question one more time. They said that they probably read too fast and were focused on "matriculado actualmente" (currently enrolled), which is why they had answered incorrectly. They had completed a bachelor's degree and were currently attending college for their master's; they had initially answered "Master's degree (e.g., MA, MS, MEng, MEd, MSW, MBA)."

b.   CAI Mode

Of the 13 participants who answered the education attainment question in CAI mode, only 4 reported someone in the household was enrolled in school in the last 3 months. Three of them correctly answered the highest grade *completed* and not the highest grade *enrolled*. The fourth participant had been attending school 1 month before and had obtained a technical degree before the interview was completed. When they answered this question,

they focused on the phrase "select the previous grade." They selected the category "Associate's degree" because they had completed an associate's degree prior to obtaining a technical degree. When asked if they found the instructions clear, this participant said the following:

- "Yo creo que deberían aclararse, ser un poquito más claro." (I think they should be clearer.) [17:56] Later, this participant added, "Esa pregunta no debería ni de estar, lo que debería preguntar es 'hasta qué grado llegaste' y ya con eso se contestó." [19:12] (That question shouldn't even be there, what it should ask is "how far did you get" and that should answer the question.)

When the other 3 participants who had reported someone enrolled in school in the last 3 months were asked if they found the instructions clear, only one said that the instructions had been helpful in selecting a response.

- The third participant said that the whole question was confusing, including the instructions. They stated that it was not clear if the question was asking for the highest degree or the most recent level that a person had reached. They explained that, in their case, their last degree obtained was a high school diploma, but their last educational level was the college credits. They said that those credits represent their highest level of education, but not their highest degree.

- The last participant said, "(Las instrucciones) deben aclararse porque está prácticamente contestando dos preguntas, son dos preguntas en una." ([The instructions] need to be clarified, because you are practically answering two questions, they are two questions in one.) [PROBE: Can you explain that?] "Porque me está diciendo que conteste el grado actual o el último título obtenido, por ejemplo, en mi caso, mi último título fue el de escuela superior, y actualmente me encuentro cursando los créditos de universidad." [32:04] (Because it is telling me to answer about the current degree or the last obtained degree, for example, in my case my last degree was high school, but I am currently taking college credits.)

One participant who was not assigned to receive flashcards and had completed a technical program, responded "Electrocardiograph Technician, EKG," before hearing all the answer options. After hearing the categories, they selected "Associate's degree." This participant explained, "Pues yo estudié un grado técnico, que prácticamente es un título asociado que duró un año y nueve meses." [25:09] (Well, I studied a technical degree, which is practically an associate's degree that lasted 1 year and 9 months.) [PROBE: Did you receive a certificate or a diploma?] "Sí, un diploma." (Yes, a diploma.) When this participant saw the flashcard during probing, they selected "Associate's degree" as well. "Vocational and technical license" is an option that can be selected in CAI interviews; however, it is not an option that is read aloud by interviewers.

Three participants who selected the category of "Some college credit, no degree" for someone in the household reported that this person had graduated high school but had also attended college and had some college credits. Only 1 of these people was reported as currently enrolled in college.

Another participant who also reported they had graduated high school but were currently attending college and had some college credits selected the "high school" category when answering the education attainment question. This participant was currently attending their third year of college.

- "Fue porque yo estoy completando el bachillerato, pero no lo he terminado, y esta es la opción correcta dentro de las que había disponibles. Y el grado que en realidad he terminado es el diploma de escuela superior." (Because I am completing my bachelors, but I haven't finished it, and this seemed like the correct response from the available choices. And the degree that I have actually completed is my high school diploma.)

One participant who was assigned to receive flashcards said that they thought some categories were missing. They had a master's degree and other professional certifications.

- "Pues dentro de las opciones que están y mi grado completado, entiendo que la que tenía que escoger era el título de maestría. Lo que pasa es que tengo estudios adicionales a lo que es el grado de maestría, pero no es ninguna de esas otras cositas que están ahí después del bachillerato… De hecho, aquí en Puerto Rico hay múltiples certificaciones profesionales, se le llaman certificaciones profesionales. Y eso es algo diferente a lo tradicional que es el bachillerato, la maestría, el doctorado, lo que sí está reflejado en esta pregunta del censo. La certificación profesional no necesariamente conduce a una maestría. Una certificación profesional por ejemplo requiere una preparación y un examen… Quizás podrían añadir "OTRAS CERTIFICACIONES" en la lista de opciones." [35:00] (Well, within the options that are available and my completed degree, I understand that the one I had to choose was the master's degree. What happens is that I have additional studies beyond the master's degree, but it's not any of those other things that are there after bachelor's degree… In fact, here in Puerto Rico there are multiple professional certifications, they are called professional certifications. And that's something different from the traditional bachelor's, master's, doctorate's degrees, which are reflected on this census question. Professional certification doesn't necessarily lead to a master's degree. A professional certification for example requires preparation and an exam… Maybe they could add "OTHER CERTIFICATIONS" to the list of options.)

Of the 7 participants who were assigned to receive flashcards, only 5 used them and only 4 found them helpful for selecting a response.

- One participant said that the flashcard was helpful, but it was missing some categories. "Porque también existe lo que yo hice, que es un año, no sé si eso… no se llama ni asociado, ni bachillerato… grado técnico, creo que se llama… grado técnico." [16:12] (Because there is also what I did, which is a year, I don't know if that is... it's not called an associate, or bachelor... technical degree, I think it's called... technical degree.)

- Another participant said that main headings helped them find a response; however, they mentioned that the repeated term "título, título, título" [42:05] (title, title, title) for the higher grades makes it somewhat difficult getting directly to the right option.

5.1.3 Recommendations

"Inferior al grado 1" ("Less than grade 1") did not work well. For Puerto Rico, grado 1 is confusing because it is normally known as "primer grado." We recommend using "primer grado" instead. The phrase "inferior a… grado 1" did not work very well to capture ANYTHING that is less than first grade, from no schooling at all for a toddler; to an adult who never went to school; to young children in daycare, preschool, or kindergarten. We recommend including examples to guide participants. For paper, this could read as follows:

> "Menos de 1er grado completo (por ej. un adulto que nunca fue a la escuela, un niño en preescolar o Kinder, un niño que aún no va a la escuela)." (Less than 1st grade completed [e.g., an adult who never attended school, a child in preschool or K, a child who hasn't yet started school].)

Participants with some college credits felt they received conflicting instructions. If they reported the college credits, they were not reporting the highest level completed (for example, a bachelor's, if now they were pursuing a master's). Guidance should be provided for them.

For Puerto Rico specifically, participants mentioned additional levels of education not included on the list, such as certifications after a graduate degree and "grado técnico" (technical degree). If these are of interest, they should be incorporated into the list.

5.2   Health Insurance Coverage

The next Group 2 test topic was health insurance coverage. Test versions are shown in **Table 5.2** by mode, version, and language.

The key research goals of cognitive testing were to determine the following:

1. For participants who check more than one option, are they double reporting one health insurance plan or do they have more than one type?

2. Specifically, for people who report Medicare and another plan, what types of other plans do they have and how do they obtain them?

3. Does including additional instructions ("Do NOT include plans that cover only one type of insurance, such as dental, drug, or vision plans") reduce reporting of single-service health insurance plan?

4. Do participants notice the instruction to "Mark 'Yes' or 'No' for EACH type of coverage in (a) through (h)"?

5. For participants who do not select "Yes" for any option, are they uninsured or do they have some type of coverage that they did not report?

6. How do participants interpret the word "*sindicato"?* Is its inclusion helpful?

Table 5.2.   Health Insurance Questions by Mode

CAI Mode	Paper Mode
Ahora le voy a hacer preguntas acerca <de su seguro y cobertura de salud/del seguro y de la cobertura de salud de NOMBRE>. NO incluya planes que cubren solo un tipo de servicio, tales como planes dentales, de medicamentos o de la visión.	**16 ¿Tiene esta persona cobertura ACTUALMENTE de alguno de los siguientes tipos de seguros de salud o planes de cobertura de seguro de salud?** *NO incluya planes que cubren solo un tipo de servicio, tales como planes dentales, de medicamentos o de la visión.* *Marque "Sí" o "No" para CADA tipo de cobertura en las respuestas a–h.* a. Seguro a través de un patrono actual o previo, un sindicato *(union)* o una asociación profesional (de esta persona o de otro miembro de la familia) Sí ☐ No ☐ b. Medicare, para personas que tienen 65 años o más o personas con ciertas incapacidades ☐ ☐ c. Medicaid, el Programa de Seguro Médico para Niños (CHIP) o cualquier tipo de plan de asistencia gubernamental para personas con un ingreso bajo o incapacidad ☐ ☐ d. Seguro adquirido directamente de una compañía de seguros o un corredor ☐ ☐ e. Cuidado de salud para veteranos (está inscrito(a) en el Departamento de Asuntos de los Veteranos) ☐ ☐ f. TRICARE u otro seguro de salud militar ☐ ☐ g. Servicio de Salud para Indígenas Estadounidenses ☐ ☐ h. Cualquier otro tipo de seguro de salud o plan de cobertura de seguro de salud – *Especifique* ☐ ☐
23a. Tiene <usted/NOMBRE> cobertura actualmente de un plan de seguro de salud a través de un patrono actual o previo, un sindicato (*union*) o una asociación profesional <suyo/de él/de ella> o de otro miembro de la familia? Sí No	
23b. ¿Tiene <usted/NOMBRE> cobertura actualmente de Medicare para personas que tienen 65 años o más, o personas con ciertas incapacidades?	
23c. ¿Tiene <usted/NOMBRE> cobertura actualmente de Medicaid, el Programa de Seguro Médico para Niños (CHIP) o cualquier tipo de plan de asistencia gubernamental para personas con un ingreso bajo o incapacidad?	
23d. ¿Tiene <usted/NOMBRE> cobertura actualmente de un seguro de salud adquirido directamente de una compañía de seguros o un corredor?	
23e. ¿Tiene <usted/NOMBRE> cobertura actualmente a través del cuidado de salud para veteranos (está inscrito(a) en el Departamento de Asuntos de los Veteranos)?	
23f. ¿Tiene <usted/NOMBRE> cobertura actualmente de TRICARE u otro seguro de salud militar?	
23g. ¿Tiene <usted/NOMBRE> cobertura actualmente a través del Servicio de Salud para Indígenas Estadounidenses?	

(continued)

Table 5.2.   Health Insurance Questions by Mode (continued)

CAI Mode	Paper Mode
23h. ¿Tiene <usted/NOMBRE> cobertura actualmente de cualquier otro tipo de seguro de salud o plan de cobertura de seguro de salud? Sí -- ¿Cuál es el nombre de ese plan de salud? No	

5.2.1 General Findings

1. *For participants who check more than one option, are they double reporting one health insurance plan or do they have more than one type?*

Of the 20 Group 2 participants, 8 reported more than one type of health insurance coverage for someone in the household. Of these 8, 4 had Medicare and another plan(s) (this is discussed in Research Question 2, below).

For the others who reported multiple types of health insurance coverage that did not include Medicare, one legitimately reported two different plans.

▪ A CAI mode participant had an employer-provided plan (question 23a) with a supplement provided by the Puerto Rico government (question 23c) to cover what the employer-provided plan does not pay for. It is possible that this participant's employer-provided health insurance coverage was not a comprehensive plan.

The other 3 reported the only plan they had under more than one question. The errors were not unreasonable.

▪ One CAI mode participant reported a government plan (question 23c) and a plan purchased directly from an insurance company (question 23d). In probing, it became apparent that the participant had only one plan, a Medicaid plan under the Affordable Care Act (ACA) in Puerto Rico, known as "La Reforma" (short for the health care reform, or Obamacare). The participant was directed to select a plan from private insurers, which Medicaid pays for, hence the double reporting. It is possible that this participant's coverage was Medicaid managed care, which would be classified as Medicaid and not direct purchase.

▪ Another CAI mode participant reported both employer-provided coverage (question 23a) and private insurance purchased from an insurance company (question 23d). The plan is obtained through the participant's parent's employment, but it is a private carrier plan, hence the double reporting.

▪ A third CAI mode participant who was retired from the Armed Forces reported insurance through a current or former employer (question 23a). When offered the

option of VA coverage (question 23e), the participant said "Yes" as well. They confirmed in probing that this was the same plan, double reported.

2. Specifically, for people who report Medicare and another plan – what types of other plans do they have and how do they obtain them?

Of the 20 participants, 3 reported Medicare plus another plan for someone in the household. One reported coverage through a current or former employer, Medicare, and a government plan. In another household, one person was reported to have Medicare and employer-provided coverage. Finally, the third participant reporting Medicare plus other coverage mentioned Medicare plus a government plan.

Coverage in Puerto Rico appears to be more complex than stateside, with different types of coverage available to people so that the person's medical expenses are fully covered. This was true for our participants receiving Medicare. The way this is achieved is through supplemental plans, which are often offered at the municipal government level.

- A CAI mode participant reporting Medicare (question 23b) also answered "Yes" to government coverage (question 23c) and to a private plan obtained from an insurance company (question 23d). Probing revealed that the participant is a retired government employee whose former employer provides coverage that supplements Medicare by paying for what Medicare does not cover. This supplement provided through the Puerto Rico government is provided by a private insurer, and the participant had to select a plan from said company, hence the triple reporting.

- Another CAI mode participant answered "Yes" to coverage through a current or former employer (question 23a), "Yes" to Medicare coverage (question 23b), and "Yes" to Medicaid or government coverage (question 23c). In probing, it became apparent that this participant has two coverage plans, not three: Medicare and Medicaid. The participant answered "Yes" to employer coverage thinking that the contributions they made while working were what made them eligible to have a medical plan now, after retirement (Medicare). It was also apparent in probing that the terms "Medicare" and "Medicaid" confused the participant. [PROBE: "How do you become eligible for Medicaid?"] This participant said, "Cuando uno trabaja, y llega la edad de retiro, pagaste tu Seguro social y te dan tu plan médico que es el Medicaid." [25:39] (When you work, and you reach the retirement age, you paid your social security tax and you get your medical coverage, which is Medicaid.) In addition to Medicare, the participant has a city plan that supplements what Medicare does not cover. [PROBE: What plan were you thinking about when you answered "Yes" to this question?] This participant said, "Yo trabajé profesionalmente, pagué mi Seguro social yo me enfermé, me deshabilitaron y a través de ellos fue que yo conseguí mi Seguro social, que es lo que tengo actualmente." [26:48] (I worked professionally, I paid my social security tax, I became sick and I qualified for disability, and it was through them that I got my Social Security.) The interviewer confirmed that the medical plan that pays for the medical expenses is Medicaid. The participant said they signed up for Medicaid through a local government office.

- A third CAI mode participant reported having Medicare (question 23b) and insurance through a former employer (question 23a). In probing, we learned that the participant (a retired government employee) had a Medicare Advantage plan paid by their former employer: "Yo soy una persona pensionada de 28 años de servicio, y por mi patrono a los 28 años de servicio yo recibí esa pensión. Aparte de eso, tengo

el beneficio del seguro social federal el cual yo pagué." [29:01] (I am a retired person, after 28 years of being actively working. It was through my employer that after 28 years I received retirement income. On top of that I paid for the social security benefits that I currently receive.) Although her Medicare Advantage is paid by both the federal and the Puerto Rico government, the participant considers they have a private plan because coverage is provided through a private insurance company.

▪ The fourth participant (CAI mode) reported Medicare (question 23b) and a government provided plan (question 23c): "Yo siempre he tenido Medicare porque soy una persona incapacitada y como tengo seguro social, pues tuve derecho a ese seguro médico." [28:10] (I've always had Medicare because I'm a disabled person and since I have social security, I was entitled to that medical insurance.) This person said they have an insurance card and can choose their own doctors. They also said they can choose the health plan most adequate for them. Their plan is Medicare Advantage. The participant added that the coverage with this plan started this past January, and they were eligible due to their disability, since they are not 65 years old yet. It is not clear in this case if the participant also selected government provided insurance thinking of a second source of coverage for the same Advantage plan or some sort of supplemental coverage they receive.

All 20 participants reported that their health plan(s) covers every health service, including dental, drug, and vision plans. The instruction was unnecessary for them. One participant volunteered that they did not think single-service plans are common in Puerto Rico.

4. *Do participants notice the instruction to "Mark 'Yes' or 'No' for EACH type of coverage in (a) through (h)"?*

All 7 paper mode participants noticed the instruction and asked the interviewer to mark "No" for anything that did not apply. No item was left without a "Yes" or a "No" answer.

5. *For participants who do not select "Yes" for any option, are they uninsured or do they have some type of coverage that they did not report?*

Only one of the 20 participants answered "No" to all health insurance options. In probing, the participant explained that a health or medical plan is one thing and "insurance" is another. They did not interpret the question as asking about medical plans ("plan médico"), but rather as some type of insurance, perhaps life insurance.

▪ "Seguros de salud, esa pregunta no se refiere a plan médico ni nada de eso, es seguros adicionales. ¿Como coberturas de vida o de condiciones médicas? Eso es lo que entiendo. …Cuando hablamos de un plan médico pues hablamos de la tarjeta con la que tú vas a la oficina médica. Si me hablas de seguro médico, nosotros entendemos que es ese plan adicional. Si es considerando plan adicional yo contestaría que no por todas, porque no cuento con un plan adicional." [13:13] (Health insurance, that question doesn't refer to a medical plan or anything like that. Is it additional insurance, like life or medical condition coverage? That's what I understand. When we talk about a medical plan, we are talking about the card with which you go to the doctor's office. If you are talking about medical insurance, we understand that it is that additional plan. If it is considering additional plans, I would answer no for all, because I don't have an additional plan.) The interviewer asked the participant if reading "planes de cobertura de seguro de salud" (health coverage

plans) was not helpful, and she said that she would still consider that to be insurance.

6. How do participants interpret the word "sindicato"? Is its inclusion helpful?

Of the 20 participants in Group 2, only 14 were asked their interpretation of the term "*sindicato*" due to a protocol printing error. Of these 14 participants, 11 understood the term as intended, as a workers' union.

- One participant answered, "Cuando un conjunto o grupo de personas se unen a través de x o y nombre para protegerse de los patronos para velar por los derechos de los trabajadores." [37:34] (It is when a group of persons join together through x or y name to protect themselves from their bosses, to advocate for the rights of employees.)

- Another participant answered, "Alguna unión obrera." [52:06] (A workers union.) [PROBE: Would you use the word "unión" or "sindicato"?] The participant said those two words mean the same.

The remaining 3 (of the 14) were not familiar with the term or did not interpret it as intended.

- The first participant answered, "Buena pregunta, no sé… no tengo… me suena como algo de política, no sé." [27:15] (Good question, I don't know… I have no… it sounds like related to politics to me… I don't know.)

- The second participant answered, "Un grupo de socios, de unión… algo así… un grupo que promueve." [40:07] (A group of partners, a union…. Something like that… a group that promotes.) [PROBE: What does it promote?] "Un ideal, o lo que ellos quieren presentar." (Their ideals, or what they want to present.) [PROBE: What is a union?] The participant said it is the same. "La unión para mí es un grupo de personas en un trabajo que dan la cara por todos, son los que llevan la voz cantante" [40:35] (A union for me is a group of people in a workplace that represent everybody, they are the ones who take the lead.) [PROBE: A "sindicato"— is it the same or different than a union?] The participant said they were not very familiar with a "sindicato," but they thought it is the same.

- The third participant answered, "Como un grupo de apoyo." [30:07] (Like a support group.) [PROBE: For what? In what context?] "Puede ser como para las personas de bajos recursos?" [30:14] (Could be for low-income persons?) [PROBE: Are you familiar with any union, that you can give me an example?] The participant said they do not know any union in Puerto Rico, but they know organizations. "Yo lo asimilo un sindicato como si fuera una organización." [31:07] (To me, it's like a "sindicato" would be an organization.) [PROBE: What would be the purpose of the organization?] "Para personas de bajos recursos." (For low-income persons.)

Among the 11 who understood the term as intended, 3 expressed a preference for the term "unión" over "sindicato."

- "Es un grupo de personas que defienden los derechos que personas que trabajan. Nosotros les llamamos aquí las uniones. También le dicen sindicatos, pero nosotros los que somos de fuera de este gremio (giggling), le decimos uniones—uniones eléctricas, uniones de acueductos—pero sí también se le dicen sindicatos." [43:01]

(It's a group of people who defend the rights of workers. Here we call them "uniones." They also call them "sindicatos," but those of us who are from outside this guild [giggling], we call them uniones—electrical unions, aqueduct unions—but they are also called sindicatos.)

▪ "Eso es agrupaciones de empleados. Unos que lo llaman sindicato, otros lo llaman unión, otros lo llaman asociaciones." [40:58] (Those are employee groups. Some call it a "union," others call it a "sindicato," others call it an "association.") The participant added that the word "unión" was used more than "sindicato." He suggested using the word "unión" and add in parentheses "sindicato."

▪ "Unión obrera." [56:33] (Workers union.) [PROBE: Do you use both words "union" and "sindicato" indistinctly, or do you use one more than the other?] "Aquí en Puerto Rico se utilizan las dos, pero se escucha más la palabra 'uniones.'" [56:51] (Here in Puerto Rico, we use both, but "uniones" is more frequently used.)

5.2.2 Findings by Mode

a. Paper Mode

Of the 7 participants in this mode, 6 had no difficulty responding to the health insurance question and describing how they selected their answer. One participant, however, was thrown off by the use of the term "seguros de salud" (health insurance) and felt the question did not apply to their household, as they did not have any insurance coverage, just a health plan ("plan médico"). This is described in detail under Research Question 5 in **Section 5.2.1**.

The other 6 were generally familiar with their insurance coverage and could articulate the kind of coverage they had, when and how they enrolled in their coverage, and why they enrolled in their coverage.

Of these, 3 participants were able to locate their response on the list of options by reading through each response option. From probing, it was apparent that there were no false positives or negatives. All 3 reported one single plan for each household member.

The remaining 3 did not find a choice on the list that reflected their coverage, so they chose option h and specified the coverage. Two participants chose option h and specified the same type of coverage: "SSS Vital." Both knew the plan was government subsidized but were not sure options a–g fit their coverage.

▪ "Pues el plan que yo tengo es el plan del gobierno de Puerto Rico, o sea la cobertura del plan de acá. Pero, yo no sé si ese plan tiene que ver con el gobierno de Puerto Rico. Realmente no sé. Yo me imagino que debe de ser de fondos federales que mandan de allá, pero no sé. Y pues por eso puse el nombre." [38:46] (Well, the plan I have is the Puerto Rico government's plan, meaning the coverage of the plan here. But I don't know if that plan has to do with the Puerto Rican government, I really don't know. I imagine that it must be federal funds that they send from over there, but I don't know. And that's why I put the name of the plan.)

- "Okay, ese es un plan del gobierno donde se recibe ayuda del gobierno de acuerdo a los ingresos y la gran mayoría de las personas no pagan, o si pagan, pagan unas cuotas bastante cómodas. Como un dólar, dos dólares, tres dólares, o si son especialistas cinco o diez dólares." [36:59] (Okay, that's a government plan where you receive government assistance according to your income and the vast majority of people don't pay, or if they do pay, they pay fairly comfortable payments. Like one dollar, two dollars, three dollars, or if they are specialists five or ten dollars.)

The third participant had coverage through a hospital plan and chose option h: "Plan médico privado" (private medical plan). The family pays for a private medical plan in a local hospital. The plan covers medical visits, lab tests, dental care, and vision care.

- [PROBE: How did you enroll in that plan?] "Llenamos una solicitud directamente en el hospital." [52:46] (We filled out an application right there at the hospital.) [PROBE: Do you have to select your providers from within their network or can you see any provider you want and go to any hospital you want?] The participant said they must select their providers from the network. "Uno es como si fuera socio del hospital." [54:40] (You are like a member of the hospital [plan].)

As reported under Research Question 4, all 7 participants marked "Yes" or "No" for each option.

b.   CAI Mode

Thirteen participants were tested in CAI mode. Generally, these participants were able to answer about each type of coverage for each member of their household. However, all the cases with misreporting were in CAI mode. Possibly not knowing what other choices would come in subsequent questions may make it easier to answer in error in this mode, rather than when a participant has all the types of coverage in front of them, on paper. The cases that had reporting errors were discussed under the research questions above.

Only 1 participant answered "Yes" to someone in the household having coverage under a plan not mentioned in 23a–g. This household member was a student who is covered under their college's plan.

Participants appeared to have no difficulty processing the instruction to exclude plans that offer dental or vision coverage alone. However, they did not have to keep it in mind in responding, as none of them had single-service plans. All their plans included vision and dental, which seems to be the norm in Puerto Rico.

5.2.3 Recommendations

RTI/RSS recommends adding some text to the introduction to the CAI question, letting participants know that the interviewer will ask them, one by one, about different types of coverage. The text would also add that if they say "Yes" to any of the questions and later hear another option that is a better fit, they should let the interviewer know to correct their earlier answer.

We also recommend replacing "un sindicato" in question/option a with "una union."

5.3   Disability

The next Group 3 test topic was disability. ***Table 5.3*** displays versions of the question series by interview mode.

Table 5.3.   Disability Questions by Mode

CAI Mode	Paper Mode
Las siguientes preguntas son sobre las dificultades que <usted/NOMBRE> pueda tener al hacer ciertas actividades. 25a. ¿Tiene <usted/NOMBRE> dificultad para ver, aunque lleve puestos espejuelos o lentes? No tiene dificultad Un poco de dificultad Mucha dificultad No puede hacerlo 25b. ¿Tiene <usted/NOMBRE> dificultad para oír, incluso si usa un audífono? 26a. ¿Tiene <usted/NOMBRE> dificultad para caminar o subir escalones? 26b. ¿Tiene <usted/NOMBRE> dificultad para recordar o concentrarse? 26c. ¿Tiene <usted/NOMBRE> dificultad con su cuidado personal, tal como lavarse el cuerpo o vestirse? 26d. Usando el idioma que habla mejor, ¿tiene <usted/NOMBRE> dificultad para comunicarse, por ejemplo, entender o ser entendido(a)? 27. Debido a una condición física, mental o emocional, ¿tiene <usted/NOMBRE> dificultad para hacer diligencias o mandados solo(a), tal como ir al consultorio de un médico o ir de compras?	**18** **a. ¿Tiene esta persona dificultad para ver, aunque lleve puestos espejuelos o lentes?** ☐ No tiene dificultad ☐ Un poco de dificultad ☐ Mucha dificultad ☐ No puede hacerlo **b. ¿Tiene esta persona dificultad para oír, incluso si usa un audífono?** ☐ No tiene dificultad ☐ Un poco de dificultad ☐ Mucha dificultad ☐ No puede hacerlo **19** **a. ¿Tiene esta persona dificultad para caminar o subir escalones?** ☐ No tiene dificultad ☐ Un poco de dificultad ☐ Mucha dificultad ☐ No puede hacerlo **b. ¿Tiene esta persona dificultad para recordar o concentrarse?** ☐ No tiene dificultad ☐ Un poco de dificultad ☐ Mucha dificultad ☐ No puede hacerlo **c. ¿Tiene esta persona dificultad con su cuidado personal, tal como lavarse el cuerpo o vestirse?** ☐ No tiene dificultad ☐ Un poco de dificultad ☐ Mucha dificultad ☐ No puede hacerlo **d. Usando el idioma que habla mejor, ¿tiene esta persona dificultad para comunicarse, por ejemplo, entender o ser entendido(a)?** ☐ No tiene dificultad ☐ Un poco de dificultad ☐ Mucha dificultad ☐ No puede hacerlo

(continued)

Table 5.3.   Disability Questions by Mode (continued)

CAI Mode	Paper Mode
	20 **Debido a una condición física, mental o emocional, ¿tiene esta persona dificultad para hacer diligencias o mandados sola, tal como ir al consultorio de un médico o ir de compras?** ☐ No tiene dificultad ☐ Un poco de dificultad ☐ Mucha dificultad ☐ No puede hacerlo

The key research goals of cognitive testing were to determine the following:

1. If participants reported any difficulty, how did they choose their specific response category? Why did they not choose a different response category?

2. For the question about difficulty communicating, do people understand the concept of "language spoken best" ("Usando el idioma que habla mejor")?

3. Are they reporting "some difficulty," "a lot of difficult," or "cannot do at all" for circumstances that are in scope of a disability in the communication domain? Do participants report any disability due to reasons that are out of scope? For example, a language barrier is not in scope. (Question 19d)

4. What types of disabilities/conditions are being identified for children when the response indicates difficulty with communication?

5. Do participants clearly and consistently understand the term "washing all over" ("lavarse el cuerpo") as a more broad/inclusive description of bathing?

6. Do people react to the text "washing all over" ("lavarse el cuerpo") as sensitive, awkward, or embarrassing? [As assessed by observation]

7. Do participants answer this question based on "self-care" tasks outside of washing and dressing (and if so, which ones)?

8. For those who reported anything other than "no difficulty," what are the actions or circumstances that caused them to answer as they did?

9. For those who reported "no difficulty," what do participants think "difficulty walking or climbing steps" ("dificultad para caminar o subir escalones") entails?

10. Do participants consistently understand the term "subir escalones" as climbing steps? What do they think "subir escalones" entails?

11. Do the participants read/hear and understand the question preamble in responding to difficulty with "doing errands alone such as visiting a doctor's office or shopping" ("para hacer diligencias o mandados sola, tal como ir al consultorio de un médico o ir de compras")? In other words, do participants report difficulty with errands for reasons other than health or disability?

12. Do participants associate particular conditions with difficulty concentrating or remembering?

This section details the general and mode-specific findings related to these research questions.

5.3.1 General Findings

1. **If participants reported any difficulty, how did they choose their specific response category? Why did they not choose a different response category?**

Of the 20 total Group 2 participants, 14 reported some level of difficulty either for a household member or themselves for at least one question in the disability question series. Six participants, 4 tested in CAI mode and 2 in paper mode, responded "no difficulty" for all questions.

Questions 18a/25a and 18b/25b asked about difficulty seeing or hearing. Eleven participants reported no difficulty seeing or hearing for all, and 9 participants reported some level of difficulty for someone in the household and explained their selected response category.

- One participant reported "some difficulty" hearing and explained, "Yo no sé cuán profundo es eso porque yo no soy especialista, pero cuando nos comunicamos y eso, como que si no estoy ahí cerca, no me escucha bien, si estoy atrás de ella o algo así, tiene dificultad." [45:20] (I do not know how severe her problem is, I am not the specialist but when we talk, if I am not close enough she cannot hear me, if I am behind her or something like that she has difficulty hearing.)

- Another participant reported "A lot of difficulty" seeing for his sibling: "Mi herman(o/a) tiene cataratas en ambos ojos, so [sic], si Dios permite, ahora en enero empezamos el proceso para operárselos, so, sí, [él/ella] tiene dificultad para ver en este momento." [40:12] (My sibling has cataracts in both eyes, God willing in January we will start the paperwork for them to go into surgery, so yes they have difficulty seeing in this moment.) [PROBE: You said they have a lot of difficulty, what made you answer this way instead of some difficulty?] "Porque se le hace bien difícil ver, identificar cosas u objetos." (Because it is very difficult for them to see or distinguish things or objects.)

- Another participant selected "some difficulty" seeing for herself. The interviewer probed as to whether she wears glasses. This participant explained that she does wear glasses but due to COVID-19 the clinic closed, and she has been unable to get a vision exam and knows she needs a new prescription.

One participant tested in CAI mode reported "some level of difficulty" at Question 25a, thinking about when they are not wearing glasses. Another participant said another person in the home uses glasses to read. The interviewer asked whether the person has difficulties with their glasses on, and the participant said they do not. These participants did not realize that the question asked about difficulty "even if wearing glasses" (aunque lleve puestos espejuelos o lentes).

Other participants did note this instruction and mentioned it in explaining their selected response.

- "Porque él sí tiene dificultad visual, es porque, aunque el utiliza espejuelos, él ve por el ojo izquierdo, él no ve nada por el derecho. Él tuvo un accidente entonces él tiene su ojo, pero no ve por el derecho." [43:48] (Because he does have visual difficulty, although he uses glasses, he sees out of his left eye only, he does not see anything out of his right eye. He had an accident, so he has his eye, but he does not see out of his right eye.) This participant explained that she answered "A lot of difficulty" because even though it does not interfere with his day-to-day activities, it can become dangerous when he is outside, and the sun is right on his face because it can make him lose his balance.

- Another participant reported "some difficulty" seeing for himself and his mother: "Si, contesté eso porque, aunque usamos espejuelos pues como quiera a veces es un poco difícil ver de lejos o ver cuando hay mucha luz." [29:46] (Yes, I answered that because, even though we use glasses it is sometimes a little difficult to see far away or to see when there is too much light.) This participant added that he knows he has to update his prescription and that his mother has a condition that makes it hard for her to see if there is too much light or if she is too far away.

- One participant tested in CAI mode explained that she has a medical condition that affects her vision even while wearing glasses. She mentioned that she sees lights, a black dot, or sometimes blurry, but it has to do with stress, anxiety, or eyestrain, which cannot be fixed by wearing glasses. She answered, "some difficulty" and not "a lot of difficulty" because this condition does not stop her from carrying out her daily activities.

Eight participants selected "no difficulty" for all household members at questions 19/26 (a) through (d) in the disability series. Twelve participants reported some level of difficulty either for a household member or for themselves and explained how they decided on their selected response.

- One participant tested in paper mode reported "some difficulty" for a relative at 19a and explained she has fibromyalgia and arthritis; although she can walk and go up the stairs, if she goes up many stairs, at the end of the day she is in pain. This participant said that he answered, "some difficulty" and not "a lot of difficulty" because, although it is somewhat painful, she is still able to do these activities.

- Another participant explained why he reported "some difficulty" for himself: "Yo tengo un poco de debilidad, así mismo un poco, en la pierna derecha, y en ocasiones pues mi andar no es derecho. Yo camino balanceándome. No utilizo bastón, por eso no considero que sea mucha, y si me sostengo de las barandas puedo subir escaleras. O sea que no es algo grave, pero no camino dentro del rango de lo normal." [40:36] (I have a little weakness, just like that a little, in my right leg, and sometimes my walk is not straight. I walk with a swaying gait. I don't use a cane, so I don't consider it to be much, and if I hold on to the handrails, I can climb stairs. So, it's not serious, but I don't walk within the normal range.)

- One participant tested in paper mode explained why she reported "some difficulty" remembering or concentrating for both her grandmother and herself: "Pues ella por mi bisabuela murió de Alzheimer's, y pues ellos tienen una enfermedad hereditariamente y pues a ella a veces se le olvidan las cosas. No tiene Alzheimer's

porque no se lo han diagnosticado, pero por la edad que tiene ella a veces se le olvida donde pone las cosas." [49:26] (Well, my great-grandmother died of Alzheimer's, and they have a hereditary disease, and she sometimes forgets things. She doesn't have Alzheimer's because she hasn't been diagnosed, but because of her age she sometimes forgets where she puts things.) The participant said that she also answered "some difficulty" for herself because she suffers from postpartum depression and anxiety, and these make her forget things. [PROBE: Were you thinking only about difficulty remembering or difficulty concentrating as well?] "Pues sí también para concentrarme. Pero para concentrarme yo siempre he sufrido de eso desde pequeña porque yo era bien hiperactiva. No estoy segura, pero yo entiendo que a mí me diagnosticaron con ADD algo así. No estoy segura." [50:35] (Yes, also to concentrate. But to concentrate I have always suffered from that since I was little because I was very hyperactive. I'm not sure, but I understand that I was diagnosed with ADD or something like that. I'm not sure.)

- Another participant who reported "some difficulty" remembering or concentrating for herself explained that she has lesions in an area of the brain that affect her recent memory for specific details.

- One participant tested in paper mode reported "cannot do at all" at all for items a–d for an 8-month-old baby in the household. This participant should have skipped these questions for the baby but had not read the instructions before question 19a. No other participants reported disability in error.

2. For the question about difficulty communicating, do people understand the concept of "language spoken best" ("Usando el idioma que habla mejor")?

Nineteen of the 20 Group 2 participants were asked how they understood the term, "language spoken best" ("Usando el idioma que habla mejor"). Participants understood the phrase as intended, describing the term as meaning one's native or primary language, or the language one speaks best or most proficiently.

- "Usando el idioma que habla mejor, me da a entender a mí que es mi lengua natural, y en el caso mío es el español." [53:34] (Using the language you speak best, makes me understand that it is my natural language, and in my case it is Spanish.)

- "Pues lo que llamaríamos el idioma primario, o el idioma con el que te criaste tus primeros años. Mi idioma primario en mi caso es el español. En Puerto Rico ese es generalmente el idioma que se utiliza." [47:27] (Well, what we would call the primary language, or the language you grew up with during your first years. In my case my primary language is Spanish. In Puerto Rico that is generally the language that is used.)

- "Pues el idioma con el que tú te sientes más cómodo y eres más fluido al hablar." [53:02] (The language in which you are most comfortable and fluent when speaking.)

- "Que si yo soy puertorriqueña, mi mejor idioma es el español. Si yo fuera americana era el inglés, es el idioma que hablo mejor, el que yo domino." [47:59] (That if I am Puerto Rican the language that I speak best is Spanish, if I were American it would be English, is the language I am more proficient.)

3. Are they reporting "some difficulty," "a lot of difficult," or "cannot do at all" for circumstances that are in scope of a disability in the communication domain?

Do participants report any disability due to reasons that are out of scope? For example, a language barrier is not in scope. (Question 19d)

Nineteen of 20 Group 3 participants selected "No difficulty" for all household members at questions 19/26d.

One participant tested in CAI mode selected "some difficulty" for her elderly mother at question 26d. This participant also selected "some difficulty" for her mother at question 25b, and upon probing said she was thinking more about her mother's hearing difficulties but thought she had some difficulty understanding also: "Tú le estás hablando y ella quiere también aportar, entonces no escucha bien lo que tú estás diciendo y cambia la versión o entiende otra cosa." [54:24] (You are talking to her and she wants to interact, so she does not listen what you are saying, and she changes the facts or misunderstands.)

4. *What types of disabilities/conditions are being identified for children when the response indicates difficulty with communication?*

One participant tested in paper mode mistakenly reported for an 8-month-old baby, selecting "cannot do at all" for questions 19a through 19d. No other participants reported any level of difficulty with communication for a child.

5. *Do participants clearly and consistently understand the term "washing all over" ("lavarse el cuerpo") as a more broad/inclusive description of bathing?*

Group 2 participants were asked how they understood the translated term "washing all over" ("lavarse el cuerpo"). While most understood the term as a more broad or inclusive description of bathing, some still interpreted the term more simply.

Twelve of the 20 Group 2 participants described "lavarse el cuerpo" more broadly than simply bathing and including other personal care or grooming activities.

- "Lo puedo realizar de manera independiente—mi cuidado personal, como vestirme, maquillarme, bañarme, etc. y no necesito ningún tipo de ayuda de otra persona ni instrumento. Lavarse el cuerpo significa bañarse, pero también puede incluirse lo que es lavarse el pelo y bañarse." [56:00] (I can do it independently—my personal care, like dressing, putting on makeup, bathing, etc. and I don't need any help from another person or instrument. Washing the body means taking a bath but washing your hair and bathing can also be included.)

- "Bañarse, asearse, sí el aseo personal corporal completo." [45:50] (Bathing, grooming, full body grooming.)

- "Ducharme, bañarme, asearme." [45:51] (Shower, bathe, groom myself.)

Seven participants offered a narrower interpretation of "lavarse el cuerpo" as simply washing or taking a shower.

- "Bañarse en la ducha. Yo pienso que no incluye lavarse la boca." [43:44] (Taking a shower. I think that it does not include washing your mouth.)

- "Darse un buen aseo." [38:19] (To give yourself a good toileting.)

5-23

One participant who reported "some difficulty" for herself explained how she interpreted the term based on her own ability. "Asearse todo el cuerpo, por ejemplo la espalda ya no puede, no llega, y doblarse a limpiarse sus pies tampoco." (To clean up all your body, for instance you cannot reach your back anymore, and you cannot bend either to clean your feet.)

Eight Group 2 participants used the term "bañarse" when asked how they interpreted the phrase "lavarse el cuerpo." Of those who used the term, four either suggested that "bañarse" might be a better alternative to the term "lavarse" or "lavarse el cuerpo" or noted that "bañarse" is a more commonly used term.

- "A bañarse. Yo pensaría más bien en bañarse, cuando uno se ducha, se baña, es lo que me viene a la mente." [35:08] (To bathe. I would think more like bathing, when you take shower, you bathe, that's what comes to my mind.)

- "Aquí le decimos 'bañarse,' el poder limpiarse el cuerpo con agua y jabón. Ejemplos son: lavarse el pelo, limpiarse los dientes." [51:20] (Here we call it "bathing," being able to wash your body with soap and water. Examples are washing your hair, brushing your teeth.)

- A participant said that "bañarse" could be a better term, adding that it was not difficult for this person to understand the question, but that "bañarse" sounds better. [PROBE: What type of activities are involved in "lavarse el cuerpo"?] The participant said, "Todo, desde la cabeza a los pies." [33:01] (Everything from head to toes.)

6. Do people react to the text "washing all over" ("lavarse el cuerpo") as sensitive, awkward, or embarrassing? [As assessed by observation]

None of the 20 Group 2 participants tested in either mode showed any indication of discomfort or embarrassment at questions 19c/26c.

7. Do participants answer this question based on "self-care" tasks outside of washing and dressing (and if so, which ones)?

Additional tasks mentioned included hair care (blow drying hair, setting hair with rollers, brushing), brushing teeth, and putting on makeup. All participants, however, answered the question thinking of showering or bathing and getting dressed.

8. For those who reported anything other than "no difficulty," what are the actions or circumstances that caused them to answer as they did?

Four Group 2 participants, all tested in CAI mode, reported some level of difficulty washing or dressing either for a household member or for themselves.

- One participant reported "a lot of difficulty" when responding to 326c for her sister and explained that their sister has a paralyzing condition, uses a walker, and has difficulties with her personal care. She cannot take a shower by herself, and she needs help to have a shower or to get dressed. She falls quite often because her body is not fully functional, so she has muscle weakness in her legs and arms. She can have seizures every so often and with every seizure she gets weaker and loses mobility.

▪ Another participant reported "some difficulty" at 25c for her mother who she explained sometimes loses her balance and has difficulty taking a shower.

▪ Another participant who described having physical difficulties due to arthritis and a renal condition selected "some difficulty" for herself at 25c and explained how her conditions make self-care difficult. "Yo me puedo lavar la cabeza pero no me puedo poner un blow [sic] en la cabeza, no me puedo hacer unos rolos, dependo de otra persona que lo haga para mí o tengo que dejarme mi pelo rizo natural." [46:07] (I can wash my hair, but I cannot blow it, or I cannot do curls, I depend on other person that does that for me, or I have to leave my hair naturally curly as it is.) … "Otra dificultad es que si me voy a poner un pantalón o una ropa interior, tengo que sentarme porque no puedo hacerlo de pie como todo el mundo hace, se pone la ropa y sigue andando, so a mí me coge un poquito más de tiempo, yo tengo que sentarme, cogerme mi tiempo ayudar la pierna a subir para amarrarme los zapatos o para quitármelos." (Another difficulty I have is that if I am about to wear my pants or my underwear I need to sit down, I cannot do it on my feet as everybody else, I must sit down, take my time, and carry my leg up to put on my shoes or to take them off.)

▪ Another participant reported "a lot of difficulty" for herself having explained that she suffers from health conditions including obesity and a large hernia. "Cuando estoy sola, que me encuentro que estoy sola, al tener ese peso en el abdomen, pues no me alcanzo mis partes. Muchas veces sola al pararme en el baño pues mi hija me ayuda. Y a veces tengo que espera a que mi hija llegue para que entonces me ayude a hacer esas... Pero de vestirme, me visto pero con dificultad." [44:42] (When I am alone, when I find that I am alone, having that weight in my abdomen, I can't reach my parts. Many times, alone, when I stand up in the bathroom, my daughter helps me. And sometimes I have to wait for my daughter to arrive so she can help me do those… To get dressed, I get dressed but with difficulty.)

9. For those who reported "no difficulty," what do participants think "difficulty walking or climbing steps" ("dificultad para caminar o subir escalones") entails?

Participants reporting "no difficulty" had varying definitions of what difficulty entails. Some focused on the need for assisting devices, whereas others focused on the limitation itself.

▪ "Que necesita alguna ayuda para poder hacer esas tareas." [40:00] (That you need some help to be able to do these tasks.)

▪ "Que la persona utilice silla de ruedas, o un equipo asistivo como un andador, o bastón." [1:01:01] (That the person uses a wheelchair, or a walker or a cane.)

▪ "Debe tener un problema físicamente, algún tipo de enfermedad, algún tipo de problema en las piernas." [30:26] (They must have a physical issue, some type of disease that affect the legs.)

▪ One participant said it means not being able to perform that action of climbing steps. [Giggling] She said climbing steps means being able to climb certain steps to get to a higher level, like going from the first floor to the second floor.

▪ Another participant said having difficulty means one must make an effort to go up the stairs one by one.

10. Do participants consistently understand the term "subir escalones" as climbing steps? What do they think "subir escalones" entails?

Participants consistently understood "subir escalones" as climbing steps. Because a set of steps constitutes a flight of stairs, they saw "subir escalones" as applying to both climbing isolated steps or climbing stairs.

- "Lo que pasa es que escalones es una parte, la escalera es el total. Una escalera está llena de escalones." [45:56] (What happens is that a "step" is just a part, the staircase is the total. A staircase is full of steps.)

Participants provided more or less detailed definitions or descriptions of what "subir escalones" entails. Some focused on the precise physical movements involved:

- "Levantar la pierna para subir a una parte más elevada del piso normal." [43:32] (To lift the leg to reach a higher space than the regular floor.)

- "Utilizando el pasamano, poniendo los pies completos en el escalón, con seguridad para no caerse." [1:01:49] (Using the banister, putting both feet firmly on the step so you do not fall.)

- "…que tengas que forzar la pierna para subir los pies para subir una escalera, o que haya diferentes niveles en los que tengas que subir, levantar los pies más, y no puedas, me imagino." [55:24] (That you have to force your leg to raise the feet to go up the stairs, or that there are different levels you need to climb, raise the feet further, and that you can't, I imagine.)

Others focused on the goal of climbing steps:

- "Llegar a arriba de un nivel." [48:06] (To reach the next level up.)

- "Desplazarme de un lugar a otro a través de las escaleras." [43:06] (Move from one place to another through the stairs.)

- One participant said climbing steps means being able to climb certain steps to get to a higher level, like going from the first floor to the second floor. She said the term "escaleras" (stairs) is more common. [54:18]

11. Do the participants read/hear and understand the question preamble in responding to difficulty with "doing errands alone such as visiting a doctor's office or shopping" ("para hacer diligencias o mandados sola, tal como ir al consultorio de un médico o ir de compras")? In other words, do participants report difficulty with errands for reasons other than health or disability?

Participants generally heard and understood the question preamble. Most took it into consideration when answering the question and gave examples that made this clear.

- One participant answered "No difficulty" when answering about a household member. In probing, this person explained that this was a young person who is able to run errands alone, including going to a doctor's appointment, but still needs someone to drive her because she still does not drive.

- A participant who answered "some difficulty" described a neurological condition that requires that someone go with her to her medical appointments to make sure she does not miss anything the doctor says.

- A household member for whom a participant answered "Cannot do at all" has a condition in her legs and balance problems.

- A participant who answered they have "a lot of difficulty" explained that they are in dialysis and should not be out alone.

- Another participant who suffered a stroke said they have "a lot of difficulty" and explained they have fallen down because of the weakness of their body since the stroke.

- Another participant who answered "a lot of difficulty" explained that her obesity precludes her from walking to places and she has no transportation.

No one answered in error (i.e., reported difficulties that were unrelated to physical, mental, or emotional conditions).

12. Do participants associate particular conditions with difficulty concentrating or remembering?

A number of conditions were mentioned:

- Fibromyalgia

- Brain surgery sequelae

- Aging memory

- Emotional trauma

- Certain medications

- Alzheimer's disease

- Mental problems

- Brain damage

- Senile dementia

- Depression and anxiety

5.3.2 Other Findings by Mode

All notable interview findings are included in the discussion of the research questions above.

5.3.3 Recommendations

No changes are recommended. "Lavarse el cuerpo" (Wash all over) did not present issues or make anyone uncomfortable. In some cases, it was interpreted as synonymous with bathing, and in others it included hair care, brushing teeth, or applying makeup.

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6. PRCS Group 3 Findings and Recommendations

Twenty PRCS participants completed interviews in Group 3, which focused on four topics: electric vehicles, solar power, means of transportation to work, and income and weeks worked. This chapter presents a summary of findings and specific findings for the Group 3 test topics.

Overall, the electric vehicle questions tested in Round 3 performed well and appeared to be understood by participants as intended. No changes are recommended.

The solar power question worked well. We learned in testing that many in Puerto Rico call solar panels "placas solares" instead of "paneles solares." We propose changing the question to include both terms, asking about "paneles o placas solares."

The question on means of transportation to work performed well generally. However, participants reported varying strategies for fitting carpooling in the existing list and therefore picked a variety of categories to try to report carpooling. For this reason, we recommend adding an option to the list called "carpooling," a term used in Spanish in Puerto Rico. We also recommend removing the long-distance train option, as this type of transportation reportedly does not exist in Puerto Rico. The ride-hailing option was clearly understood, so no changes are recommended.

The weeks worked questions presented problems in paper mode testing, as most participants were unable to follow the skips or instructions accurately. Besides instructing survey participants on how skips work at the beginning of the survey, we have no recommendations.

For the income questions, each of the items is a long statement that lists more than one type of income and provides information on what to include or exclude. Participants often did not read the entire item on paper or listen to the full item on CAI. This led to some errors in response. We urge the Census Bureau to consider this issue for possible future changes.

6.1 Electric Vehicles

The first test topic in Group 3 was electric vehicles. The key research goals of cognitive testing were to determine the following:

1. Are participants reporting hybrid vehicles that do not require connecting to an electrical source for charging?

2. Are participants going to consider every household member that might own an eligible vehicle?

3. Are participants accurately reporting electric vehicles that they have access to (i.e., someone in the household owns or leases)?

The question tested includes all types of electric vehicles in a single question, both fully electric and plug-in hybrid vehicles. The question directs the participant to think about vehicles that were owned or leased. **Table 6.1** displays the electric vehicle question by mode.

Table 6.1.   Electric Vehicle by Mode

CAI Mode	Paper Mode
21. ¿Tiene o alquila usted o algún miembro de este hogar un vehículo eléctrico? Incluya tanto los vehículos totalmente eléctricos como los vehículos eléctricos híbridos que se enchufan. Sí No	**13** **¿Tiene o alquila usted o algún miembro de este hogar un vehículo eléctrico?** *Incluya tanto los vehículos totalmente eléctricos como los vehículos eléctricos híbridos que se enchufan.* ☐ Sí ☐ No

6.1.1 General Findings

General findings that apply to both modes are discussed in this section, and mode-specific research findings are discussed in **Section 6.1.2**.

1. **Are participants reporting hybrid vehicles that do not require connecting to an electrical source for charging?**

None of the 20 Spanish interview participants reported owning or leasing plug-in electric or hybrid vehicles. When asked how they determined their answer to this question, these are some of the answers they provided:

- "Porque el vehículo que usamos usa combustible, gasolina." [23:33] (Because the vehicle we use works with fuel it uses gasoline.)

- "Porque ninguno de los dos vehículos que hay en la casa tienen esa tecnología." [29:44] (Because neither of the two vehicles in the house have this technology.)

- "Porque yo no tengo ese tipo de vehículo, yo no guío, yo no tengo licencia. Y no tengo chavos tampoco para comprar un carro hibrido de esos." [23:55] (Because I don't have that kind of vehicle, I don't drive, I don't have a license. And I don't have enough money to buy one of those hybrid cars.)

- Another participant said that they had answered "No" because they do not own an electric vehicle. They confirmed that the vehicle they do own runs with a motor and gasoline.

2. **Are participants going to consider every household member that might own an eligible vehicle?**

When answering these questions, 8 of the 20 participants confirmed that they thought about all the vehicles used by any member of their household.

- One participant said that they only thought about the car they have at home, which runs on gasoline. The car belongs to the participant but is driven by another person in the household.

- One participant said that they thought about all the cars at home. This participant reported having five vehicles at home.

- Another participant said they thought about the two cars in the household.

One of the 20 participants confirmed that they only thought of their own car. This participant reported having two vehicles at home, only one being theirs.

Five participants answered that there was only one car in the household for use by household members, 3 participants reported not having any vehicles in the household, and 3 participants were not asked this follow-up question.

One of the participants who reported not having a vehicle at home mentioned that, since they do not have a car, they thought about their daughter's car, even though their daughter does not live in the household. This participant sometimes calls her daughter to take her places. Her daughter's car is powered by gasoline.

3. Are participants accurately reporting electric vehicles that they have access to (i.e., someone in the household owns or leases)?

Although this probe was only intended for participants answering "Yes" to having an electric vehicle in the home, 11 of the 20 participants were asked whether they thought the questions referred to vehicles that were either leased or owned. Four participants said they understood the question to be only asking about vehicles that were owned; 5 participants said they understood the question to be asking about vehicles that were either owned or leased; 1 participant was not able to provide an answer; and 1 participant said they did not think about that when they answered the question.

6.1.2 Other Findings by Mode—Spanish PRCS Interviews

a.   Paper Mode

All 8 participants who tested in paper mode seemed to understand the questions as intended and gave explanations during probing that supported their response to the survey questions. However, it was clear in probing that one of the participants did not necessarily know what a plug-in electric or hybrid vehicle was.

- This participant said during probing that their car was electric because it uses a battery, but also admitted that their car uses gasoline and was not a hybrid. This participant also could not confirm whether they thought the questions referred to vehicles that were either leased or owned.

b.   CAI Mode

All 13 participants who tested in CAI mode seemed to understand the questions as intended and provided explanations that supported their responses. When asked if there were any other vehicles they had thought about when answering this question, 1 participant answered, "Yes, Prius."

6.1.3 Recommendations

Overall, the electric vehicle questions tested in Round 3 performed well and appeared to be understood by participants as intended. RTI/RSS does not recommend any changes to this question.

6.2   Solar Power

The next Group 3 test topic was solar power. **Table 6.2** displays versions of the question by interview mode.

Table 6.2.   Solar Power Question by Mode

CAI Mode	Paper Mode
23. ¿Usa <esta casa móvil/esta casa/este apartamento/esta vivienda> paneles solares que generan electricidad? Sí No	**15 ¿Usa esta casa, apartamento o casa móvil paneles solares que generan electricidad?** ☐ Sí ☐ No

The key research goals of cognitive testing were to determine the following:

1. How do participants understand "solar panels"?

2. Do participants inaccurately include garden lights as sources of solar power?

3. What do participants in multi-unit housing units know about their building's solar use? Do participants in multi-unit housing units include solar power for just their unit, for the building as a whole, or both?

6.2.1 General Findings

1. How do participants understand "solar panels"?

Only one of the 20 Group 3 participants responded "Yes" to the solar panel question. This participant explained that the solar panels they have at home are not necessarily used to generate electricity, but to heat the water.

When asked what "generar electricidad" meant, this participant said the following:

- ▪ "Cuando me dicen 'generar electricidad' yo pienso que es que cuando están instalados es que no me estarían cobrando luz (electricidad), porque es algo que está saliendo de mi casa, no es algo que lo está proveyendo el gobierno." [28:47] (When they tell me "generate electricity," I think that when they are installed, they would not be charging me for electricity, because it is something that is coming out of my house, it is not something that is being provided by the government.)

Another participant tested in CAI mode answered "No" to the solar panel question and explained that the building did not have solar panels that generate energy, but she believes her building may have solar panels for water heating. She explained that she was not sure but had noticed that when it rained the water would come out cold, and the opposite was true when the sun was out.

The remaining 18 participants responded "No" with certainty, explaining either that they know they use electricity for power or that they do not have solar panels on their home.

- ▪ "Porque no tengo paneles solares, solamente tengo energía eléctrica." [17:42] (Because I do not have solar panels, I only have electricity.)

- ▪ "Porque ahora mismo lo que esta casa usa es la luz, la otra luz." [34:40] (Because right now what this house uses is light/electricity, the other type of light/electricity.)

- ▪ "Bueno porque no, no tengo… aquí la casa no tiene paneles solares." [26:07] (Well because I do not have them… the house does not have solar panels.)

- ▪ "No, porque en mi edificio tenemos planta eléctrica." [19:04] (No, because in my building we have an electric plant.)

Four participants mentioned that they know they are not able to have solar panels at their home due to ownership restrictions or structural limitations.

- ▪ "Aquí no se permiten." [39:05] (Those are not allowed here.) [PROBE: Tell me about that.] "Esto no es casa propia, es alquilada, uno paga según el ingreso, pero no es propiedad de uno." (I do not own the house, this house is rented. You pay according to your income, but you do not own the house.)

- ▪ "Lamentablemente en el área que vivo no podría utilizarlos, porque vivo en lo que le llaman un walk-up, vivo en segundo piso; mientras tenga otro piso sobre mí no los puedo utilizar. Sin embargo, quisiera tener esa oportunidad de usarlos." [24:32] (Unfortunately in the area where I live, I cannot use them. I live in what people call a walk up, I live in a 2nd floor. As long as I have another floor over me I will not be able to use them. However, I would love to have the chance to use them.)

- ▪ "Los tratamos de poner, pero no se pudo porque tiene teja la casa, y en las tejas no se pueden poner las placas." [41:05] (We tried to put them, but we couldn't because the house has a tile roof, and it is not possible to put the plates on the tiles.)

- ▪ One participant explained that her home has a wooden roof, and it would be risky to put solar panels because a hurricane would not just blow away the panels but the entire roof. Perhaps in the near future she would like to have solar panels but would have to find out how to address the issue of the roof.

All 19 Group 3 participants who were asked said the solar panel question was clear.

▪ One participant tested in CAI mode said she found the question to be clear and noted that solar panels are becoming more prevalent: "No, pienso que es una pregunta muy buena, porque pues nos estamos moviendo a otra modalidad de energía, y como hemos sufrido lo del embate de María, pues..." [41:44] (No, I think it is a very good question, because we are moving to another energy modality, and as we have suffered from Maria's attack, well...) This participant added that she has solar panels at work.

▪ One participant tested in paper mode said that he did not think the question was confusing, but suggested expanding the question: "¿Usa esta casa, apartamento, o casa móvil, paneles solares que generan electricidad para la propiedad?" [31:25] (Does this house, apartment, or mobile home use solar panels that generate electricity for the property?) This participant thought people might wonder whether the question is asking about generating electricity for someone else other than the property, for example, the government.

All 20 participants said they had heard the translated term for solar panels "paneles solares" and had no trouble accurately describing either the physical appearance or the function of solar panels.

▪ "En forma rectangular, no son cristales, son como un acrílico encima, cuadriculados, que van encima del techo de la casa, y se supone que hay una batería dentro de la casa para generar energía." [21:00] (They are rectangular in shape, they are not glass but more like they have acrylic on top, checkered, and they go on top of the roof, and supposedly there is a battery inside the home to generate energy.)

▪ "Sí, aquí en Puerto Rico hay mucho, porque hace mucho sol." (Yes, here in Puerto Rico there is a lot, because it is very sunny.) "Bueno, los paneles solares están compuestos por placas solares, y esas placas solares pues, les llega la luz ahí y transmiten la energía, o todo eso que ellos recopilan a una base, a una batería." [19:35] (Well, solar panels are made of solar plates, and those solar plates, well, the light reaches them, and they transmit the energy, or all that they collect to a base, to a battery.)

All participants tested in Round 3 reported having heard the term "paneles solares" and clearly understood this translation. However, when asked to describe the term, 8 used the term "placas solares" (solar plates) in their description or said they would use this term rather than "paneles solares." One participant noted specifically that "placas solares" is a more commonly used term in Puerto Rico than "paneles solares."

▪ "Placas solares, un dispositivo que se alimenta de los rayos del sol y producen electricidad… por el proceso que sea, y retiene la electricidad por medio de baterías." [25:26] (Those are solar plates, a device that is fed solar power and produces electricity… through any process and stores electricity in batteries.)

▪ "Una placa, bueno también podría llamarla placas solares, que tiene la capacidad de recibir esa radiación del sol para poder convertir esa energía en una fuente renovable." [32:19] (A plate, well you could also call it a solar plate, that has the ability to receive that radiation from the sun in order to convert that energy into a renewable source.)

- "Bueno son placas, eso es como yo las describiría, son unas placas grandes que va encima de la casa." [35:30] (Well, they are plates, that's how I would describe them, they are large plates that go on top of the house.)

2. *Do participants inaccurately include garden lights as sources of solar power?*

Group 3 participants were asked whether they thought they should include solar-powered garden lights at questions 15/23. None had misreported garden lights as solar power, and 15 of 20 participants said they would not report solar-powered garden lights.

When considering whether solar-powered garden lights should be included, 6 participants said they think of this type of lighting as ornamental or decorative only, and 5 emphasized that solar-powered garden lights provide light to the garden only and not the entire house. Four participants specifically noted that they think of solar-powered "lights" as different from solar "panels."

- "No, porque realmente esas lucecitas que uno tiene en el jardín, eso no es como que, no lo veo como que sea algo que te ayude a economizar luz, pues no es para la casa completamente; es algo decorativo." [20:35] (No, because those little lights that you have in the garden, that's not really something that helps you save light, because it's not for the house completely; it's something decorative.)

- "Ah, si tuviera no, no diría que son placas solares. Es que eso son unas bombillitas que se alimentan del sol y que se... eso no es una placa solar, la placa solar es lo que va en el techo, eso es algo bien caro." [2:58] (Ah, if I had them, I wouldn't say that they are solar plates. It's just that those are little light bulbs that are fed by the sun and that are… that's not a solar plate, the solar plate is what goes on the roof, that's something very expensive.)

Five participants either thought that solar-powered garden lights should be reported or were uncertain. One participant stated they did not know whether this type of lighting should be reported in the question, and the others seemed to consider the energy source as solar and therefore indicated that solar-powered garden lights should be included.

- One participant first misunderstood the probe and then responded, "Yo pienso que sí, yo puedo comprar un artefacto y lo pongo en el sol y me carga, porque yo tengo un cargador de eso." [28:46] (I think yes, because I can purchase a device and put it to the sun to get charged, because I do have a charger like that.)

- "Pues claro que sí, porque tenemos esas lucecitas afuera y están generando luz solar." [36:22] (Of course, because we have those little lights outside and they are generating sunlight.)

- "Sí, porque están generando energía." [46:12] (Yes because those are generating energy.)

4. What do participants in multi-unit housing units know about their building's solar use? Do participants in multi-unit housing units include solar power for just their unit, for the building as a whole, or both?

None of the participants tested in Round 3 reported living in multi-unit housing units with solar panels.

6.2.2 Findings by Mode

No differences by mode were identified in the responses to the probes.

6.2.3 Recommendations

Consider using "paneles o placas solares" to make sure everyone understands the term, as "placas solares" appears to be at least as common in Puerto Rico as "paneles solares."

6.3   Means of Transportation to Work

This question was asked of participants who reported working in the prior week. See **Table 6.3** for the question wording by mode.

Table 6.3.   Means of Transportation to Work Question by Mode

CAI Mode	Paper Mode
26. *Usando esta lista*, ¿cómo llegó <usted/NOMBRE> USUALMENTE al trabajo LA SEMANA PASADA? Automóvil, camión o van Autobús Tren urbano Tren de larga distancia o suburbano Carro público Lancha (ferry) Taxi o servicios de viajes a pedido Motocicleta Bicicleta Caminó Trabajó en el hogar Otro método	**32** **¿Cómo llegó esta persona usualmente al trabajo LA SEMANA PASADA?** *Marque (X) UNA casilla para el medio de transportación que utilizó por más distancia.* ☐ Automóvil, camión o *van* ☐ Taxi o servicios de viajes a pedido ☐ Autobús ☐ Motocicleta ☐ Tren urbano ☐ Bicicleta ☐ Tren de larga distancia o suburbano ☐ Caminó ☐ Carro público ☐ Trabajó en el hogar → *PASE a la pregunta 40* ☐ Lancha (ferry) ☐ Otro método

The key research goals of cognitive testing were to determine the following:

1. For all participants, is the meaning of the taxi or ride-hailing services category clear? If not, what descriptive words would have made the meaning clearer? Are there descriptive words missing?

2. Among those who chose ride-hailing as their primary means of transportation to work, what is their second most common mode of work travel?

3. Among those who did not choose ride-hailing as their primary means of transportation to work, do they ever use ride-hailing services to travel to or from work? How often? In what context?

4. Are there any travel modes the participant has used to get to work that are not represented in the PRCS travel mode question? What are they?

5. Do participants view "ride-hailing" and "carpooling" as the same thing? Do participants view "carro público" as the same as "taxi o servicios de viajes a pedido"? If not, how do these types of travel differ?

6.3.1 General Findings

1. For all participants, is the meaning of the taxi or ride-hailing services category clear? If not, what descriptive words would have made the meaning clearer? Are there descriptive words missing?

Participants were probed on the concept of "viajes a pedido" (ride-hailing services). Eighteen of 20 participants in Group 3 answered this probe, and all 18 included Uber in their answer. This response choice was understood as intended. One participant defined ride-hailing services as someone requesting a trip from a company providing these services and paying them for it. One participant mentioned the use of electronic applications or "apps" to request the service. One participant said that, although she understood "servicios de viajes a pedido" as an Uber, many people in the Central area of Puerto Rico might not be familiar with this definition and suggested including "Uber" as an example in this response option.

2. Among those who chose ride-hailing as their primary means of transportation to work, what is their second most common mode of work travel?

None of the 20 participants chose ride-hailing as their primary means of transportation to work.

3. Among those who did not choose ride-hailing as their primary means of transportation to work, do they ever use ride-hailing services to travel to or from work? How often? In what context?

None of the participants reported using ride-hailing services as their primary means of transportation to work. Two participants reported they use it or have used it to get to work in the past but only in case of emergencies, when there is no train or bus, for instance, but they said this is rare.

4. Are there any travel modes the participant has used to get to work that are not represented in the ACS travel mode question? What are they?

Participants were asked for other means of transportation people use to get to work not included in the list. Most of them expressed the list was exhaustive, but some proposed additions: "on horseback," "by unicycle," and "electric scooter."

5. Do participants view "ride-hailing" and "carpooling" as the same thing? Do participants view "carro público" as the same as "taxi o servicios de viajes a pedido"? If not, how do these types of travel differ?

Seventeen of 20 participants were asked who they travel to work with, and all of them reported that they ride alone, at least most of the time. Participants were also probed on which option they would select from the list for carpooling. Responses varied; one participant said "Se llama carpool." [25:00] (It is called "carpool.") The interviewer confirmed that they use the English term in Puerto Rico while speaking in Spanish. Four other participants said they would select "car, truck, or van." Other participants said they would select "Other" and specify "viaje compartido" (shared ride) or "transporte con compañeros de trabajo" (transportation with coworkers).

- "Yo colocaría otro método y pondría automóvil, pero que no es propio –el carro del vecino o el carro de la amiga." [59:30] (I would select other method and I would write in "someone else's car," like the neighbor's or a friend's car.)

Three participants mentioned that carpooling can fall within what is known as "pon" in Puerto Rico, which means getting a ride:

- "Aquí le llaman te dan 'pon', por ejemplo 'dame un pon al trabajo, es que me voy contigo y tú me llevas'." [45:15] (Here they call it giving you a "pon," for example, "give me a pon to work, it means I'm coming with you, and you take me.")

- "Acá le dicen 'pon', que es cuando le hacen un favor para trasladarse de un lugar a otro." [44:55] (Here they call it "pon," which is when they do a favor transporting you from one place to another.) After further probing, this participant said she would select "Other method."

Another participant said their answer would depend on the means of transportation his friend is using:

- "Dependiendo del medio de transporte, porque si el compañero tiene una motocicleta o una bicicleta, entonces sería motocicleta…" [50:21] (Depending on the means of transportation, if my coworker has a motorcycle or a bicycle then I would answer motorcycle.) [PROBE: What if your friend comes to pick you up in their car?] This participant answered, "Automóvil" (Car).

Participants were asked whether they considered carpooling to be the same as or different from ride-hailing services. Participants who answered this probe considered these two situations to be different because carpooling does not involve a payment as it is conducted among friends or workmates, whereas ride-hailing services are considered a for-profit activity.

- "Parecido, no es lo mismo porque no se está cobrando, no se está generando un ingreso por eso, si no haciendo un favor." [27:50] (Similar, it is not the same because you are not charging for it, you are not generating income for it, you are just doing a favor.)

- ▪ "Posiblemente el usar el servicio de viajes al trabajo lleva un costo, y si va con un compañero o amistad no le cuesta nada." [34:43] (Likely, using ride-hailing services involves a cost for the user, whereas riding with a friend or a co-worker is free.)

Finally, participants were asked if the option "carro público" was the same as or different from ride-hailing services. Participants agreed that, although a cost is involved in both options, "carro público" is usually less expensive than ride-hailing services. Additionally, with the "carro público," people ride with many other people, whereas in the case of ride-hailing services the person rides alone with the driver. The last difference was that "carros públicos" follow pre-established routes and have specific stops, whereas ride-hailing services have customized routes and stops.

- ▪ "Es diferente, el carro público básicamente la tarifa es bien económica. Cuando es una aplicación privada, es mucho más costosa." (It's different, the fare for "carro público" is way cheaper. When you use a private application, the cost is higher.) [PROBE: Besides cost, the rest is the same?] "No es lo mismo, porque uno es a través de […], por lo menos el carro público, básicamente se encuentran ellos en una terminal, específicamente para eso, entonces la persona tiene que llegar a hacer fila, verificar cuántos hay. La otra opción, el transporte llega a ti, donde te encuentres, si la aplicación da el servicio." [1:05:13] (It is not the same, because when one is through […], the "carro público" basically is located in a terminal, specifically for that, so a person has to go and stand in a line and check how many people are in line. The other option (ride-hailing), if the service is available, then the transportation gets to you, wherever you are located.)

- ▪ "Porque aquí hay unas guagüitas de carro público que ni son autobuses ni son taxis, son choferes privados que tienen una guagüita y cobran por dar un 'ride,' pero no es ni Uber, ni guagua pública… es carro público, le dicen carro público… Y va a otras rutas que no va la guagua o autobús, y caben menos personas que el autobús pero caben más que el Uber o la guagua. Y se comparte, pero no se conoce la gente." [26:25] (Because here there are these little buses/vans that are "carro público" and that are neither a bus nor a taxi; it's private drivers who have their van and they charge for giving a "ride," but it's not Uber, or public bus… it's "carro público," they call it "carro público." And they take routes that buses do not take, and they can fit fewer people than a bus but more than in an Uber or van. And you share with others, but they are not people you know.)

- ▪ "El carro público se tarda, y el servicio a pedido llega en el momento, te montas y te vas." [43:15] (The "carro público" takes a while, and the ride-hailing services arrives on the spot, you get on it and go.)

- ▪ "El servicio de viaje es única y exclusivamente para la persona que lo pide, el carro público es una guagua que se montan diferentes personas." [24:20] (The ride-hailing service is exclusively for the person requesting the service, whereas the public bus is a "guagua" available for many people to ride.)

6.3.2 Other Findings by Mode

CAI Mode

Two participants reported not having a car of their own; when asked about the means of transportation they usually use to get to work, 1 of them answered "subway or elevated

rail." When probed, this participant said they use a combination of subway or elevated rail, bus, and a short walk. The other participant who reported not having a car said he usually gets to work by "car, truck or van."

Participants were asked to read the list again to identify missing means of transportation. One option included in the list was "carro público." One participant said "carro público" might be not easy to understand for many people in Puerto Rico. That participant thought the questionnaire was referring to "guagua pública"—public buses—like the AMA service. The participant said that perhaps if AMA (Autoridad Metropolitana de Autobuses/ Metropolitan Bus Authority) was shown next to "carro público" or if the option said "guaguas públicas," Puerto Ricans might understand it better. A participant said AMA is a low-cost public service transportation that takes different routes.

The same participant also said they do not usually use the word "motocicletas" (motorcycles), but use "motoras." Multiple participants said that there are no long distance or suburban trains in Puerto Rico.

A number of participants used the term "guagua," sometimes with reference to buses and sometimes to their own vehicle, such as an SUV.

- "Bueno porque camión no es... yo no tengo un camión… camión yo lo pongo como de carga… Van es una guagua alta, cerrada que también se le mete cosas, tampoco es…decidí poner automóvil porque es un auto propio, y es un poquito más grande estilo guagua." [30:08] (Well, because it is not a truck, I do not have a truck… a truck is like a cargo truck… Van is a large closed guagua, and you can haul things as well with it, but it is not like that… so I decided car, because it is my own car, a little bit larger, like a guagua.)

- "Normalmente acá lo que le llaman son servicio de 'guagua pública,' es una van o puede ser otro vehículo, que van por paradas distintas, es un servicio público que tiene el gobierno y hay ciertas paradas y recogen a las personas hasta llegar al punto de salida de la persona. Hay varios sitios que son gratis y hay otros que hay un boleto. La 'guagua pública' sería más cantidad de personas y carro público sería menos cantidad de personas." [40:25] (Here they normally call it "guagua pública," it's a van or it can be another vehicle, which goes to different stops, it's a public service offered by the government and there are certain stops where they pick up people until they reach their destination. Some of them are free of charge, and others require a ticket. The "guagua pública" carries a larger number of people, while the "carro público" is for a smaller number of people.)

- While answering another probe, a participant mentioned a type of transportation known as "pisicorre." They described it as follows: "La pisicorre son unas guagüitas... hay unas que vienen más pequeñas, que son privadas, que lo que caben son como ocho pasajeros, o nueve o diez. Son pequeñas y pues es un conductor privado que usa la misma ruta que el autobús." [25:10] (The "pisicorre" is a small "guagüita" [truck or van]... there are smaller ones, which are private, that can accommodate eight passengers, or nine or ten. They are small and it is a private driver that uses the same route as the bus.) This participant added that the regular bus is known as AMA (Autoridad Metropolitana de Autobuses), and when people miss the regular AMA bus, the "pisicorre" is usually their next option.

Paper Mode

When probing participants about their understanding of ride-hailing services, one of them said "Si usted es una persona discapacitada puede llamar un servicio que le provea transportación a una cita médica u hospital." [30:19] (If you are a person with disabilities, you can request transportation services to a medical appointment or to a hospital.)

When answering the probe regarding the option on the list that best matches a carpooling situation, a participant explained the concept of "pon" but said they would still select "car, truck or van."

6.3.3 Recommendations

RTIR/RSS recommends adding a "carpooling" option to the list, since participants reported different strategies for fitting carpooling in the existing list. We also recommend removing the long-distance train option, because this type of transportation reportedly does not exist in Puerto Rico. The ride-hailing option is working well, so no changes are recommended.

6.4   Weeks Worked

The next test topic in Group 3 was weeks worked. ***Table 6.4*** displays the weeks worked questions by mode.

The key research goals of cognitive testing were to determine the following:

1. Do the changes to the WEEKS WORKED series (in addition to the year change) obtain the appropriate information for that year?

2. FOR PAPER: Do participants have difficulty navigating through the series of questions?

3. Do questions 39/40 set up the universe for the WEEKS WORKED questions properly?

4. FOR PAPER: Do people go straight to question 40 after reading Instruction L?

5. FOR PAPER: Do participants read the Note? Do they understand that the Note is for questions 41a and 41b?

6. Adding "for at least one day" to 41b is supposed to let the participant know that we consider a week being worked even if they just worked one day in that week. Does the participant seem to understand this concept?

7. Do participants think paid leave should be counted as WORK?

8. FOR PAPER: Do workers with irregular schedules struggle with the HOURS worked each week question? Do the new instructions and the new question placement make it easier for irregular workers to report usual hours worked each week?

This section details the general findings related to these research questions.

Table 6.4.   Weeks Worked Questions by Mode

CAI Mode	Paper Mode
33a. ¿Cuándo trabajó <usted/NOMBRE> por paga por última vez, aunque fuera por unos pocos días? En los últimos 12 meses Hace 1 a 5 años Hace más de 5 años o nunca trabajó 33b. En el [2020/2021], ¿trabajó esta persona por paga, aunque fuera por unos pocos días? Sí No 34a. Durante las 52 semanas del [2020/2021], ¿trabajó <usted/NOMBRE> TODAS las semanas? Cuente vacaciones pagadas, licencia por enfermedad pagada y el servicio en las Fuerzas Armadas como trabajo. Incluya todos los trabajos por paga. 34b. Durante las 52 semanas del [2020/2021], ¿cuántas SEMANAS trabajó esta persona por lo menos un día? Incluya semanas en las que la persona trabajó solo unas pocas horas. Incluya todos los trabajos por paga. Cuente vacaciones pagadas, licencia por enfermedad pagada y el servicio en las Fuerzas Armadas como trabajo. 34c. Durante el [2020/2021], en las semanas trabajadas, ¿cuántas HORAS trabajó usualmente esta persona cada SEMANA? Incluya todos los trabajos por paga y el servicio en las Fuerzas Armadas.	**39** **¿Cuándo trabajó esta persona por paga por última vez, aunque fuera por unos pocos días?** ☐ En los últimos 12 meses ☐ Hace 1 a 5 años ☐ Hace más de 5 años o nunca trabajó → *PASE a la pregunta 44* **40** **En el 2021, ¿trabajó esta persona por paga, aunque fuera por unos pocos días?** ☐ Sí ☐ No → *PASE a la pregunta 44* → **NOTA:** **Para las preguntas 41a y b, incluya como TRABAJO:** ✓ todos los trabajos por paga ✓ vacaciones pagadas ✓ licencia por enfermedad pagada ✓ servicio en las Fuerzas Armadas **41** **a. En el 2021 (52 semanas), ¿trabajó esta persona TODAS las semanas?** *Recuerde incluir las vacaciones pagadas y la licencia por enfermedad pagada como trabajo.* ☐ Sí → *PASE a la pregunta 42* ☐ No **b. En el 2021 (52 semanas), ¿cuántas SEMANAS trabajó esta persona por lo menos un día?** *Incluya semanas en las que la persona trabajó solo unas pocas horas.* Semanas ☐☐ **42** **En el 2021, en las semanas trabajadas, ¿cuántas HORAS trabajó usualmente esta persona cada SEMANA?** *Incluya todos los trabajos por paga y el servicio en las Fuerzas Armadas.* Horas usualmente trabajadas cada SEMANA ☐☐☐

Findings that apply to both modes are discussed in this section, whereas mode-specific research findings are addressed in ***Section 6.4.1.2***.

6.4.1   General Findings

1. *Do the changes to the WEEKS WORKED series (in addition to the year change) obtain the appropriate information for that year?*

Generally, the current set of questions appears to be working well, in particular in CAI mode. In paper mode, the errors in skip instructions appeared to create confusion among

the participants as they tried to answer questions that did not apply to them. The discussion of the following research questions sheds further light on this.

3. Do questions 39 (33a in CAI)/40 (33b in CAI) set up the universe for the WEEKS WORKED questions properly?

Questions 39/33a and 40/33b both say, "even for a few days," but that did not seem to make a difference in how the 7 participants answered the weeks worked questions.

Of the 7 participants tested in paper mode, only one answered/skipped questions 39 and 40 correctly for both members of the household because they followed Instruction L.

Four participants tested in paper mode were asked about the difference between question 39 and 40. They had different ways of interpreting the differences.

- "La pregunta 39 es cual fue el último día o el día más reciente que la persona trabajó. Mientras que la pregunta 40, es simplemente si trabajó o no trabajó." [44:25] (Question 39 asks what was the last day or most recent day the person worked. Question 40, on the other hand, asks simply whether or not the person worked.)

- Another participant said that question 39 is more general, the last time you worked, whereas question 40 refers to the year 2021 specifically.

- The third participant explained the differences by saying that question 40 was a "Yes or No" question, whereas question 39 gives different answer options.

- The fourth participant explained that questions 39 and 40 are almost the same in the way they ask the same question in a different way. "Preguntada de otra manera." [38:55] (Asked in a different way.) This participant also said that these two questions were different in the way one mentions the year and the other one refers to the year but without mentioning it.

Of the 3 participants tested in CAI mode who answered question 33a, 2 were asked about the difference between questions 33a and 33b.

- One participant said that question 33a applied to someone who was employed completely during the previous year, whereas question 33b applied to someone who might have worked sometime during 2021, someone who could have received payments or tips.

- The second participant said that question 33a referred to the present, whereas question 33b referred to the past.

Participants were also asked what they thought "work for pay, even for a few days" meant in questions 39/33a and 40/33b. Of the 7 participants tested in paper mode, 4 interpreted the phrase in different ways. Some focused on the whole phrase, some focused on the "work for pay" part, and others focused on the "even for a few days" part.

- "Asumo que es que, aunque no fueras a la oficina tú fuiste a un sitio, trabajaste unas horas y te pagaron." [40:05] (I assume that it means that, even though you didn't go to the office you went somewhere, worked a few hours and got paid.)

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- ▪ "Que la persona no está trabajando tiempo completo o que tal vez está cuidando enfermos, está… lo que vendría siendo un trabajo informal que no tiene un horario de lunes a viernes, de 8 a 5." [43:20] (That the person is not working full time or maybe they are taking care of sick people, they are... what would be an informal job that does not have a Monday to Friday, 8 to 5 schedule.)

- ▪ "Que se me está remunerando por el servicio que yo ofrezco." [36:24] (That I am being paid for the services I provide.)

- ▪ The fourth participant said that it meant that it was something constant (i.e., more than one day in the year) even if for a few days.

Of the 13 participants who tested in CAI mode, seven interpreted the phrase "work for pay, even for a few days" in different ways. Similar to the participants tested in paper mode, some focused on the whole phrase, some focused on the "work for pay" part, and others focused on the "even for a few days" part.

- ▪ One participant said it meant to work fewer days, but still being employed and receiving a salary.

- ▪ "Que quizás la persona comenzó en un trabajo y lo dio por terminado, o el tiempo de duración fue muy corto, muy breve. Pero, lo que pude entender es que, si recibió algún tipo de ingreso o paga, por algún trabajo." [38:44] (Maybe someone that started working and finished that work, or the duration was short or brief. But what I understand from here, is if I received some type of income or payment, for any job.)

- ▪ Another participant gave examples such as cleaning homes or part-time work at a restaurant, as server. "Un trabajo no formal, de esos que no son por nómina ni pagan plan médico." [29:20] (An informal job, one of those where you are not in the payroll and don't pay for a medical plan.)

- ▪ Another participant said that this would be like having a side job that lasts 2 to 3 days.

- ▪ Three participants said it meant that the work was not voluntary, and the person would get paid.

One participant tested in CAI mode was not asked for his interpretation of this phrase, but he explained that he had to think about what "even for a few days" meant in question 33b while answering that question. In his case, he had worked the entire year and reading "even for a few days" made him think of working just a few days, like a side job, which is why he initially answered "No." He changed his answer to "Yes" after the interviewer reread the question.

6. Adding "for at least one day" to 41b is supposed to let the participant know that we consider a week being worked even if they just worked one day in that week. Does the participant seem to understand this concept?

In general, this addition did not seem to make a difference in how participants answered the question, mainly because the majority of the participants reported that they had worked full weeks throughout the previous year and had not taken any time off.

Nine of the 13 participants who tested in CAI mode reported that they had worked all 52 weeks in the previous year, and 6 reported that they did not have any week where they only worked 1 day.

Four of the 7 participants who tested in paper mode reported that they had worked all 52 weeks in the previous year, and 4 reported that they did not have any week where they only worked 1 day.

When asked "Which answer should a person choose if they worked every Thursday, but did not work any other day of the week?," 5 of the 7 participants who were tested in paper mode said that this person should answer that they worked all 52 weeks.

When the participants who tested in CAI mode were asked the same question, 6 participants said that the person should answer that they worked all 52 weeks.

- "Pues esa persona va a tener que poner que trabaja todas las semanas, pues porque si todas las semanas él trabajó los jueves, pues tiene que poner... aunque sean pocas horas dice ahí, pues tiene que poner todas las semanas… 52 semanas." [36:49] (Well, that person is going to have to put that he works every week, because if he worked every week on Thursdays, then he has to put... it says even if it is only a few hours, he has to put every week… 52 weeks.)

- "Básicamente sí, trabajó las 52 semanas, aunque sea un día." [33:08] (Basically yes, they worked all 52 weeks, even if it's just one day.)

One participant who tested in CAI mode said that she included weeks in which she worked only 1 day, because her job requires her to make up for the hours missed. For example, if she has to work 20 hours in one week, and if she missed 4 hours that week, she has to work 24 hours the following week.

Another participant said that they did not miss any days of work in the prior year, but if they were to work only 1 day in a week, they would not include it as a full week. They confirmed that they understood what the question was asking, and maybe people would include weeks where they only worked 1 day, but they would not include them.

One participant who tested in paper mode reported that during Christmas time they might have officially worked only 1 day. They included that week when answering the weeks worked question because during this time they continued to go to the office even if it was not required.

Another participant who worked only 1 day during Holy Week included that week when answering the weeks worked questions. They confirmed that they did not work because the office was closed.

7. Do participants think paid leave should be counted as WORK?

For the most part, all participants understood the instructions indicating that paid leave should be counted as work. Of the 11 participants who tested in CAI mode and reported

that they had worked during the previous year, 5 had paid leave and confirmed they had to include that time as working. Some examples include the following:

- One participant who had taken time off the prior year said that it was easy to answer because the question had instructions about including paid vacations and sick days.

- Another participant who did not take vacation or sick days during the previous year said that he understood that they should include these when answering.

- A third participant who works in education and answered that they worked all 52 weeks, confirmed that they included paid vacation, paid sick time, and the summer months they are not present at school because that time is also paid.

- Another participant who said they had worked all 52 weeks the prior year confirmed that they had taken 4 weeks of vacation and had included those weeks in the total of 52.

A few participants understood the instructions to count paid leave as work but dismissed them as not applying to them.

- One participant explained that both members of the household are self-employed and cannot take paid vacation or sick time off.

- Another participant explained that, no matter what, she has to work because her job is very demanding. This participant also explained that they do not receive paid time off: "Aunque nos estemos muriendo pero tenemos que ir a trabajar." [36:42] (Even if we are dying, we have to go to work.)

- A third participant said that they did not receive vacation time, but understood that if they did, they had to include it when answering the weeks worked questions.

One participant who answered they had worked all 52 weeks confirmed during probing that they had taken a couple of weeks off because they were sick with COVID. They do not get paid vacation or sick leave. "Nosotros no tenemos derecho a enfermedad, a vacaciones, a bono, a incentivo… no tenemos derecho a nada." [57:37] (We have no benefits, no sick benefits, no paid vacations, no bonus, or incentives… nothing.) This participant explained that they were not confused by the instructions or the question, but they had forgotten that they were hospitalized for 2 weeks.

Two participants who worked under contract explained that they had to comply with their contract and work the stipulated hours. If they took time off, they had to make up for any missed hours.

All 7 participants who tested in paper mode confirmed that they do not receive paid vacation time or sick leave. These participants, like the participants who tested in CAI mode, understood the instructions to count paid leave as work but dismissed them as not applying to them.

- One participant who had confirmed that they do not receive paid leave said that they had not taken any time off: "No, trabajé como un loco." [54:49] (No, I worked like crazy.)

- Another participant who reported only 40 weeks worked during the previous year explained that because of the pandemic and the fact that they were sick with COVID they had to take approximately 12 weeks off work.

6.4.2   Other Findings by Mode

a.   Paper Mode

2. Do participants have difficulty navigating through the series of questions?

Of the 7 participants who answered the questionnaire in paper mode, none were able to navigate through the series of questions without missing skips or instructions. There were not specific patterns on how the participants answered the questions, but all 7 participants made at least one error in following the skip patterns. Sometimes they answered correctly for one person in the household, but missed skips, answered questions they were not supposed to answer, or missed questions they were supposed to answer.

Of these 7 participants, 2 reported that they had not worked the previous week (they answered no to questions 30a and 30b).

The first participant who reported that they had not worked the previous week (answered "No" to questions 30a and 30b) answered some of the following questions (questions 32 through 42), thinking about the job they had during the summer of 2021. They did the same for another person in the household who had not worked in 1 to 5 years and answered some of the follow-up questions (questions 33 through 41a) by picking and choosing the questions they thought they should answer without paying attention to skips. This participant confirmed that they were answering these questions thinking about different members of the household at a time, including those who had worked and not worked the previous week in one page. They also confirmed that once they knew they had to answer for one person at a time, they answered without paying attention to instructions and skips. They suggested removing the italic format from the skip instructions and making them bold, so people do not miss them like they did.

The second participant who reported that they had not worked the previous week, answered the following questions that they felt applied to their situation. This participant had actually worked the previous week but answered "No" to questions 30a and 30b. They confirmed that they read the word "negocio" under question 30a and thought this question did not apply to them because they did not own a business. They confirmed that they answered "No" to question 30b because they were reading too fast and did not pay attention to what the question was asking.

4. Do people go straight to question 40 after reading Instruction L?

Of the 7 participants who answered the questionnaire in paper mode, only one participant paid attention to Instruction L and followed it correctly for both people in the household.

One participant who started answering questions that they did not feel applied to them noticed that there were skips within the questions and started following them. For the most part, this participant was good at reading all the questions and following the skips; however, for no specific reason, they did not follow instruction L.

Another participant followed Instruction L for one person in the household but did not follow it for the second person.

5. Do participants read the Note? Do they understand that the note is for 41a and 41b?

Not all participants read aloud while completing the survey, so it was not clear whether they had read the Note before question 41a; however, they all confirmed during probing that they had read the Note. Only one participant confirmed that they understood the Note was for questions 41a and 41b.

- This participant said that they had read and followed the guidance in the note above question 41, and they could say with certainty that they had worked all 52 weeks. They did not take vacation or leave; however, they understood that if someone had taken vacation or sick leave, they should still answer 52 weeks if their leave was paid.

The other 6 participants explained whether any of the situations mentioned in the Note applied to them. More detail about their specific situations can be found in Research Question 7, under **Section 6.4.1**.

8. Do workers with irregular schedules struggle with the HOURS worked each week question? Do the new instructions and the new question placement make it easier for irregular workers to report usual hours worked each week?

Of the 7 participants who tested in paper mode, two reported irregular hours. They both had only one job.

One explained that they work pretty much 12 hours per day, 2 days per week. They included their preparation time in the morning, the 6 hours they teach two classes, their lunch, and the office hours at the end of the day. This participant explained that he had to do a calculation because he had never thought about the number of hours he worked per week.

The other participant explained that they work an average of 25 hours per week, and their schedule depended on the time of the year. Sometimes they work Tuesday to Friday, and sometimes they work weekends.

These participants appeared to navigate the questions without difficulty. There was not enough evidence to determine whether the instructions and the placement of the question made it easier for irregular workers to report their usual hours worked per week.

b. CAI Mode

Of the 13 participants who tested in CAI mode, 12 were able to answer questions 33a and 33b without any problems. For the most part, participants said these questions were clear and easy to understand, and they had a strong grasp on their work history.

Two participants explained that the questions were clear, but they had to think about their answer:

- ▪ "Como tuve que buscar para atrás en el archivo de la memoria, me tomó un tiempo, pero no fue complicado." [28:48] (Since I had to search back in my memory file, it took me a moment, but it was not hard.)

- ▪ Another participant said that the question was easy to understand, but difficult for them to answer. They explained that they did not remember the last time they worked, but they knew it had been more than 5 years ago. They shared that they had been sick with COVID, and it had affected their memory.

One participant explained that question 33b was confusing. They had initially answered "No," but the interviewer read the question again and then he answered "Yes." They explained that they had to think about what "even for a few days" meant in this question. In their case, they had worked the entire year and reading "even for a few days" made them think of working just a few days, like a side job, which is why they had answered "No."

Six participants were asked whether the instructions for question 34c were clear and whether they applied to their specific situation. All 6 said that the instructions were clear, and two said they applied to their situation. These two participants reported having a regular job and a side job, but they did not include their side job when answering this question.

- ▪ The first participant only took into account his regular job; he did not take into account his freelance work because he does not dedicate a specific number of hours to that.

- ▪ The second participant also did not include his side job. He explained that most people would only think about their main job when answering these questions and only report that job.

Ten participants were asked the vignette questions about counting 1 day as a week worked. Six participants correctly answered 52 weeks for someone who worked every Thursday; 3 correctly answered 1 week for someone who worked on 1 day all year.

One participant was not able give an answer: "Esas 52 semanas habría que dividirlo porque solamente trabajó una por semana, no trabajó 52 semanas, solamente un día nada más…"

[1:01:09] (Those 52 weeks, you would need to divide them because they only worked one per week, they did not work 52 weeks, only one day.)

Another participant was not sure how this person should answer, because they would not count 1 day as 1 week for the purpose of this question.

Four participants were asked vignette questions about counting 4 or 60 hours as a week worked. Three correctly answered 52 weeks for someone who worked 4 hours per week and someone who worked 60 hours per week.

Only 5 participants were asked how they thought irregular workers should report their usual hours worked each week. They suggested that they should provide an average, provide a range, do a calculation, and provide an estimate.

6.4.3   Recommendations

No changes recommended. Based on RTI/RSS experience testing census forms with low education participants, it seems the best way to address skip errors is at the start of the questionnaire rather than within the test topic itself. This may consist of providing an example page at the start of the questionnaire that teaches participants how to read and navigate the skip patterns.

6.5   Income

The final topic tested in Group 3 was income. **Table 6.5** displays the income questions by mode.

1. Do the participants report income for the appropriate reference period (prior year)? [For paper: Do they read the instructions? If so, do they understand what is written?]

2. Are the participants reporting accurately, especially keeping in mind the following changes being made to question or instructional wording?:

    a. Total Income Amount: Adding "all sources"

        • Does the participant report "all sources," or do they leave out some?

    b. Self-employment Income: Adding "including work paid for in cash"

        • Does the participant report all self-employment income (including side jobs that they may not report as income for tax purposes?)

    c. Net Rental Income: Splitting up category as its own question (paper)

        • Does splitting up the categories make it easier for the participant to recall the amounts and report accurately?

        • Does having Net Rental Income as its own category (on Paper) make participants who are reading quickly misreport their monthly rent to a landlord (instead of rental income)?

    d. Public Assistance Income: New wording and instructions

- Do the new instructions help participants to report the amounts that we intend to be reported with this question? Specifically, do they understand that PAN and unemployment should not be included?

e. Retirement Income: For paper: Does moving up the instructions "Do NOT include Social Security" help avoid Social Security being included in retirement income? Do participants notice the instruction?

Table 6.5.   Income Questions by Mode

CAI Mode	Paper Mode
Las siguientes preguntas son sobre todos los tipos de ingreso, sujetos y no sujetos a impuestos, recibidos en el [2020/2021] (es decir, desde el 1 de enero de [2020/2021] hasta el 31 de diciembre de [2020/2021]). Para el ingreso recibido en conjunto, informe la parte que le corresponde a cada persona, o, si eso no es posible, informe la cantidad total para una sola persona y no informe el ingreso para la otra persona. 36a. ¿Recibió <usted/NOMBRE> jornales, sueldos o salarios en el [2020/2021]? If Sí: ¿Cuánto recibió <usted/NOMBRE> de sueldo o salario de todos los empleos antes de aplicarse deducciones por impuestos, bonos, cuotas u otras cosas? 36b. ¿Recibió <usted/NOMBRE> alguna comisión, bonificación o propina en el [2020/2021]? If Sí: ¿Cuánto recibió <usted/NOMBRE> en comisiones, bonificaciones o propinas de todos los empleos antes de aplicarse deducciones por impuestos, bonos, cuotas u otras cosas? 36c. ¿Recibió <usted/NOMBRE> algún ingreso por empleo por cuenta propia regularmente en el [2020/2021], incluyendo el trabajo pagado en efectivo? Informe ingresos de sus propios negocios (agrícolas o no agrícolas), incluyendo de propiedad única o en sociedad. If Sí: ¿Cuál fue la cantidad? Informe el ingreso NETO después de descontar los gastos de operaciones.	

(continued)

Table 6.5.   Income Questions by Mode (continued)

CAI Mode	Paper Mode
36d. ¿Recibió <usted/NOMBRE> algún interés o algunos dividendos en el [2020/2021]? Informe cantidades, aunque sean pequeñas, acreditadas a una cuenta. If Sí: ¿Cuál fue la cantidad? 36e. ¿Recibió <usted/NOMBRE> algún ingreso por derecho de autor o ingreso por herencias y fondos de fideicomisos en el [2020/2021]? If Sí: ¿Cuál fue la cantidad? 36f. ¿Recibió <usted/NOMBRE> algún ingreso por alquileres o rentas en el [2020/2021]? If Sí: ¿Cuál fue la cantidad? Informe el ingreso neto después de descontar los gastos. 36g¿Recibió <usted/NOMBRE> pagos por beneficios del Seguro Social o pagos de retiro para personal de los ferrocarriles en el [2020/2021]? If Sí: ¿Cuál fue la cantidad? 36h. ¿Recibió <usted/NOMBRE> algún pago de Seguridad de Ingreso Suplementario (SSI) en el [2020/2021]? If Sí: ¿Cuál fue la cantidad? 36i. ¿Recibió <usted/NOMBRE> alguna asistencia financiera de la oficina de bienestar (welfare) estatal o local en el [2020/2021]? If Sí: ¿Cuál fue la cantidad? NO incluya el Programa de Asistencia Nutricional (PAN); compensación por desempleo o beneficios que no sean en efectivo, tales como asistencia para la energía o la vivienda. 36j. ¿Recibió <usted/NOMBRE> algún ingreso por sobreviviente o discapacidad en el [2020/2021]? If Sí: ¿Cuál fue la cantidad? No incluya Seguro Social.	**d. Ingreso por alquileres o rentas.** *Informe el ingreso NETO después de descontar los gastos. Si el ingreso neto fue una pérdida, marque (X) la casilla "Pérdida" al lado de la cantidad de dólares.* ☐ Sí → $ ☐☐,☐☐☐ .00 ☐ Pérdida ☐ No CANTIDAD TOTAL para el 2021 **e. Seguro Social o retiro para personal de los ferrocarriles.** ☐ Sí → $ ☐☐,☐☐☐ .00 ☐ No CANTIDAD TOTAL para el 2021 **f. Seguridad de Ingreso Suplementario (SSI).** ☐ Sí → $ ☐☐,☐☐☐ .00 ☐ No CANTIDAD TOTAL para el 2021 **g. Cualquier asistencia financiera de la oficina de bienestar *(welfare)* estatal o local.** *NO incluya el Programa de Asistencia Nutricional (PAN); compensación por desempleo o beneficios que no sean en efectivo, tales como asistencia para la energía o la vivienda.* ☐ Sí → $ ☐☐☐,☐☐☐ .00 ☐ No CANTIDAD TOTAL para el 2021 **h. Ingreso por retiro, pensiones, ingreso por discapacidad o de sobreviviente.** *NO incluya el Seguro Social. INCLUYA ingresos de un patrono o de un sindicato previo y cualquier retiro o distribución regular de una cuenta individual de retiro (IRA, por sus siglas en inglés), una IRA no deducible (ROTH IRA), un plan 401(k), 403(b) u otras cuentas diseñadas específicamente para el retiro.* ☐ Sí → $ ☐☐☐,☐☐☐ .00 ☐ No CANTIDAD TOTAL para el 2021 **i. Alguna otra fuente de ingreso recibido regularmente, tales como pagos de la Administración de Veteranos (VA), compensación por desempleo, pensión para hijos menores, pensión alimenticia o pensión de su ex pareja.** *NO incluya pagos de mayor cantidad recibidos una sola vez, tales como dinero de una herencia o venta de una casa.* ☐ Sí → $ ☐☐☐,☐☐☐ .00 ☐ No CANTIDAD TOTAL para el 2021 **45 Incluyendo todos los tipos de ingresos, ¿cuál fue el ingreso total de esta persona en el 2021?** *Sume las cantidades anotadas en las preguntas 44a a 44i; reste cualquier pérdida. Si el ingreso neto fue una pérdida, anote la cantidad y marque (X) la casilla "Pérdida" al lado de la cantidad de dólares.* ☐ O $ ☐☐,☐☐☐,☐☐☐ .00 ☐ Pérdida Ninguno CANTIDAD TOTAL para el 2021

(continued)

Table 6.5.   Income Questions by Mode (continued)

CAI Mode	Paper Mode
36k. ¿Recibió <usted/NOMBRE> una pensión o algún ingreso de retiro de un patrono o sindicato (unión) previo, o alguna cantidad retirada o distribuida regularmente de cuentas de retiro tales como 401(k), 403(b), IRA, una IRA no deducible (ROTH IRA) o de otras cuentas diseñadas específicamente para el retiro en el [2020/2021]? If Sí: ¿Cuál fue la cantidad? No incluya Seguro Social.	
36l. ¿Recibió <usted/ NOMBRE> ingreso en forma REGULAR de alguna otra fuente, tal como pagos de la Administración de Veteranos (VA), compensación por desempleo, pensión para hijos menores, pensión alimenticia o pensión de su ex pareja en el [2020/2021]? If Sí: ¿Cuál fue la cantidad de todas las fuentes? (No incluya pagos de mayor cantidad recibidos una sola vez, tales como dinero de una herencia o la venta de una casa.)	
36m. ¿Cuál es su mejor estimado del ingreso TOTAL que <usted/NOMBRE> recibió de todas las fuentes en el 2021?	

6.5.1 General Findings

Findings that apply to both modes are discussed in this section, and mode-specific findings are addressed in *Section 6.5.2*.

1. Do the participants report income for the appropriate reference period (prior year)?

Some CAI interviews were conducted at the end of 2021 and others in early 2022. All paper mode cases were interviewed in 2022. In either case, participants reported income for the prior calendar year, 2020 or 2021 as was the case.

Paper mode participants had an easier time answering this question because, at least for those reporting primarily work earnings, they had just received their W2 forms for 2021 and had the response fresh in their minds.

Of the 20 participants, 16 were probed about what period of time they were considering as they answered each of the income items. In the 7 paper mode interviews, 4 participants answered the probe. Three confirmed they were thinking of 2021 in its entirety (2 had received their W2 that same week), and only 1 did not appear to be taking the past

calendar year into account. This person said that they answered question 44a thinking about how much they earn on a weekly basis and extending it to a whole year.

- ▪ "Ahí dice sueldo y salario, so cuando yo leí sueldo y salario asumí que es lo que me gané en una semana." [46:25] (It says salary and wages, so when I read salary and wages, I assumed that it was what I earned in a week.)

2. Are the participants reporting accurately, especially keeping in mind the following changes being made to question or instructional wording?

Participants had some errors in reporting.

- ▪ A participant missed reporting unemployment benefits because they stopped reading the item when they read "VA" and decided it did not apply to them. They mentioned it at the total income question.

- ▪ A paper mode participant left the total income question blank by mistake. They answered "No" to previous items, and they marked question 45 "Ninguno." This was verified in probing.

- ▪ A participant excluded a part-time job by mistake, as they indicated in probing.

- ▪ A participant collecting Social Security retirement benefits did not select 36g, as they said, because they did not work for the railroads. In probing, they said there should be two separate questions to avoid confusion. The same participant excluded TANF by mistake: they said they were focused not on the full year but on the 4 months since starting to receive Social Security. They had collected TANF in the months preceding that, and they did not think of it.

a. Total Income Amount: Adding "include all sources" – Does the participant report "all sources," or do they leave out some?

We did not detect cases where participants left off this item some of the amounts they had reported earlier. In fact, the opposite was true in a few cases. Upon providing the total amount from all sources, they provided larger amounts than the sum of the previous numbers. In probing, it emerged that they had forgotten or not found where to report some income, but they included it in total income amount.

b. Self-Employment Income: Adding "including work paid for in cash" – Does the participant report all self-employment income (including side jobs that they may not report as income for tax purposes)?

Only 4 of the 20 participants said "Yes" to self-employment income, and 2 of them provided details.

- ▪ One participant does freelance work, which they reported first in item 36a and again as self-employment in 36c. It was double counted but only counted once for the total income question.

- ▪ The other participant said they were self-employed, providing services to clients as a social media manager.

Another participant did not include her business and later said there was no place to do so.

▪ The participant makes products at home that they sell to others. This does not generate dependable income, and it is very irregular. The interviewer probed as to whether they had not found any place to report it in the questions. "No, no dice nada de negocio propio." [36:12] (No, it says nothing about your own business.) The interviewer reread 36c to the participant, and they said she had missed hearing it.

The phrase "incluyendo el trabajo pagado en efectivo" (including work paid for in cash) appeared to make participants think mostly of unreported, "under the table" income. This was apparent when we probed for examples of types of income people may report in questions 36c/44b.

▪ One participant listed someone who cleans houses, a construction worker, a handyman, and persons who cut hair.

▪ "Un barbero que recibe dinero en efectivo, alguien que trabaja en la belleza, alguien que trabaje de mecánico, alguien que trabaje en la calle, alguien que no tenga un lugar estable." [50:46] (A barber who receives cash, someone who works in beauty industry, someone who works as a mechanic, someone who works on the street, someone who does not have a stable place.) After more probing, this participant said that he would not include a person who owns their own grocery story in question 36c, even if they were paid in cash.

▪ "Yo creo que verdad si es algo como que no oficial, pensaría que sería estilo: recorto el patio por ti y tú me pagas esta cantidad, o ayudo a tu nieto, hijo, sobrina a estudiar y tú me pagas esta cantidad." [50:57] (I think it's that if it's something kind of unofficial, I would think it would be like: I trim the yard for you and you pay me this amount, or I help your grandchild, your son, your niece to study and you pay me this amount.)

▪ "Casi siempre cuando una va a hacer limpieza en casa, que le pagan a uno en efectivo o, por ejemplo, cuando uno cuida a un bebé que le pagan en efectivo... para mí, como yo no estoy haciendo eso yo dije no." [55:24] (Almost always when you go to do house cleaning, you get paid in cash, or for example, when you take care of a baby, you get paid in cash… for me, since I am not doing that, I said no.)

▪ "Todo tipo de empleo que te genere dinero en efectivo." [40:07] (All type of income that generates cash income.) [PROBE: Any example?] This participant said a manicurist who works from home or people who do car washes. [PROBE: Are you considering only cash payments, or also check, or money transfer?] The participant said the question specifies only cash payments.

We asked participants if income not reported for tax purposes should be reported in the survey. This appeared to be a difficult probe for participants. Six gave what appeared to be a socially acceptable answer: Yes, you should always report all your income, for tax purposes and in the survey. Others gave what they considered a realistic response.

▪ A participant said that most people who work for themselves do not report it in their tax return, but if they have a (more formal) business they do.

▪ Another participant said that nobody would include something that they do not report in their taxes. He called it "economía subterránea" (underground economy).

c. Net Rental Income: Splitting up category as its own question (paper)

> i. ***Does splitting up the categories make it easier for participants to recall the amounts and report accurately?***

> ii. ***Does having Net Rental Income as its own category (on Paper) make participants who are reading quickly misreport their monthly rent to a landlord (instead of rental income)? NO ONE DID.***

Only 1 participant reported rental income: their spouse is a landlord of several properties that they rent under Section 8. We are unable to answer this research question.

> d. ***Public Assistance Income: New wording and instructions***

> i. ***Do the new instructions help the participant to report the amounts that we intend to be reported with this question? Specifically, do they understand that PAN and unemployment should not be included?***

None of the participants reported PAN or unemployment under public assistance income. In fact, several participants mentioned that they saw PAN benefits should not be included. This applied to participants who did receive PAN the prior year.

- A PAN recipient said they receive PAN benefits but did not include them when answering this question because it is not financial assistance: "No, porque ahí yo pensé que era a través de PAN de asistencia económica, o allá le dicen SNAP. ¿Pero eso no cuenta, verdad?" (No, because I thought that was through PAN, or SNAP, but that doesn't count, right?) The interviewer asked whether they had included it in the income they reported, and they said no.

Two participants asked about COVID stimulus payments and where to report them and whether they are considered benefits. One of them said they would report it in 36i.

Four participants said they did not understand what the word "*welfare"* meant. Beyond PAN and Section 8, most were not very familiar with benefits. There was a single mention of WIC and very few mentions of TANF as cash assistance.

> e. ***Retirement Income: For paper: Does moving up the instructions "Do NOT include Social Security" help avoid Social Security being included in retirement income? Do participants notice the instruction?***

Only 1 participant received retirement benefits outside of Social Security. They said it was retirement from their former employer.

6.5.2 Other Findings by Mode

a.   Paper Mode

1. Do participants read the instructions? If so, do they understand what is written?

Participants appeared to skim the instructions, rather than read them in detail. Most noticed 2021 and took it into account in answering. It was unclear whether the participant who reported based on current weekly earnings had read the instructions.

b.   CAI Mode

In the CAI mode, 12 of 13 participants answered the probe about the reference period. Of these 12, 10 confirmed they had answered thinking about the full last calendar year. Another participant implied the same without naming the year: this participant said they were thinking of their tax form with their earnings for the year. One participant did not understand the probe and could not answer.

6.5.3   Recommendations

Each of the items in the income question is a very long statement that lists more than one type of income and indicates what to include or exclude. Participants often did not read the entire item on paper or listen to the full item on CAI. It is not clear what recommendations would help in this regard, but the Census Bureau may want to consider this issue.

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Appendix A:
Example of Round 3 Recruitment Advertisements

Get paid for one hour of telling us your opinions

RTI International, a not-for-profit research organization working with the U.S. Census Bureau, is looking for **active-duty service members in the U.S. Armed Forces who currently live in a military barracks** to give their reactions and opinions about questions in the national survey. The interview will be conducted online using a secure video conferencing app.

The interview will take about 60 minutes. We will provide $40 to each eligible person who participates in the 60-minute interview.

To see if you are eligible for the study, please complete a short questionnaire at

RTI International, a not-for-profit research organization working with the U.S. Census Bureau, is looking for **active-duty service members in the U.S. Armed Forces who currently live in a military barracks** to give their reactions and opinions about questions in the national survey. The interview will be conducted online using a secure video conferencing app.

The interview will take about 60 minutes. We will provide $40 to each eligible person who participates in the 60-minute interview.

To see if you are eligible for the study, please complete a short questionnaire at
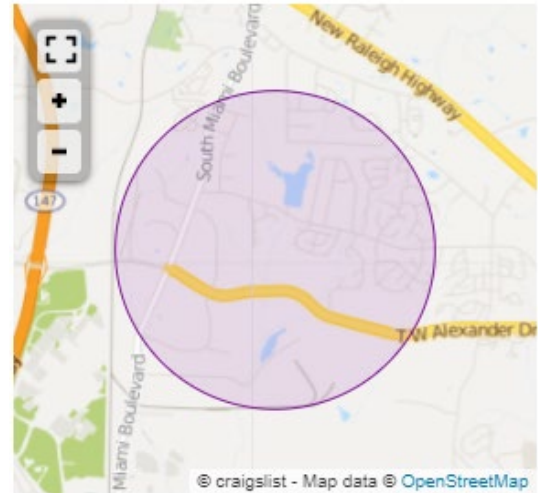
3040 East Cornwallis Road
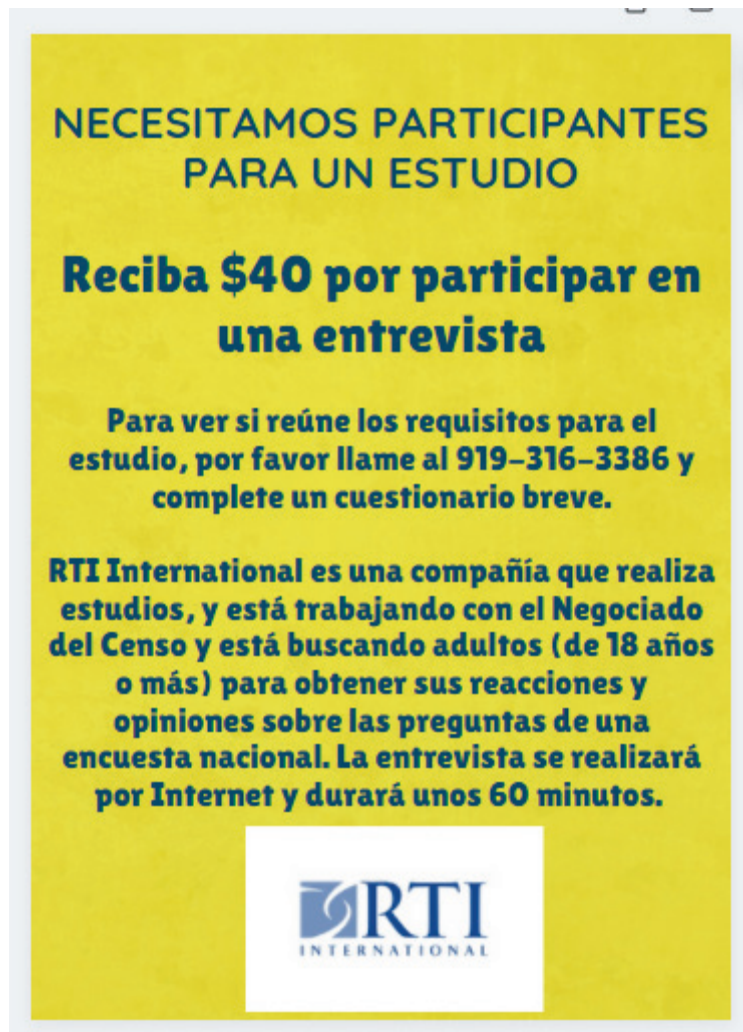
compensation: **$40 for one hour interview**

employment type: **contract**

non-profit organization

telecommuting ok

Round 3 Spanish Recruitment Advertisements

▪ **Online advertisement with the RTI logo**

▪ **Online advertisement with the RSS logo**

NECESITAMOS PARTICIPANTES PARA UN ESTUDIO

Reciba $40 por participar en una entrevista.

Research Support Services es una compañía que realiza estudios sobre distintos temas, y está trabajando con el Negociado del Censo de los Estados Unidos. Estamos buscando adultos (de 18 años o más) para obtener sus reacciones y opiniones sobre las preguntas de una encuesta nacional.

La entrevista se realizará por Internet, usando una aplicación segura de videoconferencia y durará unos 60 minutos.
Los participantes recibirán $40 por su tiempo.

Para ver si reúne los requisitos para el estudio, por favor llame al **888-871-6125** y deje su nombre y número de teléfono.

rss inc.   www.researchsupportservices.com

▪ **Newspaper advertisement**

Reciba $40 por participar en una entrevista de una hora por Internet

Buscamos adultos (de 18 años o más) para obtener sus reacciones y opiniones sobre las preguntas de una encuesta nacional del Negociado del Censo de los EEUU.
La entrevista se hará por Internet, usando una aplicación segura de videoconferencia.
Llame al 1-888-871-6125 y deje su nombre y teléfono. O mande un mensaje a **danae@researchsupportservices.com**

Appendix B:
Guidelines for Technical Problems During Interviews

1. If VDI drops the interviewer, the interviewer will continue with the interview using a phone connection. If Microsoft Teams drops the interviewer or the participant, the interviewer will call the participant immediately on the phone number they have provided to re-establish an audio connection.

> **Note: to avoid losing audio connection with the participant, interviewers should connect to Microsoft Teams audio via their phones.

2. The interviewer will then inform the participant they are experiencing technical difficulties and will need to do some troubleshooting. Interviewers will consult the *Troubleshooting Skype for Business* document provided by the Census Bureau to find a quick resolution and inform the participant how they will proceed. (Interviewers are being encouraged to review this document now, so they have some sense of where to look to address specific technical problems.)

3. If the interviewer is not able to resolve the technical problem within a few minutes (within a limit of 5 minutes) and has an audio connection with the participant, the interviewer will continue to complete the interview by phone. This time limit is recommended to avoid losing the participant or significantly increasing the length of the interview. For interviews involving show cards or PAPI forms, the interviewer will ask the participant to confirm an email address and send the necessary materials to the participant to use for the remainder of the interview.

   a. Should an interview converted to telephone require the participant to complete the paper questionnaire, the interviewer will prompt the participant to indicate which question they are answering as they move through the instrument. Interviewers will also remind participants (as needed) that they do not need to read the questions aloud as this would add significant time to the length of interview.

   b. Should recording via SnagIt no longer be possible, the interviewer will use an external recorder to record the remainder of the interview.

4. In the event the interviewer is not able to resolve the technical problem within 5 minutes and there is no audio or phone connection with the participant, the interviewer will email the participant, apologize for the technical difficulties, and ask the participant when they will be available to resume the interview. The interviewer will attempt to reschedule the interview as soon as possible, but also allow further time to fix and test the technical problem they encountered.

5. Interviewers will briefly document the technical problem they encountered during the interview in the "General Observations" section of the Interview Summary Template, note how/whether the technical problem was resolved, and indicate whether the interview was (1) completed by Microsoft Teams, (2) completed by phone, or (3) not completed at that time and rescheduled.

6. If the interview cannot be continued via the Microsoft Teams line and is converted to telephone, observation will no longer be possible. The interviewer will attempt to email observers to let notify them of this; however, the priority will be for the interviewer to re-establish contact with the participant. If the Microsoft Teams line is disconnected, and observers do not hear from the interviewer within 5 minutes, they can assume the interview has been converted to telephone and continued observation will not be possible.

7. If the interview is rescheduled for a later time or day, the interviewer will update the original calendar invitation, so the participant and observers receive a notification of the new interview time.

Appendix C:
English and Spanish Informed Consent Forms

American Community Survey

Adult Cognitive Interview Participant Informed Consent Form

What is the purpose of this interview?
The U.S. Census Bureau is conducting cognitive interviews to help with the design and content of the American Community Survey. The American Community Survey helps local officials, community leaders, and businesses understand the changes taking place in their communities. It is an important source of detailed population and housing information about our nation. It's important that the questions make sense, are easy to answer, and that everyone understands the questions in the same way. You are one of about 335 people who are being asked to participate in the cognitive interviews.

What will happen if I take part in this interview?
You will be asked to complete and discuss the American Community Survey during a confidential interview. The survey includes questions about your household, including yourself and other people in the household. The interview will be conducted by a staff member from RTI International or Research Support Services, who are doing this study for the U.S. Census Bureau. Findings from the discussion will be used to clarify survey questions and instructions.

We would like to audio and video record the interview. Only the people who work on this study will view the recording. It will help us make sure we have understood your answers. If you don't want to be recorded, that's okay. Participating in the interview implies consent for the purposes stated.

How much time is required to participate?
The interview will last approximately 1 hour.

Do I have to take part in this interview?
No, participation in this interview is voluntary. You can stop the interview at any time, and you don't have to answer a question if you don't want to. You will not lose any rights you would normally have if you choose not to join this interview.

What are the possible risks and benefits from participating in this interview?
There are no direct benefits to you from doing this interview. Your involvement in this study will help us improve the questions for the American Community Survey. There is no more than minimal risk in participating. You can skip any question that you are not comfortable answering.

How will my privacy be protected?
This interview is being conducted under the authority of 13 U.S.C. Sections 6 (c), 141, and 193. Federal law requires that your answers are kept confidential (13 U.S.C. Section 9), and protects your privacy under the Privacy Act (5 U.S.C. Section 552a). Only research staff from the U.S. Census Bureau and its survey vendors, RTI International and Research Support Services will know your answers and/or comments from the interview. The Census Bureau can use your responses only to produce statistics, and is not permitted to publicly

release your responses in a way that could identify you, your business, organization, or institution.

Additionally, per the Federal Cybersecurity Enhancement Act of 2015, your data are protected from cybersecurity risks through screening of the systems that transmit your data. Your information is secured by strictly adhering to the provisions of the Privacy Act, and other regulations and policies to protect the privacy and confidentiality of the information.

This collection has been approved by the Office of Management and Budget (OMB). This eight-digit OMB approval number, 0607-0725, confirms this approval and expires on 12/31/2022. Without this approval, we could not conduct this study.

How will I be compensated?
You will receive [IF IN-PERSON: $50] [IF REMOTE: $40].

What if I have questions about the interview?
If you have concerns or questions about the interview, you may contact RTI's project director, Doug Currivan, at 919-316-3334 or dcurrivan@rti.org.

- -

Participant's Agreement:
I have read the information provided above. I voluntarily agree to participate in this interview.

☐   I agree for this interview to be audio and video recorded.

☐   I do not agree for this interview to be audio and video recorded.

_____   _____

Signature of Research Participant   Date

_____

Printed Name of Research Participant

_____   _____

Signature of Person Obtaining Consent   Date

_____

Printed Name of Person Obtaining Consent

Encuesta sobre la Comunidad Estadounidense
Formulario de consentimiento informado para adultos que participan en entrevistas cognitivas

¿Cuál es el propósito de esta entrevista?

La Oficina del Censo de los Estados Unidos está realizando entrevistas cognitivas para ayudar con el diseño y el contenido de la Encuesta sobre la Comunidad Estadounidense. La Encuesta sobre la Comunidad Estadounidense ayuda a las autoridades locales, a los líderes comunitarios y a las empresas a entender los cambios que ocurren en sus comunidades. Es una fuente importante de información detallada sobre la población y la vivienda en nuestra nación. Es importante que las preguntas tengan sentido, sean fáciles de responder y que todos entiendan las preguntas de la misma manera. Usted es una de aproximadamente 335 personas a quienes se les pide que participen en las entrevistas cognitivas.

¿Qué sucederá si tomo parte en esta entrevista?

Se le pedirá que complete la Encuesta sobre la Comunidad Estadounidense y converse sobre ella durante una entrevista confidencial. La encuesta incluye preguntas sobre su hogar, incluido(a) usted y otras personas en el hogar. La entrevista la realizará un miembro del personal de RTI International o de Research Support Services, quienes están haciendo este estudio para la Oficina del Censo de los Estados Unidos. Los resultados que se obtengan de la entrevista se usarán para aclarar preguntas e instrucciones de la encuesta.

Nos gustaría grabar la entrevista en audio y video. Sólo las personas que trabajan en este estudio verán la grabación. Esto nos ayudará a asegurarnos que hemos entendido sus respuestas. Si no desea ser grabado(a), no hay ningún problema. Participar en la entrevista indica que usted ha dado consentimiento para los propósitos mencionados.

¿Cuánto tiempo se requiere para participar?

La entrevista durará aproximadamente 1 hora.

¿Tengo que tomar parte en esta entrevista?

No, la participación en esta entrevista es voluntaria. Usted puede parar la entrevista en cualquier momento y no tiene que responder a ninguna pregunta que prefiera no contestar. No perderá ningún derecho que normalmente tendría, si decide no tomar parte en la entrevista.

¿Cuáles son los posibles riesgos y beneficios por participar en esta entrevista?

No hay beneficios directos para usted si participa en esta entrevista. Su participación en este estudio nos ayudará a mejorar las preguntas para la Encuesta sobre la Comunidad Estadounidense. No hay más que un riesgo mínimo por participar. Puede dejar sin contestar cualquier pregunta que lo/la haga sentirse incómodo(a).

¿Cómo se protegerá mi privacidad?

Esta entrevista se está realizando bajo la autoridad del Título 13 del Código de los Estados Unidos, Secciones 6(c), 141 y 193. La ley federal requiere que sus respuestas se mantengan confidenciales (13 U.S.C. Sección 9) y protege su privacidad bajo la Ley de Privacidad (Título 5, Código de los Estados Unidos, Sección 552a). Sólo el personal de estudios de investigación de la Oficina del Censo de los Estados Unidos y el personal de las compañías contratadas para realizar las encuestas, RTI International y Research Support Services, sabrán sus respuestas y/o comentarios de la entrevista. La Oficina del Censo puede usar sus respuestas únicamente para producir estadísticas y no se le permite publicar

sus respuestas de una manera que pueda identificarle a usted, a su negocio, a su organización o institución.

Además, de acuerdo con la Ley Federal de Mejora de la Ciberseguridad de 2015, su información está protegida de los riesgos de ciberseguridad a través de la evaluación de los sistemas que transmiten su información. Su información está protegida por el estricto cumplimiento de las disposiciones de la Ley de Privacidad y otras reglamentaciones y políticas para la protección de la privacidad y confidencialidad de la información.

Esta recolección de información ha sido aprobada por la Oficina de Administración y Presupuesto (OMB, por sus siglas en inglés). Este número de OMB de ocho dígitos, 0607-0725, confirma su aprobación y vence el 31/12/2022. Sin esta aprobación, no podríamos realizar este estudio.

¿Cómo seré compensado(a)?
Usted recibirá $40.

¿Qué sucede si tengo preguntas sobre la entrevista?
Si tiene inquietudes o preguntas sobre la entrevista, puede comunicarse con el director del proyecto en RTI, Sr. Doug Currivan, al 919-316-3334, o a la dirección de correo electrónico dcurrivan@rti.org.

- -

Acuerdo del (de la) participante:
He leído la información arriba mencionada. Estoy de acuerdo en participar en esta entrevista de manera voluntaria.

☐ Estoy de acuerdo en que esta entrevista sea grabada en audio y video.

☐ No estoy de acuerdo en que esta entrevista sea grabada en audio y video.

_____   _____
Firma de la persona que participa   Fecha

_____
Nombre en letra de imprenta de la persona que participa

_____   _____
Firma de la persona que obtiene el consentimiento   Fecha

_____
Nombre en letra de imprenta de la persona que obtiene el consentimiento

C-4

Appendix D: Protocol Changes by Mode

Obtaining Consent:

- In-person interviews:

  – Interviewers will provide participants with a copy of the consent form and review the information.

  – Interviewers will ask participants to mark their responses to the participation/recording consent questions and sign the form.

  – Participants will receive a copy of the consent form for their records.

- Virtual interviews:

  – Interviewers will email the Qualtrics link with the consent form with the calendar invite scheduling the interview.

  – Interviewers will review the important points from the consent form and answer any questions participants have about the form at the beginning of the interview.

- Telephone interviews:

  – Interviewers conducting phone interviews will ask participants to open the Qualtrics link to the consent form emailed to them.

  – Interviewers will read the consent form verbatim to participants.

  – Participants will then sign the consent form and submit via Qualtrics.

- All interviews will require that consent be recorded. Interviewers will review the consent form with participants who will then sign the form. Interviewers will then start the recording and ask participant to verbally confirm their consent on the recording.

Recording the Interview:

- In-person interviews:

  – Interviewers will record using an external recorder.

  – Interviewers will transfer recordings to the Census network using Kiteworks.

  – Interviewers will save the recording to the appropriate location on the Census network.

- Virtual interviews:

  – Interviewers will record using SnagIt or external recorders.

  – Should interviewers record using external recorders, they will email recordings to their Census account via Kiteworks.

- Telephone interviews:

  – Interviewers will record using SnagIt or external recorders by placing the call on speaker.

  – Should interviewers record using external recorders, they will email recordings to their Census account via Kiteworks.

- All interviewers (regardless of mode) will test recording/audio quality before conducting interviews.

- For all interviews (regardless of mode) external recorders will be the back-up option for recording.

Completing the Questionnaire:

- In-person interviews, Paper questionnaire:

    – Interviewer will provide participant with the paper questionnaire.

    – Participant will complete the questionnaire as if taking the survey, notifying the interviewer of their response to each question.

    – Interviewer will record responses on summary sheet.

- Virtual interviews, Paper questionnaire:

    – Interviewer will share their screen to display the fillable PDF of the appropriate paper questionnaire.

    – Participant will complete the questionnaire as if taking the survey, notifying the interviewer of their response to each question.

    – Interviewer will record responses on the PDF displayed on their screen.

- Telephone interviews, Paper questionnaire:

    – Interviewers will email materials to participants and ask them to open and view the appropriate materials as they move through the interview.

- All modes: CAI instrument will be tested with the interviewer reading the CAI script aloud to participants. Interviewers will record responses on summary sheet.

Flashcards:

- In-person interviews:

    – Interviewer will present participant with printed flashcard and allow the participant to review.

- Virtual interviews:

    – Interviewer will share their screen to display the flashcard document and allow the participant to review.

- Telephone interviews:

    – Interviewer will email flashcards to participant at the beginning of the interview.

    – As instructed by the interviewer, participant will open the flashcard documents and refer to them on their own device during the interview.

Incentives:

- In-person interviews:

- – Provide participant with $50 cash.[4]

- ▪ Virtual interviews:

  - – Interviewers will email/text participants to coordinate the receipt of the $40 incentive.

- ▪ Telephone interviews:

  - – Interviewers will email/text participants to coordinate the receipt of the $40 incentive.

For all modes: Interviewer will sign incentive receipt to record that the incentive has been delivered.

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[4] The OMB has differential incentives for in-person vs. virtual interviews. Thus, in-person participants were paid $50 for their participation while virtual participants were paid $40 for their participation.

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