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Cognitive and Usability Pretesting of the Online Version of the Puerto Rico Community Survey in Spanish and English

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Abstract:

This report summarizes the findings from cognitive testing and eye-tracking analysis conducted as part of the usability testing of the online version of the Puerto Rico Community Survey, carried out in January 2011 in Puerto Rico. Cognitive testing revealed various issues related to translations of survey content and navigation elements. Testing also identified some content-related difficulties, several of which were specific to the Puerto Rican context. Analysis of the eye-tracking data provided additional evidence of user difficulty. Recommendations for immediate implementation and suggestions for further testing are provided.

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1.0 INTRODUCTION

This report summarizes the findings from eye-tracking and cognitive testing conducted as part of the usability testing of the online version of the Puerto Rico Community Survey (PRCS), carried out in January 2011 in Puerto Rico. The American Community Survey (ACS) is a survey sent by the U.S. Census Bureau to almost 3 million households nationwide annually on a rolling basis. It provides annual and multi-year data to help determine the allocation of more than \$400 billion in federal and state funds across the United States each year. The PRCS is a Spanish-language instrument, also available in English, that covers the same content as the ACS but is designed specifically for Puerto Rico. Each year, the PRCS samples approximately 36,000 housing unit addresses in Puerto Rico. The Census Bureau is currently exploring the idea of providing an option for respondents to complete the ACS and the PRCS online, and the current testing was the fifth round of usability testing performed on a version of the 2011 American Community Survey online instrument, and the first testing performed on an online version of the PRCS.

2.0 METHODS

The protocol used for the testing the online version of the PRCS was based on the protocol used for the final round of ACS English usability testing conducted in late 2010 (Ashenfelter, Holland, Quach, & Nichols, 2011). The testing was done very close in time to when the survey was scheduled to go live in the field, so the main goal was to detect any major cognitive and usability problems with the instrument. The translations of the instrument and the navigational elements were not a focus of this testing, nor was the content of the questions. Nonetheless, this report does document content and translation issues that were detected during testing.

The usability testing included eye-tracking, cognitive probing, debriefing interviews and a respondent satisfaction survey. Eye-tracking is a methodology in which specialized equipment is used to assess which parts of a computer screen an individual focuses on, and for how long, while the individual interacts with a computer-based instrument. Such information can provide insights into how respondents interact with the survey. For example, a lack of respondent fixations on instructions indicates that respondents did not read them, while lengthy or repeated fixations may suggest that respondents had difficulty understanding a question or choosing a response option. One attractive aspect of eye-tracking as a methodology is that it allows researchers to detect issues and problems of which respondents may not have conscious awareness.

Cognitive testing, on the other hand, involves asking respondents to report what they are thinking, how they interpret something, or what they would do in a given situation. An advantage of cognitive testing is that it can provide insights not just on how respondents interact with a survey, but on why they behave as they do. While eye-tracking can document problematic or difficult questions, cognitive probing can help researchers pinpoint and understand the specific difficulty observed. For this reason, eye-tracking and cognitive testing are complementary usability methodologies which work well in combination.

2.1 PARTICIPANTS

Participants were recruited through the Census Bureau's Boston Regional Office, which covers the island of Puerto Rico. The recruitment goals included a balance of male and female participants from different age groups, and participants who identified Spanish as their first language. While monolingual Spanish speakers were sought, most participants had some knowledge of English as well. In total, 14 respondents took part in the usability testing. Three respondents were male and nine were female. Their ages ranged from 27 to 66 and they all had some college-level education. Ten of the respondents reported internet use of 1-3 hours per week, while two reported 4-6 hours, one reported 7+ hours, and one reported 0 hours. All participants were paid \$40 for their participation.

2.2 PROCEDURE

All interviews were conducted in Puerto Rico, in a hotel room foyer, by a single cognitive interviewer following the protocol in Appendix 1. The interviewer (a sociolinguist from the Center for Survey Measurement [CSM]) is a native speaker of English who is also proficient in Spanish. Also present during interviews was the English-speaking usability expert who designed and managed the testing phase of the project and operated the eye-tracking equipment (a research psychologist, also from CSM). An English/Spanish bilingual representative of the American Community Survey Office (ACSO) also observed many of the initial interviews (The ACSO representative's observation report can be found in Appendix 2).

Upon arrival, respondents were seated at a desk with a keyboard and an eye-tracking monitor (Tobii model T120) and a mouse. The usability expert performed the calibration of the eye-tracking equipment and ran the survey from a Census Bureau laptop (see Appendix 3 for screenshots of the survey), after administering consent forms (see Appendix 4) and background questionnaires encompassing demographic information and computer use/experience (see Appendix 5). After completing the PRCS online, the cognitive interviewer administered a debriefing that contained questions about the survey as well as several vignettes designed to test how respondents would respond to coverage questions (see Appendix 1 for the specific probes and vignettes). Finally, respondents filled out a satisfaction questionnaire (Appendix 6) based on the Questionnaire for User Interface Satisfaction (QUIS) (Chin, Diehl, & Norman, 1988).

Once they had completed the background questionnaires and the eye-tracking equipment had been calibrated, respondents were given a mailing packet containing instructions for accessing the PRCS. The mailing label of this packet contained a fictitious Household ID (HHID), which served as the user ID and was needed in order to access the online survey. The respondents were all given the same fictitious address and asked to pretend that they lived there for the purposes of this testing. With the exception of this fictitious address, respondents were instructed to complete the PRCS as they would at home and to answer the survey using information about their own households.

While completing the survey, respondents were stopped and probed regarding several aspects of the survey. Specifically, after completing the mortgage questions, all respondents were asked if they had a sense of how much longer they would need to complete the study, in order to assess their noticing of the progress indicator on the right side of the screen. In addition, all respondents were interrupted and asked what they would do if they had to leave for an appointment, in order to test the "save and logout" feature. Participants were also interrupted at the pre-summary screen in order to assess whether they would review their answers prior to submission. Further, approximately half of the respondents were interrupted during the completion of the sections about other members of the household and asked what they would do if they did not have all of the requested information. All sessions were audio- and video-taped, and a synced screen capture was also recorded, allowing researchers to see the screen that respondents were seeing at any given point in the audio and video tapes. However, in the case of one survey completion session, the recording did not work at all, and the debriefing session was not recorded for one respondent. In addition, technical failures meant lack of video or screen capture in several cases; these respondents were recorded using a cassette recorder.

One respondent asked if she could take the survey in English, explaining that she prefers to complete some tasks in English even though she was born and raised in Puerto Rico and is a native speaker of Spanish. Because she told the interviewer that this is what she would do if she were at home, during testing she completed the English version of the PRCS. This allowed the research team to observe any errors in the English version. All of the other cognitive interviews were conducted in Spanish, although in some cases respondents also used small amounts of English.

3.0 RESULTS FROM THE COGNITIVE INTERVIEW PROTOCOL

In this section we discuss some of the issues involved in the navigation of the online instrument that were identified in the cognitive portion of the testing. The findings are reported by topic and presented in the sequence in which they appeared in the instrument and protocols.

3.1 Entering the Survey: User ID

Logging onto the online questionnaire requires respondents to enter a user ID, which is provided on the printed mailing materials. For this research, respondents were provided with those materials at the outset of testing.

3.1.1. User ID

All respondents ultimately were able to enter the user ID number printed on the packet of information that was provided to respondents near the beginning of their first entry into the survey. However, respondents exhibited some difficulty identifying and entering the user ID. One respondent wasn't sure whether he should do the survey online or on paper. Another said that she didn't have a user ID number, and she was able to find it only with interviewer assistance. Another respondent asked if she was supposed to enter her social security number, and then asked if she should enter the "código de barra" (bar code) instead, and then did so. Several respondents asked for reassurance that they were entering the correct number as their user ID. Another problem was that several respondents read the printed user ID and typed it into the text box without looking, thus making mistakes that they didn't catch until later when they tried to log in again. These typing mistakes might have been due in part to the keyboard used in testing, which didn't always register each key pressed.

In addition, when users entered their user ID, some of them had problems entering the dash, which appeared in the printed user ID number but which respondents were not supposed to type. Specifically, some respondents had trouble entering the number in the two separate text boxes provided, as a result of the automatic advancement of the cursor (without using the Tab key). In fact one respondent typed in a dash in the second text box, which prevented her from entering the complete number until she realized her error. This particular respondent also had many problems using the mouse in general, often pressing the wheel unintentionally, which caused the page to scroll up and down.

It was unclear during testing whether the respondents were hesitant during the initiation of the survey and while attempting to find and enter the user ID because of the artificial nature of the testing. During testing, not only did the respondents have to pretend that they had a fake address, but they had Census Bureau representatives watching their actions. Thus it is likely that some of the difficulties were unavoidable artifacts of the testing procedure.

3.1.2. Summary

- Although it took a few seconds to identify the user ID, most respondents were able to figure out how to enter the survey with minimal trouble.
- The automatic advancement of the cursor in the user ID text boxes gave some users difficulty.

3.2 Progress Indicator

On the right side of the screen there is a progress indicator, designed to inform respondents where in the survey they are at any given moment (see Figure 1 below). The header of the progress indicator reads "dónde se encuentra" (*where you are*), with the major sections listed below. The names of all persons on the roster are listed with bullet points in the "información sobre la persona" (*information about the person*) section. Sections that have already been viewed by the respondent appear in gray type with a gray background, while sections yet to be completed appear in black text with a white background.



Figure 1: Progress Indicator¹

The original protocol called for all respondents to be probed twice on whether they knew how much longer the survey would take: first while completing the basic information section and then again after completing the housing information section (just before the questions about household members). However, the researchers found that these probes made several respondents uncomfortable, as they seemed to interpret them as implicit criticism that they were taking too long to respond. Therefore, the researchers eliminated the second instance of the probe and eliminated both probes for one respondent. During the debriefing, all respondents were asked about the meaning of gray type (i.e., the indication that a section has been viewed).

When probed during survey completion, none of the 12 respondents probed mentioned the progress indicator or the gray type on the menu bar. Four respondents explicitly mentioned that the instructions had said the survey would take approximately 38 minutes to complete. Several respondents said they didn't know how long it would take because they did not know how many questions there were, while others estimated 10-20 minutes more. When respondents did estimate the time remaining, this seemed to be based on the calculation of time elapsed since the outset, not by a calculation based on the progress indicator.

During the debriefing session, nine respondents reported having seen the progress indicator on the right, while two said they had not. One respondent reported having looked at the progress indicator several times while completing the survey, while another remarked that because she did not know how many questions were in each section, the indicator was not particularly informative.

When asked (in the debriefing) about the meaning of the gray type in the progress indicator, nine respondents interpreted it to mean that those questions had already been answered or covered. One respondent focused on the actual meaning of the words, responding with a definition. Another respondent suggested that the gray type was general for everyone, while the black text was specific to individuals. Two respondents made reference to the use of black text or boldface for emphasis, but did not explicitly

¹ The names visible in this figure were created for the purpose of testing a hypothetical situation. They are not names of respondents in this study.

mention that this was an indicator of their progress in the survey. The four respondents who did not seem to interpret the gray type as expected were all older individuals, ages 58, 60, 62 and 66.

3.2.1. Summary

- According to their retrospective comments, the progress indicator was not salient to respondents during survey completion.
- Although they generally understood the meaning of the gray type, the indicator did not provide respondents with a clear sense of how much time was remaining.

3.3 "Guarde y Termine La Session" (Save and Logout)

On the PRCS online survey the link "guarde y termine la sesión" (*save and logout*, literally 'save and end the session') is located on the upper right hand side of the screen, in the horizontal menu bar. The two primary anticipated uses of this link are: 1) when a respondent does not have all of the information required to complete the questions on the survey; and 2) when a respondent must stop the survey prior to completion because they have to do something else. Both of these scenarios were explored in cognitive testing.

3.3.1. Respondent Missing Required Information

During survey completion, the case of not having the information required to answer questions either about themselves or other household members came up for three respondents. In addition, as described in the methodology section, roughly half of the respondents were asked about their interpretation of the onscreen instruction to save and logout if they could not answer for someone on the list.

When these issues arose during survey completion, the interviewer asked what the respondent would do if s/he were at home and were missing the required information. In two cases, respondents explicitly mentioned saving and exiting the survey, locating the information, and returning. In contrast, a 60-year-old female who reported zero hours of weekly internet use stated that she would leave the question (the month of a household member's arrival to the household) blank. When the respondent tried to advance in the survey without entering a date, an error message appeared. Although the instrument was programmed to show a single error message and then allow respondents to move to the next question even if they did not answer the present question, the respondent interpreted the error message to mean that the complete date was a required field. After seeing the error message, she entered a date, but stated that she didn't really know if her answer was accurate. Although for this question the respondent entered a date that she thought might be inaccurate, when she later encountered another question that she couldn't answer, she reported that if she were at home she would save and come back later. Thus, in one case, this respondent provided what seemed like an arbitrary answer and in another she responded as intended (by indicating that she would save and logout). This raises the issue of whether required fields reduce data quality. In other modes, it is possible to leave an answer blank, or report "don't know" and complete the rest of the survey.

Respondents who were not probed about the save and logout during completion of the survey were asked about how they had interpreted the instruction to "save and logout" if they didn't have the information for someone on the list. Most respondents interpreted this instruction to mean that they should save and exit the survey. However, only one of those explicitly mentioned getting the information and coming back later, while another stated that the instruction was ambiguous and that she wasn't sure whether she was supposed to submit the survey with incomplete information or come back later. This respondent added that if she is supposed to come back later, the instruction should state this explicitly. When asked what she would do if she didn't have the information for her father, for example, the respondent replied that she would submit the survey with incomplete information. None of the respondents mentioned the possibility of continuing the survey for the respondents for which they had the information, although they were not probed on this directly.

3.3.2. Respondent Having to Stop prior to Completion

As part of the protocol, all respondents were prompted to describe what they would do if they had to leave the computer before completing the survey, for example if they had to go to an appointment. The desired response was that they would click on the "guarde y termine la sesión" (*save and logout*) link. After being asked about this hypothetical scenario, respondents were asked to log out of the survey. They were then asked to return to the survey, which required the use of their user ID and PIN. In addition, respondents were directly probed on their interpretation of the expression "guarde y termine la sesión."

While two respondents responded to the prompt by remarking that they wouldn't have started the survey if they had scheduled an appointment, five respondents were able to identify, with minimal difficulty, "guarde y termine la sesión" (save and logout) as the link they would follow. Other respondents did not see "guarde y termine la sesión" as a solution. One person indicated that the survey didn't provide an option to return to it later, because "guarde y termine la sesión" meant to save and end the session. Other respondents said they would simply leave the computer. Three respondents said that they would leave the survey "as is" if they had to attend to other business; one said the only options she could see were to go to the previous or next questions. Similarly, another respondent said she would turn off the computer, because she didn't see any explicit instructions. Another reported not knowing whether there was a way to return to the survey. One respondent attempted to save her work by looking for, in her words, "file save" (in English) within the file menu of the browser. She eventually found "guarde y termine la sesión." Another respondent mentioned the "security" link at the bottom of the screen as a possibility.

3.3.3. "Save" in English, Alternative Terminology

Five respondents explicitly used alternative terminology (other than "guarde y termine la sesión") during the interview. These respondents all used iterations of the English word "save," usually embedding it within Spanish matrix sentences. For example, one respondent remarked "no veo 'save' ni nada" (I don't see "save" or anything). Another example of terminology in Spanish that was introduced by this respondent was "grabar y cerrar" (record and close).

3.3.4. Meaning of "Guarde y Termine La Sesión" (Save and Logout)

Respondents were asked directly what they thought "guarde y termine la sesión" meant. One respondent answered that this phrase meant "end the whole session, the way I understand it." Another respondent said that the meaning made sense, but that onscreen it didn't look like a button one could click; she said that it should be in blue to indicate that it is a link, so that she wouldn't have to move the cursor all over the screen to look for links. Also, according to this respondent, the "save" link should be located on the right margin or at the bottom, separate from the instructions and FAQ. (A different respondent also indicated that she didn't see the link, and her actions suggested that she wouldn't have logged out and back in without prompting.) Another respondent said that she would have thought that "guarde y termine la sesión" would submit her answers, had she not read the general instructions at the beginning of the survey.

Like the two respondents mentioned above, this person also thought that because the links in the horizontal menu bar are in black text, they don't look like links and she suggested that "guarde y termine la sesión" should appear in a different color. She noted that both the "instructions" and "FAQ" links contain content that respondents might read at the outset, as background; but "guarde y termine la sesión" is an action-oriented link that could potentially solve a problem for the respondent during survey completion, and thus should be visually salient. She referenced the "anterior" (previous) and "siguiente" (next) navigation buttons and said they too should be in attention-grabbing colors ("like a doorbell that calls your attention") to indicate that they are all action buttons. Another respondent had a similar complaint, and asserted that she wouldn't look at the top of the screen for a save button. Someone else mentioned that credit card and bank websites usually have this link at the top of the screen, well marked, but otherwise it's usually found below. Along these lines, another respondent said that the link should be

more eye-catching, adding that the blue links on the bottom of the screen ("security," etc.) drew attention away from the "guarde y termine la sesión" link. This respondent also stated that he thought that this link was also too close in proximity to the progress indicator. In addition, one other respondent stated that "guarde y termine la sesión" should appear lower on the screen (rather than in the upper portion of the screen).

3.3.5. Returning to the survey

All respondents were able to log back in to the survey in order to complete it. None forgot the PIN, because they had all written it down or managed to keep it in their memory. When re-entering the survey, two respondents had difficulty with typing, partially because the keyboard wasn't working well, and another asked if she could just click on "inicio de la sesión" (*begin the session*) without entering her user ID, but she eventually understood what she needed to do. Another respondent thought at first that his PIN was his user ID, but he was able to log in eventually. Minimal trial and error resolved any initial confusion.

3.3.6. Summary

- On one hand, respondents generally understood the wording of the instruction to save and logout
 if they did not have all the information required. Nonetheless, there was confusion among several
 respondents because it was not clear to them that they would be able to return to complete the
 survey later.
- The "guarde y termine la sesión" (*save and logout*) link was not visually salient to respondents and many of them had trouble finding it.

3.4 Presummary Screen

After answering all of the survey questions on the PRCS, respondents see a presummary screen which gives them the option of clicking either a button to review their answers or a button to submit their answers without review. During survey completion, 12 respondents were interrupted at the presummary screen and asked what they would do at that point if they were completing the survey at home, i.e., "enviar" or "revisar," (*send* or *revise/review*). (Note: one person's responses were not captured by the recording equipment.) Five said they would send their responses (without reviewing), and two of these specifically mentioned the length of the survey or the time required as explanations. Two others said they were sure of their answers, so they would submit the survey.

Of the seven respondents who said they would "revisar" (revise/review), four of these specifically mentioned wanting to change or correct an answer. In addition, respondents who wanted to change a specific answer generally did not review all of the answers for all of the persons on the roster. Only three respondents said they would click on "revisar" to confirm their answers or answered that they were not looking for anything specific.

It is important to note that whereas "revise" and "review" are distinct words in English, the Spanish word "revisar" can mean both of these things. Therefore, it is possible that at least some respondents thought that the "revisar" button was primarily for changing answers. Future testing might explore respondents' interpretations of this word, as well as test alternative words such as "comprobar" (*check*) or "verificar" (*verify*).

3.4.1. Summary

- Respondents generally found the presummary screen clear and easy to use.
- There may have been some ambiguity in the meaning of the Spanish translation of "review" (*revisar*).

3.5 Summary Screen

Respondents who click on the review link on the presummary screen are taken to a summary screen that shows all of the questions and the answers they provided. During cognitive testing, all respondents were directed to click on the review link, regardless of whether they had said they would review or simply submit their answers.

If respondents fail to answer a question during survey completion, instead of an answer, the summary screen indicates that it has been left blank. In order to change or complete their answers, respondents need to click on the answer, which takes them to the screen for that particular question.

3.5.1. Changing Answers

During testing, respondents who had reported at the presummary screen that they wanted to correct some answers went to the summary screen, where they proceeded to make changes. If respondents did not indicate that they wanted to change an answer, they were asked what they would do if they realized they wanted to change their response to a housing question. All respondents were successful at changing their answers at the summary screen, although during survey completion one respondent (a 60-year-old woman) had mistyped a date of birth on a question screen and was unable to correct it without assistance. Another person stated that it was easy to change the answers. One respondent noted that she had entered her name incorrectly and was unable to change it. During the debriefing, when asked whether it was easy or hard to change their answers at the summary screen, seven of seven said that it was easy.

During testing, many technical errors were discovered on the summary screen including typos (e.g. "archives" in English instead of "archivos" in Spanish), as well as cases in which responses on the summary screen did not match those entered on question screens. These have been documented and reported by the ACSO observer (see Appendix 2).

During the debriefing, eight respondents were asked for comments on the presummary screen, and five were asked specifically whether they thought the screen was clear. Almost all respondents (12) gave positive evaluations of the summary screen, saying that it was helpful to see all the answers together or that it was clear and easy to use. One of these stated that the screen was fine, but remarked on the numerous content and spelling errors. One respondent responded only by reaffirming that she would submit her answers without review.

A translation issue was also noted; after changing an answer in order to return to the summary screen, the users click on a link "regrese para revisar" (return in order to revise/review). Although respondents did not have trouble returning to the summary screen, this wording is awkward and may not be the best translation. For one, it includes the meaning of intentionality or purpose "in order to" which does not exist in the original English and which may not be appropriate here. In addition, the use of the infinitive "regresar" may be more natural-sounding in hyperlinks than the imperative "regrese." One possible alternative translation worth testing is "regresar al resumen" (return to the summary).

3.5.2. Unanswered Questions

As noted above, the summary screen indicates when questions have been left blank. Within the online PRCS instrument tested, "blank" was translated as "en blanco," which is the standard translation when the intended meaning is "unfilled" or "not completed." The on-screen instructions on the summary screen inform respondents that they can complete unanswered questions by clicking on "la linea [EN BLANCO]," which means "the blank line." This is somewhat unclear because it could be interpreted to mean that the line appears in white.

In contrast with the online PRCS instrument, the screen shots included in the debriefing instrument shown to respondents omitted "en" and simply showed the word "blanco," which means "white." It was unclear whether this was a typographical error, a calque (or loan translation) from English, or a proposed alternative.

During survey completion there were issues related to noticing and interpreting the "en blanco" (*blank*) indication. One respondent, a 60-year-old woman, noted the summary screen instructions

informing her that she could change unanswered questions by clicking on "en blanco." Due to the ambiguity of the word "blanco" (which means both "blank" and "white"), she began clicking on white space on the screen, expressing surprise that nothing happened until she was assisted by the interviewer. This respondent had left two questions unanswered but did not seem to notice the words "en blanco" that appeared on the summary screen. Similarly, the "en blanco" indication was not salient to another respondent, a 60-year-old man, who did not seem to notice that he had several responses listed as "en blanco." He did not comment on this or click on the links to change them. On the other hand, another respondent, a 53-year-old woman, stated that as soon as she got to the summary screen and saw "en blanco," she knew she had to change her answer. A different respondent, when probed about the meaning of "en blanco" while at the summary screen accurately reported that this was an indication that he had left the real estate taxes question unanswered. However, his response still raises some concern because he interpreted it as acceptable to have left the question blank, because he does not pay real estate taxes himself. It is unclear whether there was a problem with the programming of the instrument that gave him a question that did not apply to him.

All respondents were asked about the meeting of "blanco" during the debriefing. Even though this is a calque from English, and considered grammatically incorrect, all respondents correctly interpreted the meaning when probed. Of those that were asked or volunteered a preference between "en blanco" and "blanco," four preferred "en blanco," two said they had no preference, and two said that they would leave it as it was on the screen they were shown ("blanco"). The fact that two respondents said they preferred this ungrammatical translation highlights the difficulty that some respondents have in describing their own language use and preferences, and the preference of these two respondents for "blanco" was likely a result of the fact that they had just seen this on-screen. When asked about a preference between "blanco" and "en blanco," one respondent suggested that "no contestada" (unanswered) would be a better option in Spanish, and also recommended the term "unanswered" for the English version. Given the lack of salience and the ambiguity of "en blanco," it would also be worthwhile to test alternatives such as "sin contestar" (not answered, without answer), which is more explicit than the current translation.

3.5.3. Summary

- Respondents did not exhibit difficulty in changing their answers and all reported that they had
 found it easy to do so. However, one person was unable to correct a mistake in the spelling of her
 name.
- Numerous typos and automatic calculation errors made in the survey instrument (not by the respondents) have been documented and are listed in Appendix 2.
- The wording for "review" and the link to return to the summary screen may not be clear.
- The instruction to complete an unanswered question is ambiguous.
- Some older respondents did not seem to notice "en blanco" (blank) on the summary screen.
- When they noticed it or were probed directly, respondents understood both "en blanco" and "blanco" to mean that a question was left blank but they did not necessarily interpret this to mean that they should provide an answer.
- Respondents understood both "en blanco" and "blanco" even though the latter is ungrammatical in this context.

3.6 Submission and Exit

Respondents did not have trouble submitting their surveys when finished, with the exception of a 60-year-old woman, who was going to click on "guarde y termine la sesión" (*save and logout*) until informed by the interviewer that this would return her to the login screen. The respondent then stated that she was finished, and looked for a "finish" or "end" button, but did not find it. She did not seem to realize that she could scroll down, which the interviewer did for her, and the respondent then clicked on the link to return to the presummary screen and successfully submitted the survey.

3.6.1. Summary

- The submission process was clear to the vast majority of respondents.
- The one case of confusion was related to the phrasing "guarde y termine la sesión" (save and logout).

4.0 COGNITIVE RESULTS FROM THE POST-SURVEY DEBRIEFING

The testing protocol included a short debriefing section after respondents completed the survey; respondents were given a series of retrospective probes about the survey, using screen shots, presented via PowerPoint, as a guide. These probes addressed issues such as interpretations of specific phrases and visual elements and how respondents would use particular navigation tools (see the protocol in Appendix 1 for a complete list of probes). As described in the methodology section, not all respondents were given all of the probes. In addition, during the debriefing, all respondents were presented with two vignettes designed to assess their interpretation of the rostering questions. As in the case of the retrospective probes, respondents were shown screen shots of the specific questions to which the vignettes referred.

4.1 Grayed-out Questions and Progress Indicator

As noted earlier, the online survey instrument includes a progress indicator designed to inform respondents where in the survey they are at any given moment. The names of sections that have already been completed (or at least entirely viewed) appear in gray type with a gray background, while sections yet to be completed appear in black text with a white background. Using a similar convention, when a survey question has multiple parts that appear on a screen together, the part that has already been answered appears in gray type. For example, if a respondent answers affirmatively to the question about whether anyone in the household pays for electricity, that question is grayed out while the respondent answers the second part of the question, which asks about the monthly cost of electricity (see Figure 2 below).



Figure 2: Gray Type Indicating that a Question Has Been Answered

Information about respondents' notice and interpretation of the progress indicator during survey completion was reported above. During the debriefing, respondents were probed about the meaning of the gray type in the questions themselves. As a lead-in, respondents were asked if they had seen the progress

indicator. Almost all (eight respondents) had seen it, but none found it useful. As one said, "I just know what part I'm up to, but I don't know how long that will take because I do not have an idea of how many questions are in each one of those parts, so to speak."

In contrast, the use of gray type in the question text was effective. All respondents understood that the question in gray had been answered already. Five respondents said that the grayed-out question was there to serve as a reference for the current question. When asked how they would change an answer to a grayed-out question, most (eight) respondents correctly mentioned the "anterior" (*previous*) button. One respondent said, when asked, that to change his answer he would click on a different answer; however, during the survey he did use the "anterior" button to change the spelling of his name. Another respondent said that an answer could be changed on the "revisar y editar" (*review/revise and edit*) screen, but did not understand the "anterior" option.

4.1.2. Summary

- Respondents seemed to interpret the significance of the gray type (as opposed to black) correctly.
- The use of this convention to indicate that a question has been answered is effective.

4.2 Rostering Questions: Coverage Vignettes

In cases where a question is applicable to only a small percentage of the population, survey methodologists often use vignettes in the testing of those questions. This allows the researchers to obtain more information about relatively rare situations. This procedure involves presenting respondents with a hypothetical scenario and asking them how they would answer a specific question if that scenario applied to them. The debriefing portion of the PRCS testing included two vignettes designed to assess respondent interpretation of coverage and rostering questions.

The ACS and PRCS residence criteria are based on the "two-month rule." According to this two-month rule, any person in the unit at the time of the survey who is there for more than two months should be counted at that address. Any person absent at the time of the survey who has been or will be away for more than two months should not be considered a resident of the unit. In addition, anyone who is present at the time of the survey and has no other place to stay should be counted as a resident, regardless of whether they will be there less than two months. The series of rostering questions are designed to identify any residents who may have been incorrectly omitted as well as any persons who were included but who should not be considered residents.

4.2.1. Child at Boarding School

The first vignette was designed to test the rostering question that identifies individuals who are away for more than two months and thus should not be counted at the unit. All respondents were given a hypothetical scenario in which they were asked to imagine they had an adolescent child living away at boarding school at the time in which the respondent was taking the survey. Respondents were then shown a screenshot (in PowerPoint) of the PRCS question asking whether anyone on the roster has been away for more than two months, and asked to say how they would respond in such a scenario. Following the PRCS "two-month rule," respondents should answer affirmatively to this question.

The wording of this PRCS question is awkward and difficult to parse: "Están algunas de estas personas que se listan a continuación en otro lugar AHORA durante más de dos meses, tal como un estudiante universitario que vive en otro lugar mientras asiste a la universidad o un miembro de las fuerzas armadas que vive en otra parte?" (Are some of these persons that are listed below in another place NOW during more than two months, such as a university student who lives in another place while s/he attends the university or a member of the armed forces that lives somewhere else?). In particular, the use of the plural "algunas" (some) rather than the singular "alguna" (any) is unexpected, and the distance of the verb "están" (are) from the object "en otro lugar" (somewhere else) makes the question unnatural and difficult to parse. Further, the phrase "algunas de estas personas que se listan a continuación" (some of these persons that are listed below) is redundant and unnecessarily wordy. Finally, the time frame in the

phrase "Ahora durante más de dos meses" (*now during more than two months*) is unclear and difficult to interpret.²

Eleven respondents said they would answer affirmatively, offering explanations such as: "yes, because he's in another place for more than two months." A couple of respondents went on to explain the broader principle involved in their decision, saying, for example, that they would answer this way regardless of whether their child lived in a dorm or an apartment or relating the question to their own experience: "Yes, because he's going to be out of the house more than two months. Two months or more, ok it says 'more than 2 months.' Or in training, for which he'd be away for 6 months, I'd also answer 'ves."

However, in some cases, respondents' explanations may not be consistent with the question's intent. For example, one person who said that s/he would answer affirmatively then added "Because they are part of my family but they are somewhere else, either studying, or in the hospital, or on vacation or somewhere else but their residence is Puerto Rico, it's my house." This respondent's explanation seemed to imply that a child living away should be counted as a resident of the unit, which is inconsistent with the two-month rule. Similarly, another respondent explained that she would answer yes "because boarding school isn't one's home, it's just that someone is in another place."

In addition to these two cases in which respondents answered correctly but without grasping the underlying concept, two respondents answered "no." One of these explained that she would not include someone living elsewhere on her list. Thus, rather than responding to the PRCS question, she seemed to be stating that the hypothetical child at boarding school should not be counted as a resident, which is correct. Another respondent also seemed to interpret the PRCS question differently from how it was intended: she replied that she would probably say "no" unless the child had been living with her during the last two months. Two possible reasons for these unexpected "no" answers" are: 1) the hypothetical nature of the vignette confuses respondents, who perhaps would not have included the persons on the initial roster, and 2) the complexity or confusing nature of the survey question wording caused cognitive overload or misinterpretation.

4.2.2. *Summary*

- The majority of respondents answered as intended, and their explanations were consistent with the PRCS two-month rule.
- At least four respondents were somewhat confused by the question, and either answered incorrectly or provided an explanation that was inconsistent with their response.

4.2.3. Child in shared custody

The second hypothetical scenario consisted of a child in shared custody who usually lives with the other parent but is with the respondent on the day of the survey. Respondents were shown a screenshot (in PowerPoint) showing the PRCS question asking whether an individual is at the unit more than two months: "¿Está NAME quedándose en ADDRESS durante MÁS de dos meses?" (Is NAME staying at ADDRESS during MORE than two months?). Respondents were asked whether or not they would include that child while completing the survey.

Of the 12 audible responses, five answered that they would not include that child, although most of these negative responses were qualified, with three respondents emphasizing the importance of whether

² The online PRCS instrument that respondents completed during testing included the question as described here, i.e., "Están algunas de estas personas que se listan a continuación en otro lugar AHORA durante más de dos meses, tal como un estudiante universitario que vive en otro lugar mientras asiste a la universidad o un miembro de las fuerzas armadas que vive en otra parte?" (*Are some of these persons that are listed below in another place NOW during more than two months, such as a university student who lives in another place while s/he attends the university or a member of the armed forces that lives somewhere else?*). However, during debriefing, respondents were shown an earlier version of this question which contained grammatical errors. None of the respondents commented on the error during the debriefing.

or not the time frame of two months meant two consecutive months or a cumulative period of two months over a year. At least two respondents seemed to interpret the question as referring to two consecutive months, while another said she would calculate the total time that the child had spent at the home because the question does not explicitly say "consecutive." Another respondent also said that the question is not specific enough.

One respondent who answered affirmatively also expressed uncertainty regarding whether the question referred to two consecutive months or a cumulative total of two months. The other five respondents who said they would include the child in the survey explained their affirmative answers by simply stating that it was shared custody, or by stating that if the child stayed with them for over two months, it should be "yes." Their interpretation of the time frame was not always clear.

Like the two "no" respondents who emphasized the two-month time frame, another respondent stated that if the child had been there *more* than two months, she would answer "yes" but that if not, she would answer "no."

The wording of this survey question is simpler than the question about individuals spending more than two months away, and it does not contain grammatical or typographical errors. Nonetheless, the time frame is unclear and respondents found it difficult to understand the intent of the question. Respondents' confusion may have been intensified by the fact that the vignette did not specify the details of the shared custody, and the protocol called for respondents to be asked one question while reading another.

4.2.4. *Summary*

- Respondents were confused as to the intent of the question, and whether "two months" referred to
 consecutive time up to and including the present or cumulative time during an unspecified time
 period.
- The hypothetical scenario may not have provided enough detail for respondents to know how they would respond.

4.3 Confusing/Unclear Instructions or Questions

During the debriefing, respondents were asked to report any thoughts they had regarding the instructions or questions. This question elicited longer responses from some, and minimal responses from others, likely due to the general, open-ended nature of the question. Respondents' comments, both elicited here and volunteered elsewhere, are summarized here.

Most of the respondents' comments about the questions related to the content (specifically employment/income, taxes, and utilities) or typographical errors rather than wording, survey navigation or usability issues (content concerns will be addressed in a separate section below). However, three respondents did make comments about usability issues. Specifically, one person mentioned that the "anterior" (*previous*) and "siguiente" (*next*) navigation links should be in different colors to make them more salient. The issue of the visual salience of links and buttons also came up in response to probes about specific links. These comments will be discussed below, in the sections corresponding to the specific probes.

Another person suggested that a calculator be made available on the screen. A different respondent said that it would be useful to have a space for "comments". She mentioned this in the context of a discussion of a question which she had left unanswered, implying that if such a field for comments had been available, she would have provided the requested information together with an explanation.

4.3.1. Summary

• There were few comments about usability and survey navigation but one comment which was consistent with the direct probes (reported below), was that the "action" links were not visually salient.

4.4 Entry of Names and Dates

Because there are differences between the continental U.S. and Puerto Rico regarding names and dates, during the debriefing respondents were asked whether they had any difficulty entering names and dates while completing the PRCS online instrument. Conventions regarding the use of names are quite different, and thus there is the possibility for confusion or difficulty during survey completion. In Spanish, it is quite common for individuals to have several given names as well as more than one "apellido" (family name). In Spanish-speaking countries, the "middle initial" is not used; when individuals use more than a single given name, they generally use the complete second name (not just the initial). Thus, someone named José Antonio generally would write his name as either "José" or "José Antonio" but not "José A." Typically, individuals use the family name of the mother as well as the father in legal documents, with the maternal name appearing after the paternal name. For example, in the case of someone hypothetically named María Alicia Gómez Martínez, Gómez is the paternal family name and Martínez is the maternal name. In other contexts, many people use only the paternal family name; i.e., María Alicia Gómez in the example here. However, other people use both family names, at least in some contexts. Thus, in English the "last name" is the same as the "family name" but for Spanish speakers, the primary "apellido" may not be their "last" name. As a result of these differences, Spanish-speaking respondents may have difficulty completing forms designed for English-speaking respondents, either because they are unsure of which or how many names to enter, or because there may not be enough space. In addition, if the instructions are not clear, respondents may answer inconsistently across survey administrations. In addition, previous Census Bureau research with Spanish-speaking respondents (Goerman et al., 2007; Goerman et al., 2008) found problems related to name entry. In particular, testing of the bilingual decennial questionnaire found that Spanish-speaking respondents were confused regarding the box provided for the middle initial, translated as "inicial" (initial). Because middle initials are not typically used in the Spanish-speaking world, respondents were confused by the box, sometimes leaving it blank, and sometimes entering the first letter of their first name. The middle initial box also caused production problems on the 2010 Puerto Rico decennial census form as a result of a disproportionate number of respondents entering their three initials (corresponding to given name and two last names).

Like the decennial survey, the PRCS has a middle initial box labeled "inicial." At the time of the testing of the PRCS online instrument, the problems regarding the middle initial box on the 2010 decennial survey had not yet been identified, and thus were not a focus of questions asked in the debriefing. No respondents reported trouble with the order of the names (first, middle initial, last) and none of them made any comments regarding the middle initial. However, the issue of the different family name conventions came up repeatedly. One respondent said that she didn't understand why the Census Bureau doesn't recognize that in Puerto Rico, people typically use two last names. She noted that government documents in Puerto Rico have a space for both last names: "apellido materno" (maternal last name) and "apellido paterno" (paternal last name). Two other respondents (a mother and her daughter) wrote both of their family names with a hyphen in between, explaining that the mother had been taught to write her name this way in the army. Six other respondents put only one last name in the space, either because they don't typically use both names, or because they suspected, based on their previous experience, that their names would be recorded inaccurately, with the first "apellido" treated as a middle name (for example, the hypothetical name Ana Álvarez Gómez would be coded as "Ana A. Gómez" as if "Álvarez" were a middle name). The mismatch between the instrument and respondents' typical practice regarding their names is evident in the fact that many respondents entered names that were different from their signatures on the study consent forms: even respondents who entered a single "apellido" typically signed their names using both.

American English and Spanish are also associated with different conventions for dates. Specifically, in English, dates follow the month-day-year format. In Spanish, in contrast, dates are usually written day-month-year. Thus, in English "November 28th, 2011" would be written "11/28/2011,"

whereas in Spanish it would be written "28/11/2011." In the debriefing, when asked about the entry of dates, most respondents said that this process was clear and easy, and all of them entered the date in the online PRCS instrument correctly. When asked, the majority showed awareness of the two different date formats and reported that they usually write the date in the U.S. English format. All of them said that because the PRCS is administered by the American federal government, even though it is in Spanish, they expected the date to be elicited in the American way, and were not surprised by the instructions telling them to enter the date in the month-day-year format. Many respondents made use of the standard instructions as well as the text box labels to guide them. One respondent asked if she should write the number of the month, or the name of the month, but realized it must be the number when the name wouldn't fit. Another respondent pointed out that the English version of the "date" screen had X's to indicate how many digits were required, and she suggested that the Spanish version have that feature too.

4.4.1. Summary

- The naming conventions in Puerto Rico are different from what is common in American English. The name fields and instructions on the PRCS online survey (and other Census Bureau Spanishlanguage instruments) do not take these differences into account, leading to difficulties.
- Date formats are also different in Spanish and U.S. English, but respondents had less trouble entering dates as a result of their expectations, the instructions and the clear labels on the text boxes.

4.5 Meaning of and Use of "Ayuda" (Help)

Many questions in the PRCS have a help link ("ayuda") which respondents can click to receive additional information or explanation about the question. This link appears directly next to the question text, and is used for information about the question itself, rather than for help with survey completion. Four respondents used the "ayuda" link without any prompting. Many others asked for clarification from the observer or the interviewer but did not click on the link. When asked, those respondents who used "ayuda" had mixed reactions. One person who had used the link for two questions reported that it was helpful for understanding the term "condominium" but not for the questions about taxes. Later, when this respondent was uncertain about another survey question (about her work history), she did not click the "ayuda" link. This suggests that her understanding of, or confidence in, the "ayuda" link was not strong. Another respondent used "ayuda" for the housing question and reported finding it useful. In contrast, someone recalled using "ayuda" approximately three times and reported that the screens had confused her even more than the question. (She had used it for help with the employment questions.)

Of the eight respondents who did not click "ayuda," four respondents understood that the information contained on that screen was meant to explain the question or offer definitions, with one of them mentioning that he thought it might have an on-screen calculator. A fifth respondent also correctly described the purpose of the "ayuda" link during the debriefing, but also thought it might provide help with computer problems (cable connections, etc.). During completion of the survey this same respondent misinterpreted the link as part of the question. Specifically, when reading the question about payments for electricity, he interpreted "ayuda" as meaning public assistance to cover his electric bill. When asked about the help link during the debriefing, the other two respondents interpreted "ayuda" as help with the *answer*, rather than the question. They couldn't understand how such a link could be useful or how clicking the link could possibly help them answer questions that only they would know the answer to, such as date of birth or employment information.

In addition, four respondents were asked what they would do if the "ayuda" link wasn't helpful. Two respondents said that they would call the Census Bureau, and two said that they would leave the question blank.

Finally, the respondent who took the survey in English said that the specific word "ayuda" didn't sound right to her in Spanish. She felt that it didn't mean the same in English and Spanish, but she could not articulate what the difference was or suggest an alternative translation.

4.5.1. Summary

- Many respondents did not seem to notice or understand the purpose of the "ayuda" link. It may be that respondents are less accustomed to seeing "ayuda" as a one-word link than English-speaking respondents are to seeing "help" as a link.
- The four respondents who used the help link were mixed as to whether or not they found the explanations helpful.

4.6 Meaning of and Use of "Comuniquese Con Nosotros" (Contact Us)

All screens of the PRCS had a link on the lower right hand corner which read "comuníquese con nosotros" (contact us). When asked, all respondents understood that this link would, in some way, put the survey respondent in touch with someone from the Census Bureau who could answer their questions or register their complaints. One respondent said "es como 'contact us'" (It's like "contact us"), using the English phrase. Another respondent said the link would allow her to make comments on the survey; she mentioned that she expected there to be a form to fill out, but she doubted anyone would respond to her.

4.6.1. *Summary*

• Participants generally understood the purpose of the "comuníquese con nosotros" link, even if they did not take advantage of it.

4.7 Paper vs. Internet Version

Although all respondents completed the online PRCS instrument, during the debriefing, eight respondents were asked whether "in real life" they would prefer to complete a paper version of the survey instead. Seven stated a preference for the online version. The respondent who preferred the paper version (a 62-year-old woman who reported spending 4-6 hours a week on the computer) explained her preference by saying that on the paper version you can correct whatever you want, and you can easily move backwards and forwards through the survey. On the other hand, one of the respondents who preferred the online version (a 66-year-old man) reported ease of correcting answers as the reason he preferred the online version. Other reasons that respondents gave for their preference for the online version include environmental friendliness and convenience.

It is worth noting that even the respondent who reported spending the least amount of time on the internet each week and had the most difficulty with the survey said that she would prefer to complete the survey online. The reason she gave was that doing it on paper is tiring because you have to turn the pages and the letters are small, while on the computer you can increase font sizes.

4.7.1 Summary

- The small size of the sample does not allow generalizations regarding respondents' preferences for online or paper versions.
- Nonetheless, the fact that respondents were asked their preference *after* completing the online survey suggests that these respondents were generally satisfied with the online experience.

4.8 "Imprima para sus Archivos" (Print for your Records)

On the summary screen, where respondents can review and change their answers, there is a link to "imprima para sus archivos" (*print for your records*). During the debriefing, nine respondents were asked about this link and whether they would use it prior to submission of their answers. As mentioned earlier, the Spanish version of the online PRCS had a typographical error ("archives" instead of "archives"). In addition, in Spanish it sounds awkward to have the verb "print" by itself, without saying

what will be printed; in Spanish, the typical instruction would be "print a copy" or "print the form." All nine respondents asked about this option understood its meaning, although one commented on the wording, saying that he would prefer "imprima el formulario" (*print the form*) or "imprima su formulario" (*print your form*). He also added that "para sus archivos" did not sound correct to him.

Of the nine respondents probed, four respondents said they might print a copy, while three said that they would not, with one commenting that since the questions are so personal they are likely to change and become quickly outdated. Respondents were uncertain about the purpose of printing a copy, although one said it might be useful if she needed to remember the amounts listed. Another thought a copy might be helpful if the Census Bureau called with additional questions, although he stated that rather than printing, he would save a copy as a PDF file. One respondent said that she would print it and save it in her records for comparison with the next census in 10 years, in order to compare how she and her family are doing now with then. She added that she saves all papers.

4.8.1. Summary

- Respondents generally did not see a clear reason or need to print the form, although a few thought they might do so.
- All respondents understood the meaning of the print link as written, but the phrasing was awkward.

5.0 SURVEY CONTENT AND WORDING: ISSUES DOCUMENTED

In this section we will briefly review issues observed or articulated on specific questions of the PRCS during the cognitive interviews. Because survey content was not the focus of this study, this feedback was not elicited through specific probes, and so reactions were not solicited from all respondents. However, we determined that it was important to document these issues for two reasons: first, many of the issues have been encountered by Census Bureau researchers in other studies, so the data presented here might provide further evidence to inform decisions; second, these issues could be tested in future research projects in which content and wording are the foci. In some cases, issues were raised by just a single respondent, but we included all respondents' concerns that were not immediately-remedied user errors. They might warrant testing in future projects.

The results are described in the order in which the questions appeared in the survey. The question numbers and question wording are included for reference.

Beginning the survey and entering household information: "¿Cuántas personas están viviendo o quedándose en esta dirección?" (How many people are living or staying at this address?)

At the beginning of the survey, respondents are asked to create a roster of the individuals living or staying at the address in question, as well as provide a valid phone number which the Census Bureau may use to follow up with any questions or clarifications.

There were two issues with the question that asked for a phone number. One respondent asked if she should enter her cell phone number or the phone number for the house. After the interviewer explained that the session's purpose was not to collect information, she included her cell phone number because no one would be able reach her at her home number. Another respondent had a little trouble entering her telephone number, possibly forgetting to include the area code (she couldn't enter four digits in the second space). But she figured it out without much difficulty.

Regarding rostering, one respondent asked about "quedarse" (to stay); she mentioned that her son often stays with his girlfriend at her house. When the interviewer said that she couldn't answer for her, she eventually concluded that she should include her son in her household. In general, respondents did not have difficulty listing the members of their households.

Q5-6: "¿Es la Persona X de origen hispano, latino o español?" (Is Person X of Hispanic, Latino, or Spanish origin?) and "¿Cuál es la raza de la Persona X?" (What is Person X's race?)

Participants brought up issues regarding completion of the race question that have been documented in other Census Bureau studies (e.g. Gerber and Crowley, 2005; Goerman et al., 2007; Goerman et al., 2008; Childs et al., 2010; Terry & Fond, 2011). One respondent said that she was neither black nor white. Another said, "We always had this issue when we were filling this out because in nowhere does it say 'latino' so I would be white?" The interviewer instructed her to do what she would do if she were at home, and she typed in "latino." Yet another respondent said "no soy blanca, no soy negra..." (*I'm not black, I'm not white...*) and when the interviewer asked her to think of what she would do if she were at home filling out the survey, she typed in "puertorriqueña" (*Puerto Rican*) for her race.

Another respondent had difficulty answering this question, stating that he doesn't fit in any of the categories. He read the question aloud, repeating the term "ancestry" rather than "race" or "origin." He then said "latino" and then that "we" are a mix of Spanish and Indian. He seemed to imply that he might pick "white" but then again went through the list saying that none apply. He made reference to another survey that allowed Puerto Rican or Caribbean as an answer, which he preferred, stating that he would like a category that he felt close to. Eventually he chose "other race" and wrote in "Puerto Rican."

Housing Q1-2: "¿Cuál describe mejor este edificio?" (Which best describes this building?) and "Aproximadamente, ¿cuándo se construyó originalmente este edificio?" (About when was this building first built?)

Three respondents had issues with the questions about the type of unit and the year it was built. One respondent asked whether "one-family house attached to one or more houses" referred only to buildings arranged "horizontally" or whether an apartment on the second floor of her house would count. Regarding the year of construction, one respondent asked if this meant when she bought it, or when it was originally constructed. Another asked about the word "edificio" (building), stating that earlier the survey had asked about "casa" (house/home) and she was confused. (Question 1 gave "edificio" and "casa" as distinct options, and she chose "casa").

Housing Q4: "¿En cuántas cuerdas está situada esta casa o casa móvil?" (How many acres is this house or mobile home on?)

One respondent commented on the "number of acres" terminology, stating that "cuerda" (*acre*) is an older term that young people don't use. He stated that the most common measurements for housing are meters, or perhaps "cuerda," but that "acre" is not commonly used. Also, there is an inconsistency between the word used in the survey question and the summary screen in the use of "acre" and "cuerda."

Housing Q7: "¿Cuántos cuartos individuales hay en esta casa, apartamento o casa móvil?" (How many separate rooms are in this house, apartment, or mobile home?)

There were issues related to the concept of "room." One respondent noted that, while the questionnaire uses the term "cuarto" to refer to "room," in Puerto Rico it generally means "living room." He went on to say that he reported eight rooms in his home, which included living rooms, bedrooms, and bathrooms. When prompted, he confirmed that he included bathrooms (contrary to instructions). Two other respondents said that "cuartos" meant "bedrooms," and one respondent repeatedly used the phrase "otras dependencias" (literally, *other dependencies*) to refer to rooms like the living room, kitchen, etc.

Upon reviewing a summary of responses on the review screen, one respondent commented that she had responded that she has four bedrooms, but the screen showed her response to be "six." She then realized that it was an issue of rooms vs. bedrooms. On prompting, she explained that there were four bedrooms, plus a kitchen and a living room.

Housing Q9: "¿Cuántos automóviles, vans o camiones con capacidad para una carga de una tonelada o menos se guardan en la casa para uso de los miembros de este hogar?" (How many automobiles, vans, and trucks of one-ton capacity or less are kept at home for use by members of this household?)

One respondent had a problem with this question. She mentioned that she reported that she had no car/truck/etc. at her home, but in fact she has a car; her building doesn't provide any parking, so she parks on the street. "...Y decía que si se guardaba y no, yo no puedo guardar el carro en la casa" (And it says if it's stored/kept, and no, I can't keep the car at the house).

Housing Q10: "¿Cuál COMBUSTIBLE es el que MÁS se utiliza para calentar esta casa, apartamento o casa móvil?" (Which FUEL is used MOST for heating this house, apartment, or mobile home?)

This question was one of the most problematic in that it produced six false affirmative responses. These respondents chose "electricity" as the heating fuel they use at home, even though homes in Puerto Rico are not heated. For example, one respondent read the question and response options repeatedly, and

then chose "electricity." But before moving on, she asked "Para esta casa- mi casa no necesita calentarse, ise refiere al agua, si tiene agua caliente o fria?" (For this house- my house doesn't need to be heated, is it referring to the water, if it has hot and cold water?) She then laughed and said "¡Si pongo calefacción en la casa nos morimos!" (If I put on the heat in the house, we'd die!) When the interviewer asked her to answer as best she could, she said that since they use electricity, she would keep her response as "electricity" and then clicked "siguiente" (next). Another respondent explained that she doesn't use "combustible" (fuel), but electricity isn't a fuel, and so she chose that answer option. She stated (unprompted) that she recalled the question as "What kind of fuel do you use to light the house" and since she uses electricity, she chose that option. When the interviewer questioned another respondent about the heating fuel question, together they looked at the question again, to which he had responded "electricity." Upon re-reading he realized that the question was about heating, stating that he hadn't realized this when he responded. He then said that he doesn't have heat, and changed his answer to show he doesn't use fuel. While reviewing the heating question, another respondent also realized that she had answered it incorrectly. She changed her answer to "none" and said "no estaba atendiendo" (I wasn't paying attention). Then she added "porque en Puerto Rico no se usa" (because in Puerto Rico it [heating fuel] is not used).

Also, the Spanish word "cuál" (*which*) cannot occur directly before a noun. The grammatically correct version is "qué combustible" (*which fuel*).

Housing Q11c: "EN LOS ÚLTIMOS 12 MESES, ¿cuánto fue el costo de agua y alcantarillado para esta casa, apartamento o casa móvil?" (IN THE PAST 12 MONTHS, what was the cost of water and sewer for this house, apartment, or mobile home?)

There were some difficulties with this question, with regard to reference period and calculating the answer. This question (part c) asks about costs for the past 12 months, while the previous two parts of the question (parts a and b) each had a one-month reference period. This change in reference time caused confusion for many respondents. One respondent paused after calculating her water and sewage cost and went back to the previous question to make sure she hadn't misread the one-month reference period in the other two parts. Another respondent asked if this question referred to the total for 12 months, or each month. Finally, another respondent mentioned specifically that he was surprised that the question about electricity was to be answered based on one month, while water was based on one year.

Respondents also had difficulty calculating the costs for 12 months. One respondent asked what she should do if she didn't know the answer. The interviewer asked what she would do if she were responding at home. She commented that she used an estimate to answer the question about electricity payments, so she would do that for this question as well. This respondent's husband was also a respondent, and their responses to this question were different by 48 percent. The fact that both respondents hesitated and asked questions while answering this question, and gave quite different responses, implies that they were understanding the question in different ways, or their estimates were unreliable.

Housing Q14: "¿Es esta casa, apartamento o casa móvil-" (Is this house, apartment, or mobile home-)

This question provides respondents with answer options that indicate who in the household owns or rents the residence. For this question, there were two concerns about joint ownership. One respondent asked if she could choose two people (her spouse and herself) because they are both owners. When the interviewer told her that she should do whatever she would do if she were at home, she marked her husband as the owner. Another respondent said that the house is both his and his wife's, explaining that in Puerto Rico a property can legally belong to two people. When the interviewer asked whether he could choose two people, he tried it and found that he can. But it's not clear whether he would have attempted this on his own.

One situation that did not fit well within the survey schema was that of a respondent who lived in an apartment in the home owned by her mother. The apartment has its own entrance, kitchen, bathroom, etc. and is "separate" in most ways, though it was unclear whether or not this respondent would have received her own PRCS. The respondent had difficulty answering questions on housing expenses because she does not pay rent, utilities, or taxes.

Housing Q17: "¿Cuánto es el total anual de los impuestos de bienes raíces sobre ESTA propiedad?" (What are the annual real estate taxes on THIS property?)

Two respondents pointed out difficulties with the phrase for "real estate tax." One respondent didn't seem to understand the phrase "impuestos de bienes raices" and she left the question blank; another respondent said that they are not known by that term. She suggested "contribuciones sobre la propiedad," or perhaps "impuestos sobre la propiedad," though "contribuciones" is more exact, in her opinion. In response to a question asked by one of the interviewers, the respondent said that "CRIM" would also work; this is an acronym for "El Centro de Recaudación de Ingresos Municipales" (*Center for Municipal Tax Collection*), and was known to all respondents with whom it was discussed.

Two respondents had trouble calculating the amount, though they seemed to understand the question. One stated that she didn't know how much she pays annually, only monthly. She said that she pays rent then joked that she is not good at math and entered an estimate of \$10,500, which may be her rent rather than taxes; she may have interpreted the question to be about total housing costs, and there may be a problem with the skip pattern that would prevent a renter from being asked this question. Another respondent stated that she didn't have any idea of how much she pays in taxes, explaining that taxes are included in her mortgage payment. She said she would leave the answer blank; before doing so she tried clicking on "ayuda" (help) but then said that she understood the question, she just didn't know the amount.

There were few problems with typing in the amount; however, one respondent attempted to write "00" as his real estate tax, but then erased it and checked "ninguno" (none).

Person Q7: "¿Dónde nació esta persona?" (Where was this person born?)

There were two places of birth that caused problems for respondents. Four respondents searched for Puerto Rico within the drop-down menu for the United States when answering this question. One spent a lot of time looking for Puerto Rico under the "U.S." menu, but when she didn't find it, she typed in "Puerto Rico" under "outside the U.S." Another did the same, explaining that when she usually uses the Internet, for shopping specifically, this is where Puerto Rico is typically found. Another respondent looked repeatedly for Puerto Rico in the list of states, and said "Puerto Rico isn't…." The interviewer informed her that for this survey, Puerto Rico isn't considered part of that list, and eventually the respondent located Puerto Rico as part of the "outside of the U.S." category. On prompting, another respondent explained that he was going to look for Puerto Rico in the list of states, but then saw that it was included in the "outside of the U.S." options. He explained that this is often the case online.

One respondent born in Washington, D.C. had trouble locating the city within the drop-down menu. While searching, she skipped past "District of Columbia" in order to look for "Washington, D.C." When she didn't see it, she thought it was an error, remarking "Esto está mal" (*This is wrong*). She then found "District of Columbia" without assistance, but she said she would prefer to see "Washington, D.C." as opposed to "District of Columbia." She pointed out that "fuera de los Estados Unidos" (*outside the United States*) included Puerto Rico, which some might find controversial.

One respondent discussed with the interviewer the fact that while Puerto Rico was considered "outside the U.S." in the survey, on the summary page it was considered part of it ("nació en EEUU," born in the U.S.). She mentioned a distinction between "continental USA" (she said this in English) and the USA, as in, it might be the case that one question was asking about the continental U.S. (of which

Puerto Rico would not be a part) while the summary was talking about a more general idea of the U.S. (This discrepancy was due to a technical error in the online survey, rather than differences in questions.)

Person Q10a: "En cualquier momento DURANTE LOS ÚLTIMOS 3 MESES, ¿ha estudiado esta persona en una escuela o universidad?" (At any time IN THE LAST 3 MONTHS, has this person attended school or college?)

One respondent had trouble with the reference period for the question; she wasn't sure what "the last three months" meant. She mentioned that she studied in a university (possibly online) but not during the last three months exactly. She also said that the three response options for this question ("No," "Yesprivate," "Yes-public") were insufficient. She decided she couldn't answer the question.

Person Q11: "¿Cuál es el título o nivel escolar más alto que esta persona ha COMPLETADO?" (What is the highest degree or level of school this person has COMPLETED?)

One respondent said that she wanted to indicate that her son had graduated from an institute, where he studied sound engineering. She chose the category "1+ years of college" but emphasized that this was not correct, because this means that the person did not receive a degree, and her son in fact did; it just wasn't an AA or BA. Also, she noted, it was not actually a college.

Person Q14: "¿Habla esta persona en su hogar un idioma que no sea inglés?" (Does this person speak a language other than English at home?)

One respondent answered that she does not speak a language other than English in her home, even though she speaks Spanish. Possibly due to the phrasing of the question, respondents will on occasion answer "no" even though they speak Spanish in the home, often exclusively.

Person Q16: "¿Tiene esta persona cobertura ACTUALMENTE por cualquiera de los siguientes planes de seguro de salud?" (Is this person CURRENTLY covered by any of the following types of health insurance or health coverage plans?)

The most significant issue with this question was that respondents did not mark "no" consistently for the forms of insurance that they did not carry. They would read the options until they marked "yes" for one of them, and leave the others blank. As an example, on respondent clicked "no" for the first healthcare option, then "yes" when she found the option that applied to her and left the other options unmarked; she tried to unmark (unclick) her first "no" response, but when she realized she couldn't, she clicked "siguiente" (*next*).

Person Q26: "¿Ha estado esta persona alguna vez en servicio militar activo en las fuerzas Armadas, la Reserva militar o la Guardia Nacional de los Estados Unidos?" (Has this person ever served on active duty in the U.S. Armed Forces, military Reserves, or National Guard?)

This question regarding "armed services" was confusing for a respondent who had been actively in the reserves for years, but not on active duty; there seemed to be no satisfactory way for her to indicate this.

Person Q29-38: Questions about work, including: "LA SEMANA PASADA, ¿hizo esta persona algún trabajo por paga en un empleo (o negocio)?" (LAST WEEK, did this person work for pay at a job (or business)?); "¿En qué lugar trabajó esta persona LA SEMANA PASADA?" (At what location did this person work LAST WEEK?); "¿Cuándo trabajó esta persona por última vez, aunque fuera por unos pocos días?" (When did this person last work, even for a few days?)

These questions, encompassing the address of the respondent's workplace and hours worked, were complicated for some respondents. There were issues with the concept of "work" and what counted as work, as well as problems with entering the correct address in the fields available on the questionnaire.

Regarding the nature of work, one respondent said that the question didn't specify whether the work is performed inside the home, outside, or via the internet, etc.; in other words, it doesn't specify what type of work would be relevant. This respondent explained that she makes cakes and desserts in her home, which are ordered by friends and acquaintances; she added that this work does not require a set number of hours, depends on how many orders are received, and is done at home. She added that she doesn't have any employees working for or with her, and this is quite different from when she worked at a company. Ultimately, she completed the form indicating that she doesn't work currently, and went on to answer subsequent questions based on her last job, before she became a baker. Regarding the reference period of work or a job, one respondent reported that he last worked 1-5 years ago. The questionnaire advanced this respondent to Q41, about activities performed last week, but the paragraph of supplemental instructions states that if the respondent didn't work last week, the respondent should refer to the most recent job. However, this respondent didn't read the last sentence, despite rereading the question out loud, and suggested that the question instructions should read "prior to retiring" or "when you last worked."

Filling out the work address was difficult for some respondents. One in particular seemed unsure about how to fill out the work address, reading the first two parts out loud. She then filled in the address, but stated that she did not know the zip code. When asked what she would do at home, she said she would look it up. On a follow-up question about the address, after she had completed the survey, she explained that she included the name of the neighborhood in the address line, but then after reading further, she saw "municipio" (*municipality*) so she erased it from the address and added it to the space for "municipio." She then decided that the neighborhood wasn't a municipality, so she put it the name of the neighborhood back into the address.

Person Q47, parts a-h: "INGRESO EN LOS ÚLTIMOS 12 MESES" (INCOME IN THE PAST 12 MONTHS)

The most significant difficulties with this question seemed to stem from the reference period in the question and the difference between self-employment or freelance and salaried work. For example, one respondent answered the question as it applied to her son, but at the "self-employment" screen (part b) she went back to the "salary" question (part a). When asked what she was thinking about, she said that her son is self-employed and she wanted to make sure that she didn't enter any income for him under "salary." Three other respondents did something similar. Another respondent first answered the salary question for his wife as "yes" but then realized later that this was only for employees, so he went back to change it (because his wife is self-employed). Another respondent noticed that when she reported her income, she included work "por cuenta propia" (freelance, self-employment) under "empleo" (employment). She came to understand that it was meant to be separate, though this wasn't clear; to her, "empleo por cuenta propia" (self-employment) is a subcategory of "employment." Many respondents found the question of employment difficult if they were self-employed or had any sort of non-traditional employment situation.

One respondent mentioned that she received income, but not from any of the sources listed (it was from her pension). She didn't know how to answer, but decided on "no" because while she had income, it wasn't of the type specified. She didn't understand what SSI ("seguridad de ingreso supplemental") meant. She asked if her pension ("por retiro") applied. When the interviewer asked if

there was anything she could do to try to understand this better, she pointed out the "ayuda" (*help*) link. She read the help screen and determined that SSI did not apply to her. She clicked on "ayuda" again to help her with the question about "bienestar" (*welfare*), and she clicked "no." Finally, she found the question that referred to her pension. She said that this question should have come up earlier, because more people have income from pensions than from SSI or welfare.

Another respondent asked whether the question referred to annual or monthly income. The interviewer asked her what she thought, and she said probably annual, but she didn't know how much it was. The interviewer asked what the question meant, and read the text to her; the respondent concluded that the question was asking about an annual amount, but she still did not know the answer.

Finally, one respondent had some questions relating to how to report income and taxes for a teenager who worked at a summer job; the questionnaire didn't seem to accommodate this type of employment situation.

In addition to these issues of interpretation, there is also a grammatical problem in the subquestions that ask respondents to report the amount of income earned. If a respondent answers affirmatively to a question about a specific type of income, he or she is then asked to report the amount. In such cases the wording used is: "¿Cuál fue la cantidad? Informe la cantidad[...]" (What was the amount? Inform the amount[...]). Although in some contexts 'informar' is an accurate translation of the English verb 'to report,' it cannot be used with a direct object (i.e., 'amount'), and is thus ungrammatical in this context. 'Indicar' (indicate) would be a more appropriate translation.

6.0 TYPOGRAPHICAL AND GRAMMATICAL ISSUES

In addition to the programming difficulties documented in Appendix 2, there were numerous linguistic errors or issues observed upon summarization of the interviews, some of which have already been reported to ACSO. Grammatical errors and issues are important to resolve, as they can have a negative impact on users or a detrimental effect on the credibility of the Census Bureau among the population that translated materials are targeted to reach.

Table 1: Summary of typographical and grammatical issues

Question	Issue	Suggested solution
Person Q10: "En cualquier momento DURANTE LOS ÚLTIMOS 3 MESES, ¿ha estudiado esta persona en una escuela o universidad?" (At any time IN THE LAST 3 MONTHS, has this person attended school or college?)	(1) The response option that says "No, no ha asistido durante los últimos 3 meses" (No, has not attended in the last 3 months) is problematic. Here, "asistir" (attend) needs a direct object, as in "asistido a una escuela o universidad" (attended a school or university). (2) The response option "Sí escuela pública" (Yes, public school) does not contain the preposition or a verb. (3) "Sí escuela privada" (Yes, private school). Same as (2). (4) The verb form (imperfect form "asistía" (attended)) doesn't match the summary screen or the first part of the question; both of those use the past tense "asistió."	(1) Add the object as suggested. Alternatively, the verb "estudiar" (study) could be used, to maintain consistency with the question. This verb is used in the paper version. (2) The response option would be more comprehensible with a preposition, as in "Sí, en una escuela pública" (Yes, in a public school) or with a verb, as in "Sí, asistió a una escuela pública" (Yes, attended a public school). (3) Same as (2). (4) Make all verb forms consistent (either "asistía" or "asistió")
Person Q29: "LA SEMANA PASADA, ¿hizo esta persona algún trabajo por paga en un empleo(o negocio)?" (LAST WEEK, did this person work for pay at a job (or business)?)	A response option for this question reads "No – No trabajó (o está retirada)" (<i>No</i> – <i>Did not work (or retired)</i>). The summary screen provides the masculine and feminine forms of the term "retired": "retirado/retirada" (<i>retired(masc)/retired(fem)</i>). However, the question itself only uses the feminine form ("retirada").	Change the summary to read "retirada." Alternatively, change the response option to include both genders.
Person Q47: "¿Cuál fue la cantidad? Informe la cantidad" (What was the amount? Inform the amount)	The second part of the question, "Informe la cantidad," (<i>Inform the amount</i>) is ungrammatical.	Change "informe" (inform) to "indique" (indicate).

Person Q48: "¿Cuál fue el ingreso total de esta persona durante los ÚLTIMOS 12 MESES?" (What was this person's total income during the PAST 12 MONTHS?).	One of the response options is incorrectly worded. It says "recibió no ingreso de todas las fuentes" (received no income from all sources). This is ungrammatical in Spanish.	The response option should read "no recibió ingreso de ninguna fuente" (did not receive income from any source).
Housing Q10: "¿Cuál COMBUSTIBLE es el que MÁS se utiliza para calentar esta casa, apartamento o casa móvil?" (Which FUEL is used MOST for heating this house, apartment, or mobile home?)	This question is ungrammatical. It begins with "cuál," which should be followed by a verb or a preposition.	Replace "cuál" with "qué" to make the question grammatically correct.
Housing Q19: "¿Tiene usted o algún otro miembro de este hogar una hipoteca, contrato de compra, escritura de fideicomiso o deuda similar sobre ESTA propiedad?" (Do you or any member of this household have a mortgage, deed of trust, contract to purchase, or similar debt on THIS property?).	This question contains the response option "Sí, contrato de ompra" (Yes, contract to purchase). The word "ompra" is a typo, and it should read "compra."	Change "ompra" to "compra."
Person Q23: "¿En qué año se casó la última vez esta persona?" (In what year did this person last get married?).	On the summary screen it says "número de años casado" (number of years married) but in the survey, the respondent is asked to enter the year that s/he got married. The survey and the summary screen are inconsistent.	Change the summary to be consistent with the question (list the year the respondent was last married). It should read "el año en que se casó la última vez." (year last married).
Summary screen	The link "imprima para sus archives" (<i>print for your files</i>) contains a typo. "Archives" should read "archivos."	Change "archives" to "archivos."
General	(1) One issue that respondents did not comment on, but appeared to notice per eye-tracking results, is that the form reads "Comunidad estadounidense" (<i>American community</i>) instead of "Puertorriqueña" (<i>Puerto Rican</i>). (2) It was suggested by a respondent that boldface, or all capital letters, should be used for the individuals' names to make them more salient in the survey. (3) The links on the bottom of each screen ("Accessibility," "Privacy," and "Security") were in English, not Spanish.	(1) Correct error so that the survey reads "Puertorriqueña." (2) Consider this for future iterations of the online survey instrument (perhaps in other surveys in addition to the PRCS). (3) Translate these terms into Spanish.

7.0 RESULTS FROM USABILITY TESTING (EYE-TRACKING)

The screens for the PRCS testing were based on the fully-programmed ACS screens, which had already been through four rounds of iterative usability testing. Therefore, fewer usability issues surfaced during PRCS testing than during the first few rounds of stateside ACS testing. Usability results will only be presented for screens that at least one respondent saw as part of their response path during testing; screens that were not seen by any respondents will not be discussed here. Screen shots of the screens seen by respondents during testing can be found in Appendix 3.

Eye-tracking data were recorded during the cognitive interviews and were analyzed after the interviews were over. Heatmaps of all respondents' data are included in the report to show overall patterns that occurred during testing. Heatmaps show areas where respondents' eyes were drawn the most, with areas in red having the most eye fixations and areas in green having the fewest fixations. Areas without color-coding were not looked at during the sessions by the respondents. Due to equipment malfunctions, eye-tracking data were not able to be collected for all 14 respondents. Only 11 respondents were able to be calibrated for eye-tracking. The number of respondents represented in the heatmap images is given in the caption for each image in this section.

Heatmaps are included for screens even where no usability issues were uncovered because they all demonstrate an overall difference between the behavior of the respondents in the stateside ACS English form respondents and the PRCS Spanish (and one English) form respondents: the PRCS respondents tended to read the entire question and all of the response options, while the ACS respondents read only the beginning of the question and tended only to read the first few response options (or read only until they saw a response option that applied to them).

7.1 LOGIN SCREEN

The respondents needed to enter their user ID from the mailing materials on this first screen. The heatmap in Figure 3 shows that respondents looked at the example mailing label image on the left side of the screen, with a focus on the circled Household User ID (HHID). The areas that received the most fixations and clicks were the entry fields where the respondents needed to enter their HHID.

Respondents did not read the warning message in the white box, nor did they read the Office of Management and Budget (OMB) burden statement above it, although there were a few glances at this area.



Figure 3: Heatmap for Login Screen for the Online PRCS Instrument (n=11)

7.2 RESPONDENT NAME

This screen asked the respondent to enter his or her name and telephone number. No respondents had difficulty with this screen. The heatmap in Figure 4 shows that the respondents focused on the entry fields and clicked on them as well. These patterns support the observation that respondents interacted well with this screen.



Figure 4: Heatmap for Respondent Name Screen from the PRCS Online Instrument (n=11)

7.3 ADDRESS SCREEN

This screen asked the respondents whether they were completing the PRCS for the sample address. All the respondents had the same vignette address: URB LAGO DE PLATA, 253 CALLE HIBISCUS, CUALQUIER PUEBLO, PR 03631. None of the respondents had trouble with this screen. The heatmap in Figure 5 shows that respondents read the question, fixated on the address, read the response options, and then clicked "siguiente" (next). Respondents interacted well with this screen.

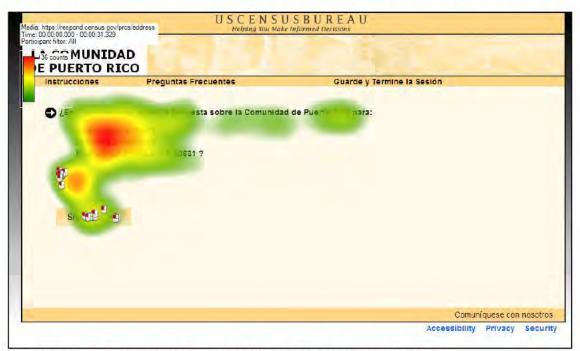


Figure 5: Heatmap for Address Screen from the PRCS Online Instrument (n=11)

7.4 RESIDENCY SCREEN

This screen asked respondents whether they lived or stayed at the vignette sample address. Participants did not have any problems with this screen. As shown in the heatmap in Figure 6, all 11 respondents with eye-tracking data read the question, answered "sí," and then proceeded on with the survey by clicking "siguiente." There were no usability issues observed with this screen.

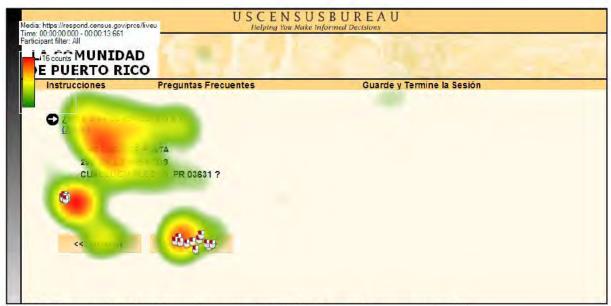


Figure 6: Heatmap for Residency Screen for the PRCS Online Instrument (n=11)

7.5 PIN SCREEN

This screen randomly generated a PIN for the respondent and asked them to make a note of it (Figure 7). Most respondents wrote the PIN down during testing, which is consistent with all previous round of stateside ACS testing where a PIN was provided to respondents. There were no usability issues observed for this screen.

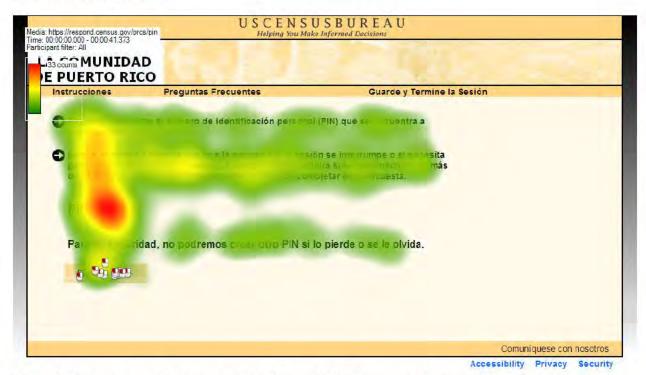


Figure 7: Heatmap for PIN Screen from the PRCS Online Instrument (n=11)

7.6 ROSTER SCREENS

As noted in the results from the cognitive interview protocol, some respondents were confused as to whether they should submit the survey with information about some household members missing.

7.6.1. Roster A

This screen asked respondents to list all of the people living at the household at the time the PRCS was completed. Figure 8 shows a heatmap for Roster A. Participants paid particular attention to the instructions below the line marked with an arrow, "The following question are about everyone who is living or staying URB LAGO DE LA PLATA, 253 CALLE HIBISCUS." These instructions say, "First, create a list of people. Enter one person on each line. Leave any extra lines blank. Enter names until you have listed everyone who lives or stays there, then click Next." These fixations may indicate that there was some confusion about what this additional text meant.

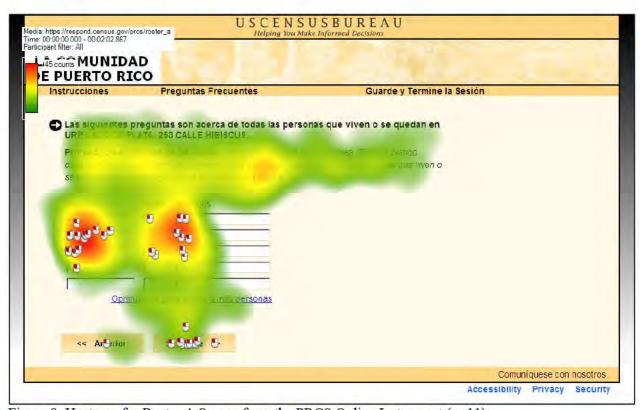


Figure 8: Heatmap for Roster A Screen from the PRCS Online Instrument (n=11)

The usability staff notes that italicized instructions may be unnecessary because 2011 web form standards suggest that most people with Internet experience will know what to do when encountering extra blank lines, etc.

7.6.2. Roster B

This screen asked respondents whether anyone other than the people already listed lived there, such as roommates, foster children, boarders, or live-in employees. In Rounds 3 and 4 of usability testing of the ACS stateside Internet instrument, some within-household duplication occurred when people already listed in Roster A were added again when they fit the example categories. However, this duplication occurred before a change was made (as recommended by the usability lab) to the question to

move the list of names down below the question itself. The change seemed to help eliminate this problem for the rest of ACS testing. For this PRCS testing, no duplication of this kind occurred.

Figure 9 shows that respondents read the question and fixated most on the example categories within the question.

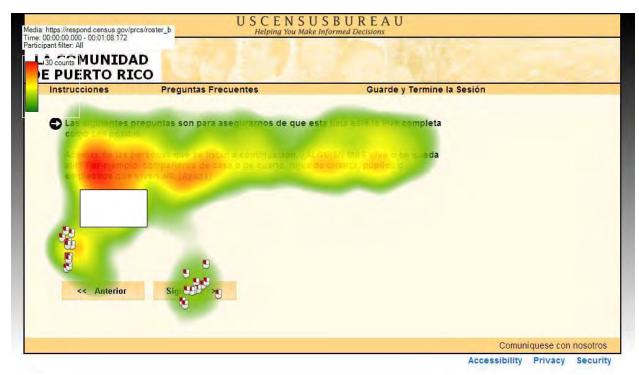


Figure 9: Heatmap for Roster B Screen from the PRCS Online Instrument (n=11)

7.6.3. Add_1

If respondents indicated in Roster B that there was someone else who lived or stayed at the residence, they would see Add_1 (Figure 10) and get a chance to enter more names. There were no usability issues observed for this screen.

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PUERTO RI		
strucciones	Preguntas Frecuentes	Guarde y Termine la Sesión
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Las siguientes p como sea posib		ista lista este lo mas completa
	ersonas que se listan a continuación, ¿Al	
alli? Por ejemplo empleados que	o, compañeros de casa o de cuarto, hijos	de crianza, pupilos o
spressess que	- (s) and	
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€® MO		
Entre las numbr	es y luego oprima Siguiente. No incluya a l	nadie que ya esté en la anterior
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	THE REAL PROPERTY.	
92		
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	a aqui r 1 a añadir a más personas	
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	a aqui ra a añadir a más personas Siguiente)>>	

Figure 10: Heatmap for Add_1 Screen from the PRCS Online Instrument (n=4)

7.6.4. Roster C

This question asks whether there is anyone else staying in the household even for a short time, such as a relative or friend. The italicized text translates as, "Do not include overnight or weekend guests who have a residence somewhere else." Figure 11 shows that some respondents tried to click on the list of names collected from Roster A, which means that they did not fully comprehend what this question was asking them to do, at least initially. All of the respondents were able to click "sí" or "no" (yes or no for the one respondent that took the survey in English) eventually to proceed with the survey, however.

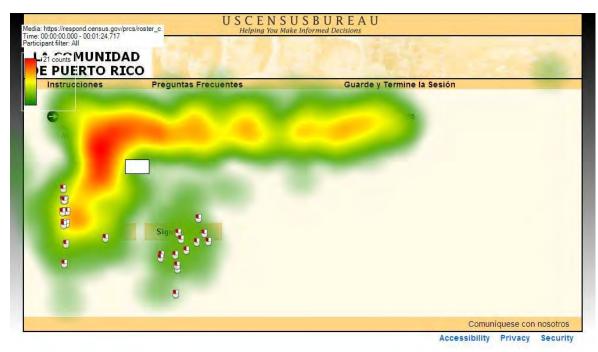


Figure 11: Heatmap for Roster C Screen from the PRCS Online Instrument (n=11)

7.6.5. Add_2

If respondents indicated in Roster C that someone else lived or stayed at the residence, they would see Add_2 (Figure 12) and get a chance to enter more names. There were no usability issues observed for this screen.

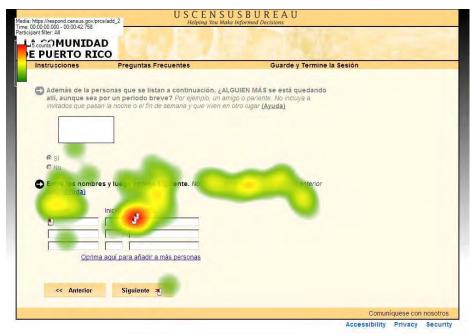


Figure 12: Heatmap for Add_2 Screen from the PRCS Online Instrument (n=1)

7.6.6. Away Now

This question asked respondents whether anyone on the list had another place where they usually stayed for more than two months (where they would be counted instead of the sample address according to ACS residence rules). This question is intended to delete people from the list of names who should not be counted at this address. Figure 13 shows that although respondents read the question, some tried to click names from the list, as with the Roster C screen.

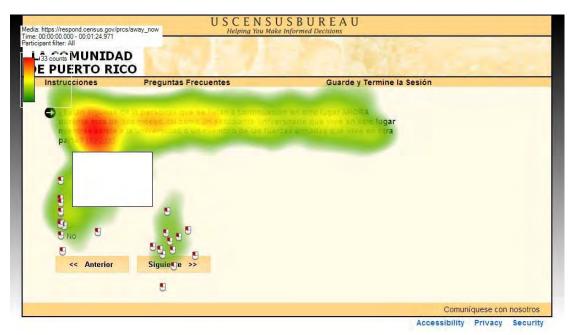


Figure 13: Heatmap for Away Now Screen from the PRCS Online Instrument (n=11)

7.6.7. Another Place

This question asks whether or not anyone on the list has another place where he or she usually stays. Figure 14 shows that respondents read the question and list of names. One respondent did try to click one of the names in the list. No other usability issues were observed with this screen.

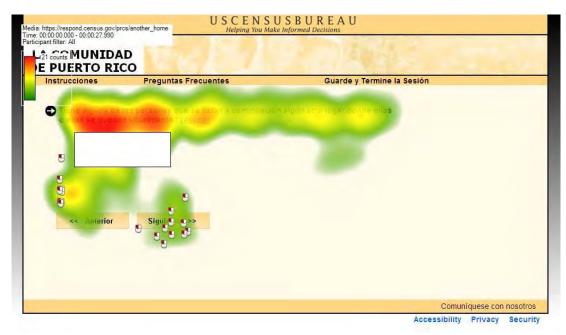


Figure 14: Heatmap for Another Place Screen from the PRCS Online Instrument (n=11)

7.6.8. Another Home Select

If the respondent indicated that someone in the household had another place where he or she usually stayed, this question would be next. Figure 15 shows that respondents read the question and selected a response before clicking "siguiente" (*next*) to proceed with the survey. There were no usability issues observed for this screen.

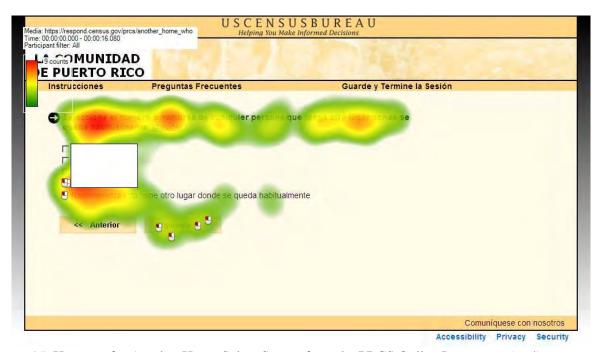


Figure 15: Heatmap for Another Home Select Screen from the PRCS Online Instrument (n=4)

7.6.9. More than Two

If the respondent selected a name on the "Another home select" screen, he or she would then see the "More than two" screen (Figure 16). There were no usability issues observed for this screen.

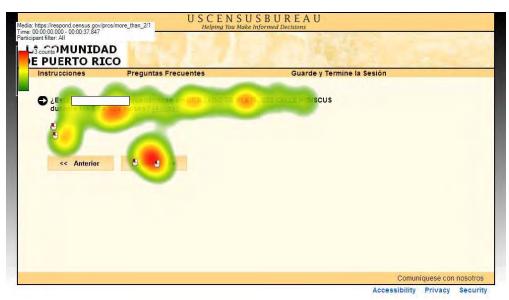


Figure 16: Heatmap for More Than Two Screen for Person 1 from the PRCS Online Instrument (n=1)

7.6.10. Roster Check

The roster for this survey will be locked after this point, so this "Roster check" (Figure 17) screen lists the people that have been entered and gives the respondent a chance to go back and change the roster in case there is a mistake. Figure 17 shows that some people did indeed click "anterior" (*previous*) to go back and make some corrections. Most clicked "siguiente" (*next*) to proceed with the survey. Participants tended to read the instructions thoroughly. There were no usability issues observed with this screen.

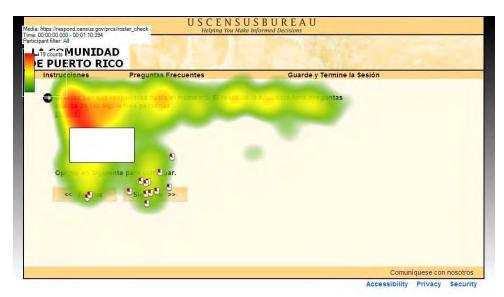


Figure 17: Heatmap for Roster Check Screen from the PRCS Online Instrument (n=11)

7.6.11. Who Rents or Owns/Reference Person

This question asks the respondents to select from a list of the residents identified from the rostering questions from the first part of the survey.

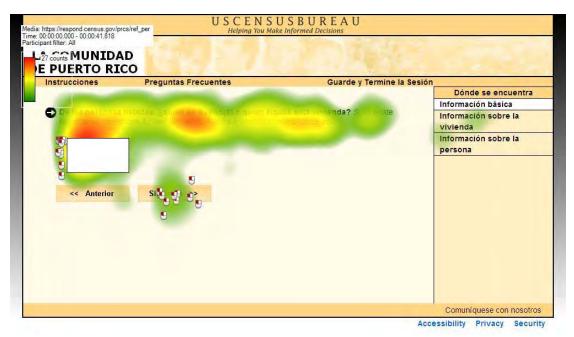


Figure 18: Heatmap for Who Rents or Owns Screen from the PRCS Online Instrument (n=10)

7.7 BASIC INFORMATION QUESTIONS

Heatmaps are only included for the first time the screen was displayed for each respondent (usually Person 1).

7.7.1. Relationship (Person Q2)

This question asks how each other person in the household is related to the reference person. Participants looked all over the screen (Figure 19), including at the progress indicator, before selecting a response and proceeding with the survey. This indicates that some confusion about the meaning of the question occurred.

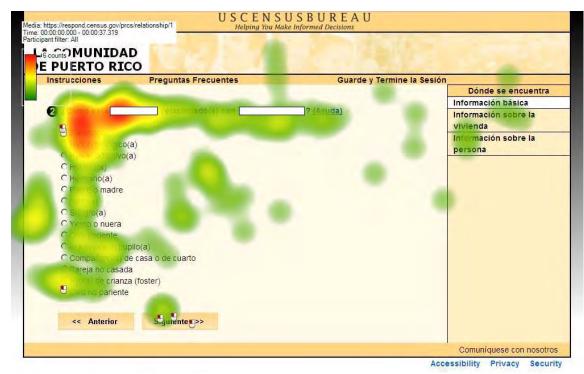


Figure 19: Heatmap for Relationship 1 Screen from the PRCS Online Instrument (n=3)

7.7.2. Sex (Person Q3)

This question asked the respondent's sex (Figure 20). There were no usability issues observed for this screen.

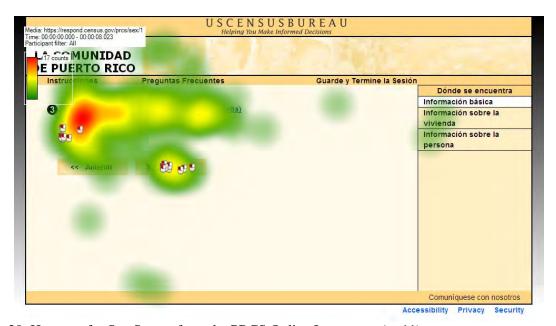


Figure 20: Heatmap for Sex Screen from the PRCS Online Instrument (n=11)

7.7.3. Date of Birth (Person Q4)

This question asked for the respondent's date of birth and age. There were no usability issues observed for this screen.



Figure 21: Heatmap for Date of Birth Screen for the PRCS Online Instrument (n=11)

7.7.4. Hispanic Origin (Person Q5)

This question asked whether the respondent was of Hispanic origin. There were no usability issues observed for this screen and all of the respondents easily found and selected the "Puerto Rican" response option.



Figure 22: Heatmap for Hispanic Origin Screen from the PRCS Online Instrument (n=11)

7.7.5. Race (Person Q6)

This question asked for the respondent's race and gave the Census Bureau's list of categories as response options. Some respondents entered "Puerto Rican" as a race in the "Some other race" response option text box, regardless of the instruction that Hispanic origins are not races for this survey. As is well known, many Hispanic respondents do not self-identify according to OMB guidelines. Respondents did not have trouble scrolling to the bottom of the screen to find the "siguiente" (*next*) button to proceed.

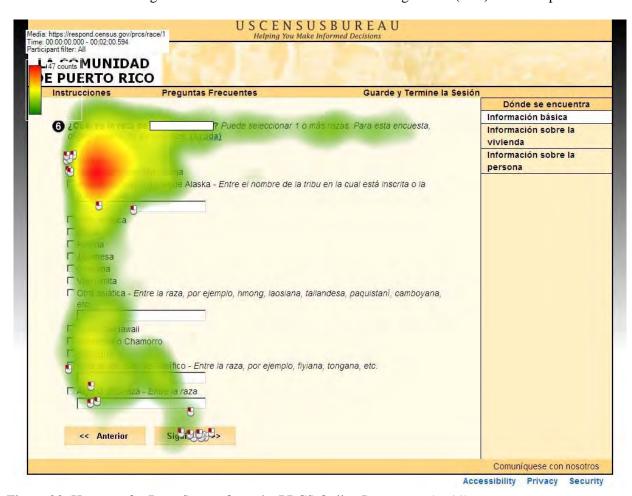


Figure 23: Heatmap for Race Screen from the PRCS Online Instrument (n=11)

7.8 HOUSING QUESTIONS

7.8.1. Type of Unit (Housing Q1)

This question asked what kind of building the sample address was. Participants could answer this question as it applied to their housing unit in real life. No respondents had trouble with the screen itself, although a few had questions about the definitions of the categories as discussed in the cognitive results section.

The heatmap in Figure 24 shows that respondents read the question and the response categories, and all clicked "siguiente" (next) to continue with the survey. They all successfully interacted with the screen and no usability issues were observed.

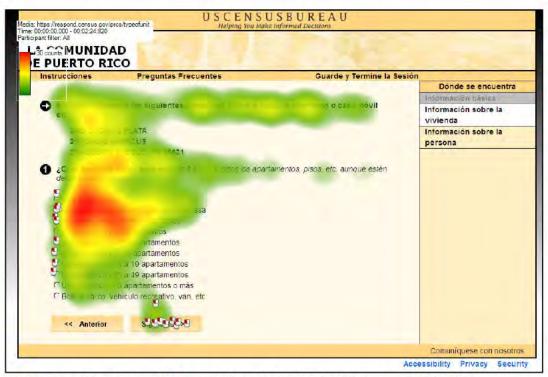


Figure 24: Heatmap for Type of Unit Screen from the PRCS Online Instrument (n=11)

7.8.2. Tenure Screen (Housing Q14)

This screen asks respondents to indicate the ownership status of their housing unit. As seen in Figure 25, respondents read this question and chose the option that applied to them in real life. There were no usability issues observed.

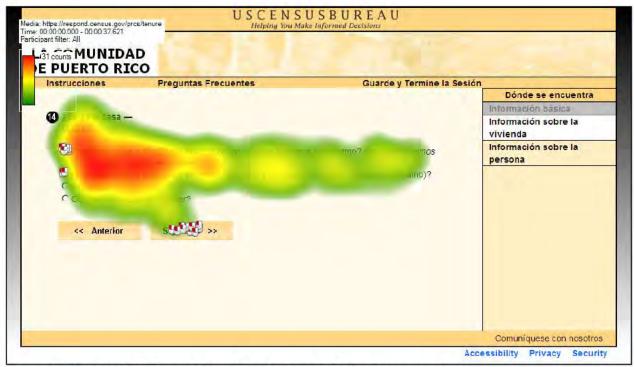


Figure 25: Heatmap for Tenure Screen from the PRCS Online Instrument (n=11)

7.8.3. Year of Construction Screen (Housing Q2)

This question asks respondents to indicate when their housing unit was built. The heatmap in Figure 26 shows that respondents read the question all the way across, then selected a response option. The area that received the most attention was the first response option, the text entry field following the first response option, "2000 or later – Specify year," and the two response options following the text entry field. These response options were also selected the most often, so these options applied to most of the respondents in this study. Although there were some clarification questions about this question, as discussed in the cognitive testing results section, there were no usability problems observed with the online screen itself. Participants were able to read the question, select a response, and move on without any issues.

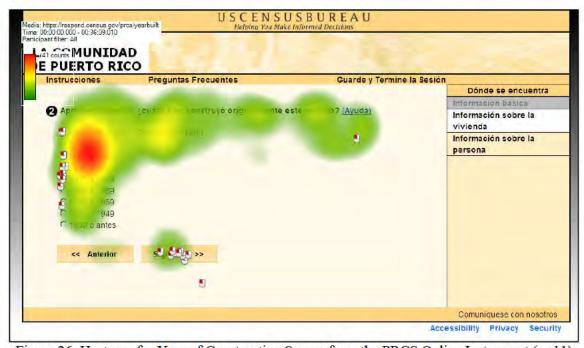


Figure 26: Heatmap for Year of Construction Screen from the PRCS Online Instrument (n=11)

7.8.4. When Moved-in (Housing O3)

This question asks for the month and year that the respondent moved into the sample address housing unit. Figure 27 shows that the respondents read the question and answered by clicking on the response fields to type in the answer. A few respondents clicked the "anterior" (*previous*) button, which could indicate that there was some confusion about the questions (e.g., whether they had answered the previous question correctly, or whether they were interpreting the current question correctly, etc.). However, there were no usability issues with the screen observed and respondents were able to answer the question easily once they decided on their response.

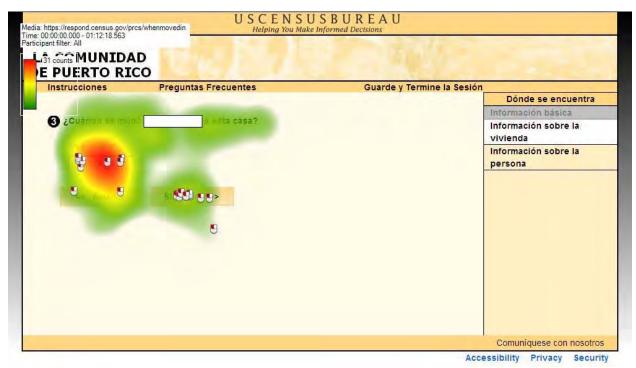


Figure 27: Heatmap for When Moved In Screen from the PRCS Online Instrument (n=11)

7.8.5. Acres (Housing Q4)

If the respondent indicates that the housing unit is a house or mobile home, the PRCS instrument will give them this question, which asks how many acres the house is on. Eight respondents saw this screen. Some respondents commented that "acre" is not a commonly used term anymore, as discussed in the cognitive testing results section. Figure 28 shows that respondents read the question and the response options. One respondent clicked the "anterior" button, which may indicate some confusion with the question. However, there were no usability issues observed with this screen.

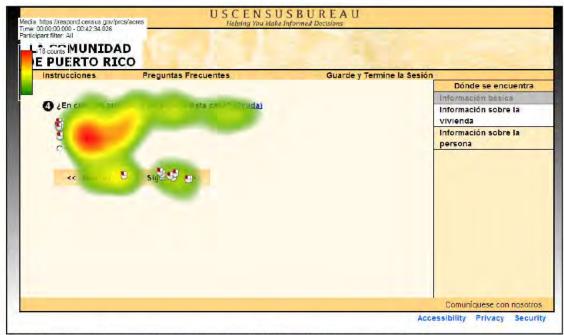


Figure 28: Heatmap for Acres Screen from the PRCS Online Instrument (n=8)

7.8.6. Agricultural Sales (Housing Q5)

This question asks the total sales of all agricultural products from the sample address property over the past 12 months. This question is asked if the response to the Acres question is one or more acres.

Only one respondent saw this screen, and he or she only took nine seconds before selecting "cero" (zero) and clicking "siguiente" (next) to proceed with the survey (see the time stamp and click marks in Figure 29). The eye-tracking data for this screen were not recorded properly due to equipment failure (Figure 29).



Figure 29: Heatmap for Agricultural Sales Screen from the PRCS Online Instrument (n=1)

7.8.7. Business on Property (Housing Q6)

This question asks respondents who answered that they lived in a house whether there was a business on the property. All eight respondents who received this question read it and easily answered before selecting "siguiente" (next) to proceed with the survey.



Figure 30: Heatmap for Business on Property Screen from PRCS Online Instrument (n=8)

7.8.8. Number of Rooms/Bedrooms (Housing Q7)

These questions asked the respondents to count the number of rooms and bedrooms in their housing unit. The number of bedrooms had to be equal to or less than the number of rooms or the respondent would receive a soft edit with information about this rule.

There was some confusion over the meaning of the word "cuarto" as discussed in the cognitive testing results section. Participants who had difficulty understanding the distinction between rooms and bedrooms received the soft edit. Only one respondent clicked the "anterior" (previous) button while answering this question (Figure 31). No respondents clicked the "ayuda" (help) link, and all were able to eventually proceed past the screen using the "siguiente" (next) button.

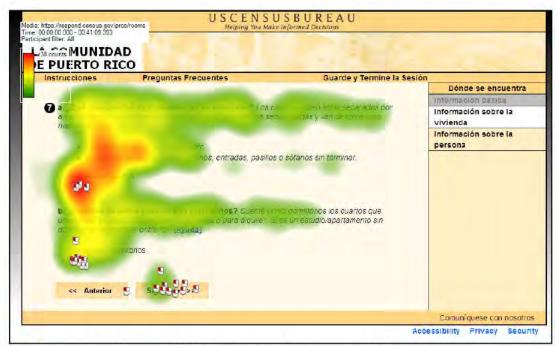


Figure 31: Heatmap for Number of Rooms/Bedrooms Screen from the PRCS Online Instrument (n=11)

7.8.9. Facilities (Housing Q8)

This question is a grid-formatted question that asks whether the respondent's housing unit at the sample address has specific amenities, such as a flush toilet, a stove or range, a refrigerator, etc.

The respondents read the list of facilities from top to bottom, then answered vertically by clicking "sí" or "no" (mostly "sí") as well in a similar pattern to what was seen in the last round of testing of the stateside ACS (Figure 32 and Figure 33). One respondent for the PRCS testing clicked about halfway across between the question and the response option, perhaps as a method of keeping track of which response paired with which question.

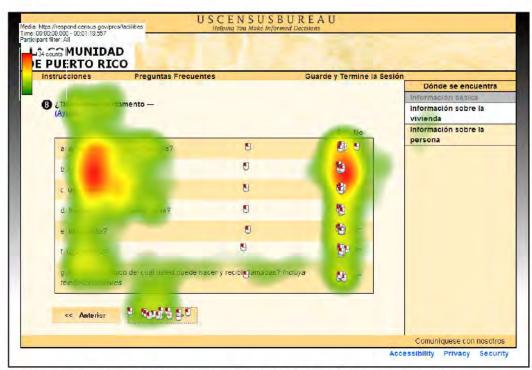


Figure 32: Heatmap for Facilities Screen from the PRCS Online Instrument (n=11)

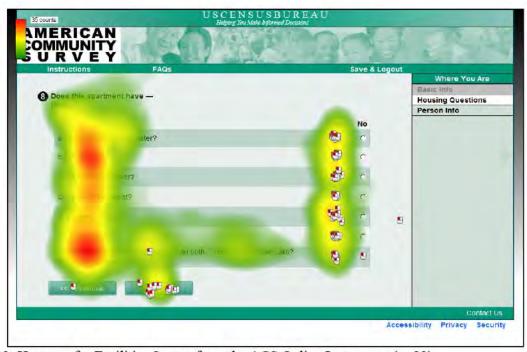


Figure 33: Heatmap for Facilities Screen from the ACS Online Instrument (n=23)

7.8.10. Vehicles (Housing Q9)

This question asked respondents how many vehicles are kept at the housing unit. As noted in the cognitive results section, one respondent mentioned that she parks on the street, since her building does not provide parking. However, no respondents had difficulty using this screen. Figure 34 shows that

respondents read the question and response options and fixated much more on the "siguiente" (next) button than the "anterior" (previous) button.

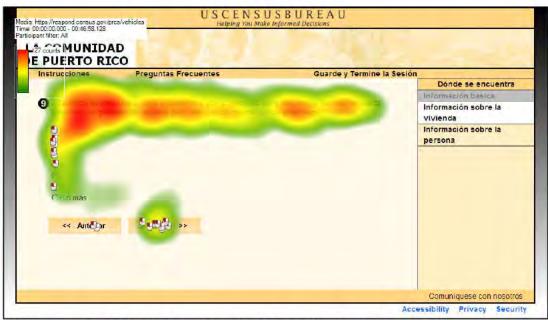


Figure 34: Heatmap for Vehicles Screen from the PRCS Online Instrument (n=11)

7.8.11. Heating Fuel (Housing Q10)

This question asked respondents, "Which fuel is used the most for heating this house?" Many respondents had difficulty answering this question and it was one of the most problematic questions with respect to cognitive issues.

As noted in the cognitive results section, initially several respondents read the question and chose one response option. Upon re-reading it, they chose another option after realizing they had responded incorrectly. Heating fuel is not used in Puerto Rico and the respondents commented on this fact. Although this is an issue with the content of the survey, it also affects the usability of the web instrument when respondents mis-read the question on the first pass and select a response option other than the one that most accurately represents their situation.

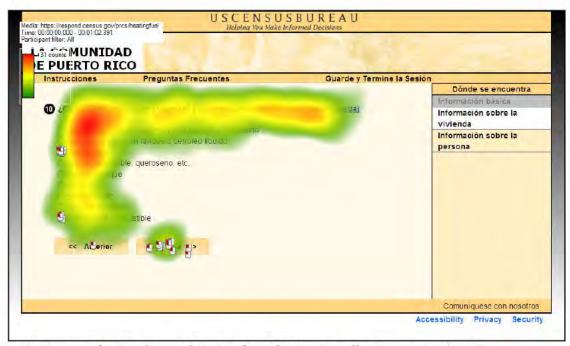


Figure 35: Heatmap for Heating Fuel Screen from the PRCS Online Instrument (n=11)

7.8.12. Electricity (Housing Question Q11a)

This question asks respondents whether anyone in the household pays for electricity. All of the respondents read the question, answered "si" and clicked "siguiente" (*next*) to proceed with the survey (Figure 36). No usability issues were observed with this screen.

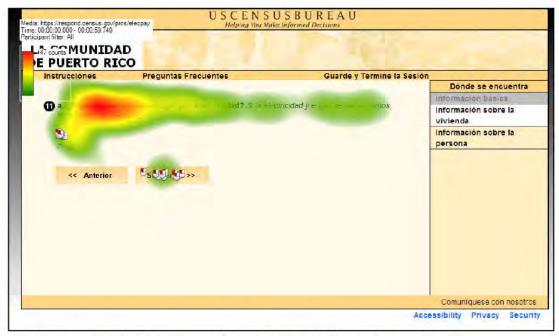


Figure 36: Heatmap for Electricity Screen from the PRCS Online Instrument (n=11)

7.8.13. Electricity Amount

When the respondents selected "sí" to the previous question, they received this follow-up question on the same screen that asked them to specify how much electricity cost. This second part of the question proved to be much more difficult for respondents, and several re-read the question (Figure 37). One tried to click "no" to eliminate the new question. However, all respondents did eventually answer the question and proceeded on with the question survey.



Figure 37: Heatmap for Electricity Amount Screen from the PRCS Online Instrument (n=11)

7.8.14. Gas Use (Housing Question 11b)

This question asks whether the household uses gas. Most people in Puerto Rico do not use gas, so most selected "no" for this question (Figure 38). There were no usability issues observed with this screen, although the question itself was somewhat confusing given that this topic is not often discussed in Puerto Rico.

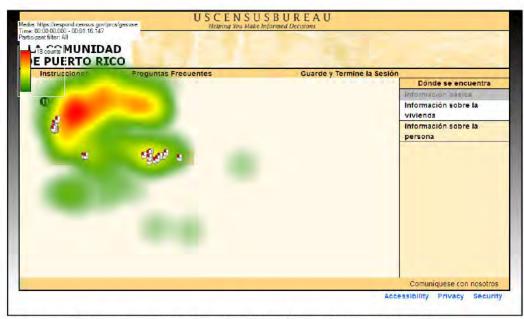


Figure 38: Heatmap for Gas Use Screen from the PRCS Online Instrument (n=11)

7.8.15. Gas Payment (Housing Question 11b)

This question asks whether anyone in the household pays for gas. Since only two people selected "sí" for the previous question, only those two respondents saw this screen. The area around the "ayuda" (help) link was fixated upon a great deal (Figure 39), but the link was not clicked. Although both respondents with eye-tracking data were able to answer this question, they struggled with the wording of the question and one took over a minute to answer it.



Figure 39: Heatmap for Gas Payment Screen from the PRCS Online Instrument (n=2)

7.8.16. Gas Amount (Housing Q11b)

Like the electricity question, the gas payment question also follows with a request to specify the amount paid if the respondent selects "si" as the response. Figure 40 shows that the respondents did not re-read the first part of the question as much as they did for the electricity question, so they may have become used to the format. However, one respondent took one minute and ten seconds to answer the question. If the whole survey should take approximately 45 minutes according to the OMB burden statement, the amount of time this respondent spent on a single question is problematic. In addition, since the survey is long, it could be frustrating for the respondent to spend so much time on a single question.

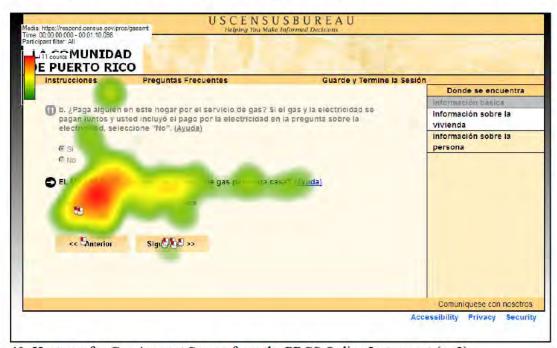


Figure 40: Heatmap for Gas Amount Screen from the PRCS Online Instrument (n=2)

7.8.17. Water and Sewer Payment (Housing Q11c)

This question asked respondents whether anyone in the household pays for water and sewer. There were no usability issues observed with this screen. Participants were able to read the question, select a response, and proceed with the survey (Figure 41).

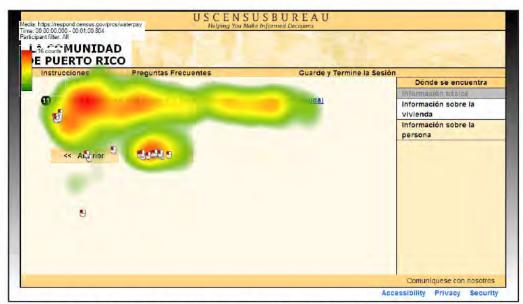


Figure 41: Heatmap for Water and Sewer Payment Screen from the PRCS Online Instrument (n=11)

7.8.18. Water and Sewer Amount (Housing Q11c)

Like the electricity and gas questions, the water and sewer question also asks for an amount if the respondent indicates that someone in the household does pay for this amenity. As noted in the cognitive results section, respondents had difficulty with the question wording because the time frame for reference throughout the PRCS keeps changing; some questions ask for one month's worth of cost, while some ask for the last 12 months. The respondents did not re-read the first part of this question. There were no observed usability issues with this screen.

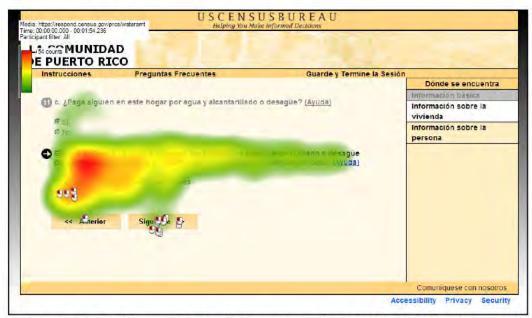


Figure 42: Heatmap for the Water and Sewer Amount Screen from the PRCS Online Instrument (n=11)

7.8.19. Other Fuel Use (Housing Q11d)

This screen asked respondents whether anyone in the household used any other fuels like oil, coal, kerosene, wood, etc. All of the respondents answered "no" to this question and no usability issues were observed with this screen (Figure 43).

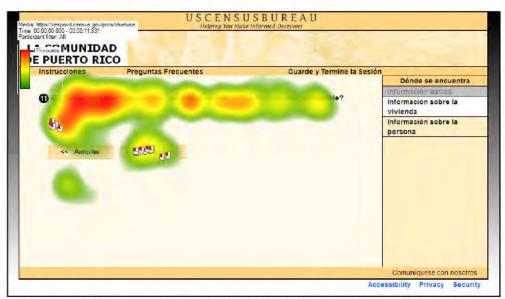


Figure 43: Heatmap for Other Fuel Payment Screen from the PRCS Online Instrument (n=11)

7.8.20. Food Stamps (Housing Question Q12)

This question asked respondents whether anyone received food stamps or a food stamp benefit card in the past 12 months. Participants read this question and all responded and clicked "siguiente" to proceed with the survey (Figure 44). No usability issues were observed for this screen.

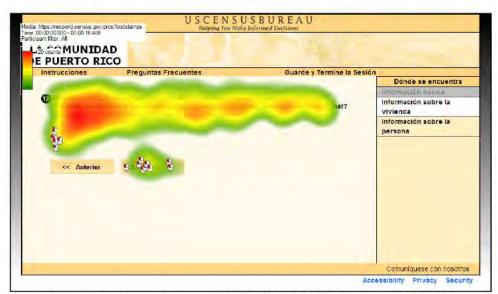


Figure 44: Heatmap for Food Stamps Screen from the PRCS Online Instrument (n=11)

7.8.21. Part of Condo (Housing Q13)

This question asks whether the housing unit is part of a condominium. Two respondents clicked on the "ayuda" (*help*) link for this question (Figure 45), indicating that they were not sure how to answer it and needed help. The definition of what constitutes a condominium also came up during usability testing of the stateside ACS online instrument.

There were no usability issues discovered with the screen itself.

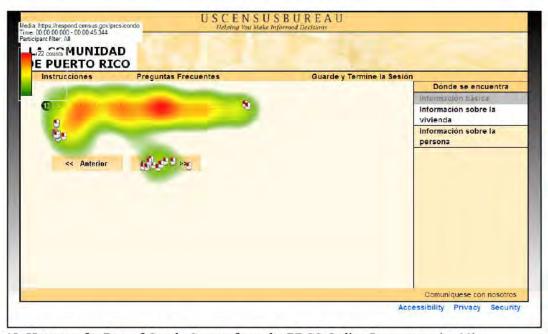


Figure 45: Heatmap for Part of Condo Screen from the PRCS Online Instrument (n=11)

7.8.22. Condo Fee (Housing Q13)

If respondents answer "si" to the previous question, they will get this question, which asks whether there is a condominium fee. All three respondents who received this question read it and selected "si" before clicking "siguiente" (next) to proceed with the survey (Figure 46). No usability issues were observed with this screen.



Figure 46: Heatmap for Condo Fee Screen from the PRCS Online Instrument (n=3)

7.8.23. Condo Fee Amount (Housing Q13)

If respondents indicate that they have a condo fee, the PRCS instrument asks them to specify how much it is. All three respondents who got this question easily read the question, entered the amount, and clicked "siguiente" (next) to proceed with the survey (Figure 47). No usability issues were observed with this screen.



Figure 47: Heatmap for Condo Fee Amount Screen from the PRCS Online Instrument (n=3)

7.8.24. Property Value (Housing Q16)

This question asked respondents how much the property would sell for if it were for sale. Participants read the question and mostly fixated on the entry field and the "siguiente" (next) button. No usability issues were observed for this screen.



Figure 48: Heatmap for Property Value Screen from the PRCS Online Instrument (n=11)

7.8.25. Real Estate Taxes (Housing Q17)

This question asked respondents what the annual real estate taxes are for the property. The heatmap in Figure 49 shows that respondents read the question and selected a response option. Two respondents selected "anterior," (*previous*) which could indicate some confusion (e.g., that they were unsure of a previous response, etc.). There were some glances at the progress indicator at the right-hand corner of the screen as well. There were no usability issues observed with the screen itself.



Figure 49: Heatmap for Real Estate Taxes Screen from the PRCS Online Instrument (n=11)

7.8.26. Property Insurance (Housing Q18)

This question asked respondents what their annual payment for fire, hazard, and flood insurance is on the sample address property. Figure 50 shows that respondents read the question, entered an amount or selected "none," then clicked "siguiente" to continue with the survey. No usability issues were observed with this screen.

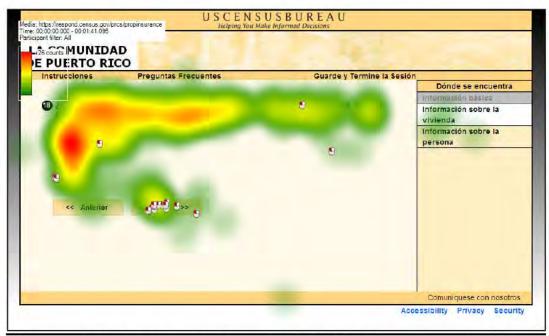


Figure 50: Heatmap for Property Insurance Screen from the PRCS Online Instrument (n=11)

7.8.27. Mortgage (Housing Q19a)

This question asked respondents whether any member of the household had a mortgage, deed of trust, contract to purchase, or similar debt on the sample address property. Figure 51 shows that respondents read the question and selected a response option and then selected the "siguiente" (next) button to proceed with the survey. There were no usability problems observed for this screen.

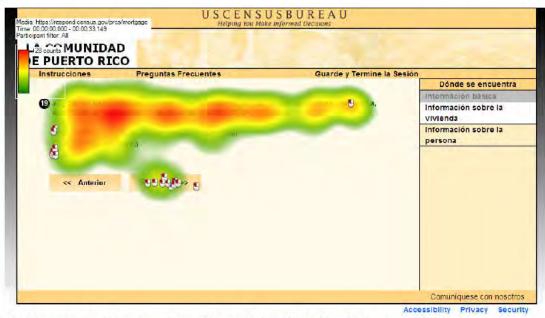


Figure 51: Heatmap for Mortgage Screen from the PRCS Online Instrument (n=10)

7.8.28. Mortgage Amount (Housing Q19b)

This question asks for an amount if the respondent replies "sí" to the previous question. Although question 18 asked for an annual estimate for fire, hazard, and flood insurance, this question asks for a monthly estimate. Again, the inconsistent time frame for reference can be confusing for respondents. The heatmap in Figure 52 shows that the three respondents who received this question read it, entered an amount, and clicked "siguiente" (next) to proceed with the survey. There were no usability issues observed for this screen.

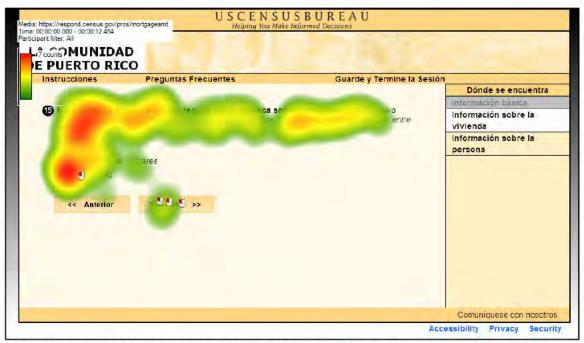


Figure 52: Heatmap for Mortgage Amount Screen from the PRCS Online Instrument (n=3)

7.8.29. Mortgage Real Estate Taxes (Housing Q19c)

This question asked respondents whether the regular monthly real estate mortgage payment included payments for real estate taxes on the property at the sample address. The response options were "Yes, taxes included in mortgage payment" and "No, taxes paid separately or taxes not required." Figure 53 shows that respondents read the question, selected a response, and proceeded with the survey. There were no usability issues observed for this screen.

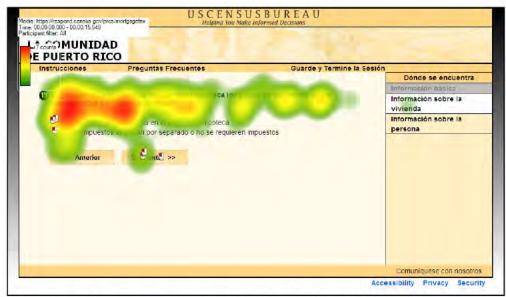


Figure 53: Heatmap for Mortgage Real Estate Taxes Question from the PRCS Online Instrument (n=3)

7.8.30. Second Mortgage Question (Housing Question 20a)

This question asked whether any member of the household had a second mortgage or home equity loan on the sample address property. The respondents read the question, all selected "no," then "siguiente" (*next*) to proceed with the survey (Figure 54). No usability issues were observed for this screen.

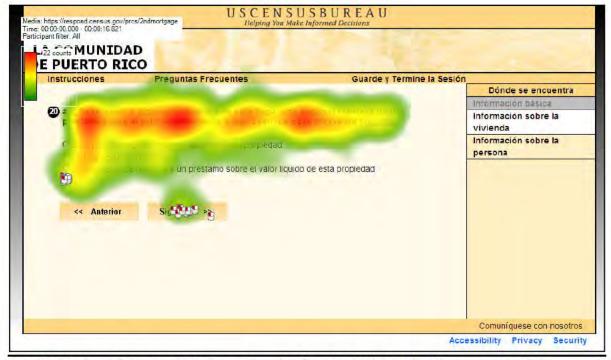


Figure 54: Heatmap for Second Mortgage Question from the PRCS Online Instrument (n=11)

7.9 PERSON OUESTIONS

Heatmaps are only shown for the first person for whom the respondent answered these questions (usually Person 1).

7.9.1. Place of Birth (Person Q7)

This question asks whether the person was born in the United States (at which point a drop-down box becomes active, asking the respondent to specify a state) or outside of the United States.

Several respondents selected the U.S. initially because they considered Puerto Rico part of the U.S. They then proceeded to look for Puerto Rico as part of the drop-down list. Only after searching for Puerto Rico and not finding it there did those respondents then realize that they should choose the second option and write in "Puerto Rico."

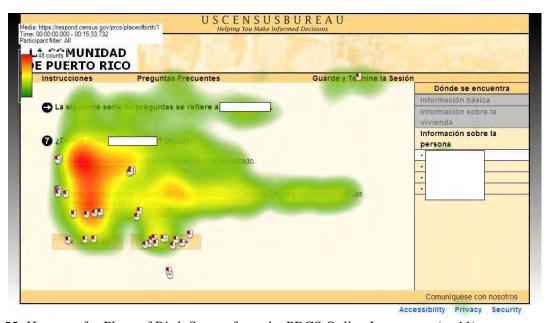


Figure 55: Heatmap for Place of Birth Screen from the PRCS Online Instrument (n=11)

7.9.2. Citizenship (Person Q8)

This question asked respondents whether they were citizens of the United States. All of the respondents were born in Puerto Rico, so the majority of their eye fixations were on the second response category "Yes, born in Puerto Rico, Guam, the Virgin Islands, or Northern Marianas." All of the respondents chose this category and then clicked "siguiente" to continue with the survey (Figure 56). There were no usability issues observed with this screen.



Figure 56: Heatmap for Citizenship Screen from the PRCS Online Instrument (n=10)

7.9.3. Attend School (Person Q10a)

This question asked respondents whether the person attended school or college at any time in the last three months. Figure 57 shows that respondents read the question and response options. There were no usability issues observed for this screen.

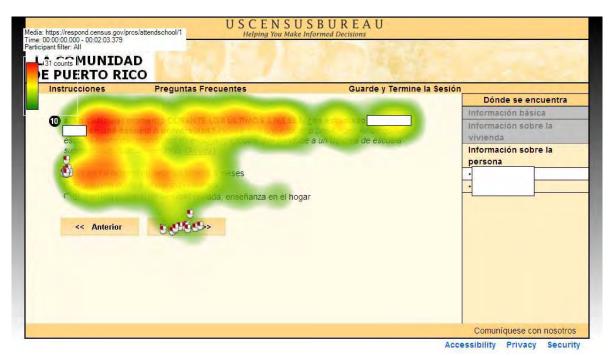


Figure 57: Heatmap for Attend School Screen for the PRCS Online Instrument (n=11)

7.9.4. What Grade (Person Q10b)

If they indicated that the person had attended school in the last three months in the previous question, the respondents would see this question, which asked which grade level that person completed (Figure 58). Both respondents who saw this screen seemed surprised to be getting this question and clicked the "anterior" (*previous*) at least once to go back and look at the previous question.

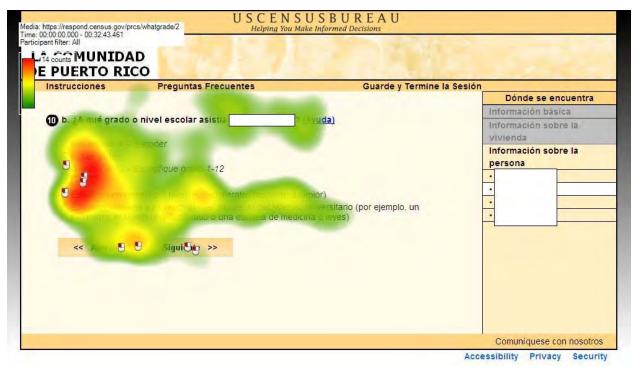


Figure 58: Heatmap for What Grade Screen from the PRCS Online Instrument (n=2)

7.9.5. Educational Attainment (Person Q11)

This question asked the highest-grade level attained by the person (Figure 59). There was some confusion over this question during testing.

As noted in the cognitive results section, during the debriefing, one respondent explained that she was confused and went back and forth between this question and the previous one looking for the closest answer to her son's actual situation. She explained that he finished high school, but went to a one-year certification program, which are common in Puerto Rico. So, he had a degree, but only went to college for one year. She selected the response option, "One year of college, no degree," but pointed out to the experimenters that he did indeed have a degree.

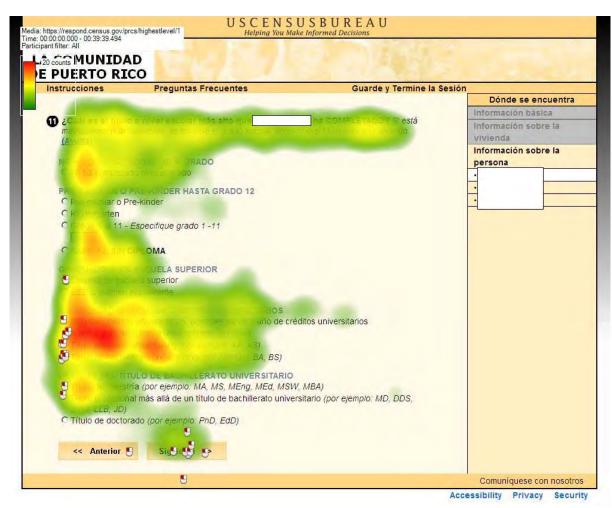


Figure 59: Heatmap for Educational Attainment Screen from the PRCS Online Instrument (n=11)

7.9.6. Field of Degree (Person Q12)

If the respondent indicated that a person received a bachelor's degree or higher in the previous question, they then got this question, which asks the field of focus of that bachelor's degree (Figure 60). There were no usability issues observed for this screen.

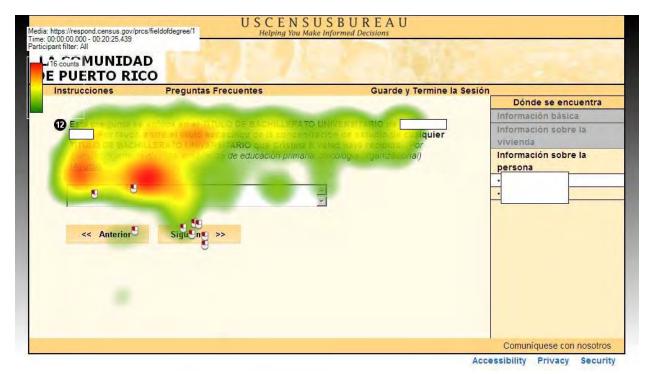


Figure 60: Heatmap for Field of Degree Screen from the PRCS Online Instrument (n=5)

7.9.7. Ancestry (**Person Q13**)

This question asked what the person's ancestry or ethnic origin was. Figure 61 shows that respondents read the question and the list of examples. All of the respondents entered "Puerto Rican."

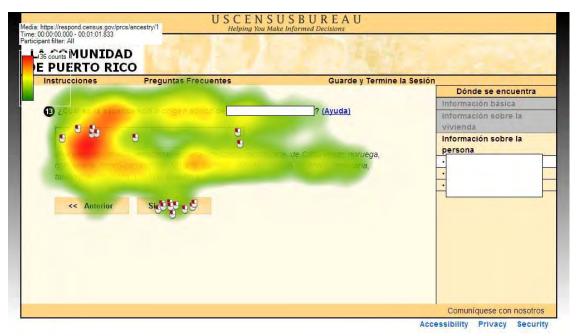


Figure 61: Heatmap for Ancestry Screen from the PRCS Online Instrument (n=11)

7.9.8. Language (Person Q14a)

This question asks whether the person speaks a language other than English at home. As noted in the cognitive interview results section, there is a potential issue with this question. Several respondents read the question quickly and marked an answer, then re-read it (Figure 62) and changed their answer; some respondents remarked that they thought the question was whether the person speaks English at home. Most of the respondents were English-Spanish bilingual, so it did not change their answer, but many respondents to the PRCS might not speak English.

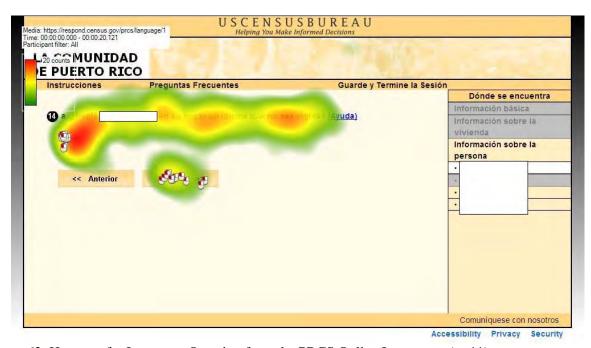


Figure 62: Heatmap for Language Question from the PRCS Online Instrument (n=11)

7.9.9. Specify Language (Person Q14b)

If the respondent indicates that the person spoke another language at home besides English, they would see this question asking him or her to specify the language spoken (Figure 63). All of the respondents entered "español" without any issues. There were no usability issues observed for this screen, other than those listed for the previous screen.

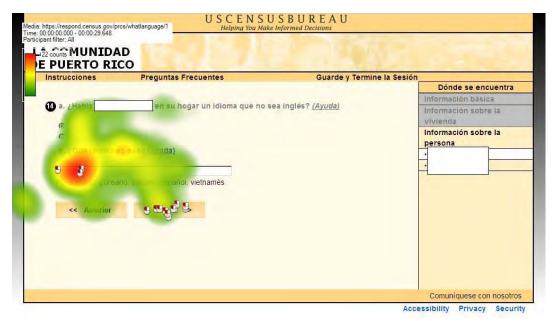


Figure 63: Heatmap for Specify Language Screen from the PRCS Online Instrument (n=11)

7.9.10. English Proficiency (Person Q14c)

This question asked how well the person spoke English (Figure 64). There were no usability issues observed for this screen.

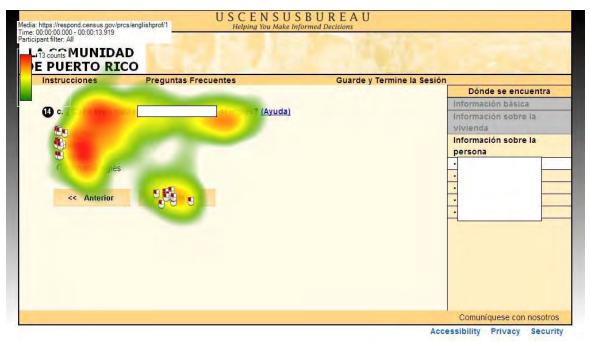


Figure 64: Heatmap for English Proficiency Screen from the PRCS Online Instrument (n=10)

7.9.11. Residence One Year Ago (Person Q15)

This question asked where the person lived one year ago (Figure 65). There were no usability issues observed for this screen.

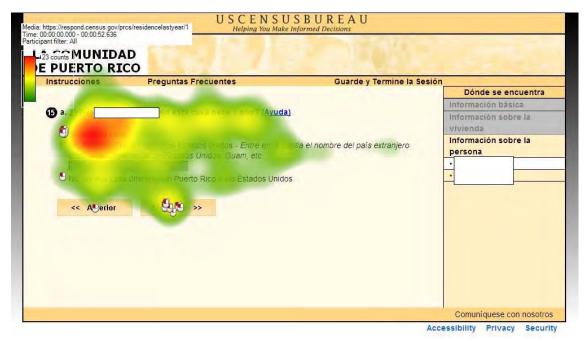


Figure 65: Heatmap for Residence One Year Ago Screen from the PRCS Online Instrument (n=10)

7.9.12. Specify Other Address

If the respondent indicated that the person lived at a different address in the U.S. or Puerto Rico, he or she would get this question (Figure 66). There were no usability issues observed for this screen.

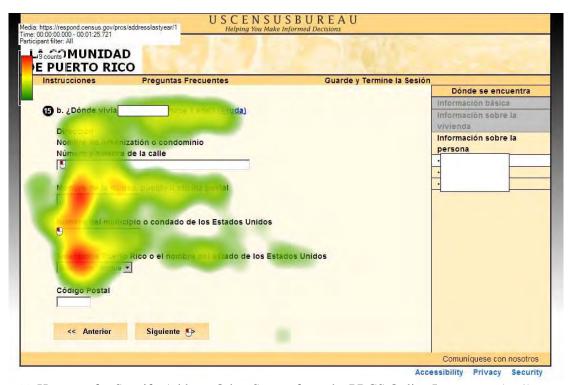


Figure 66: Heatmap for Specify Address Other Screen from the PRCS Online Instrument (n=1)

7.9.13. Insurance (Person Q16)

This question was another grid-formatted question that asked respondents to indicate whether or not a person was covered by each kind of insurance (Figure 67). As with the stateside English ACS usability testing, respondents tended to answer "sí" (or *yes* if taking it in English) for the types of insurance that applied to them and failed to answer "no" to those that did not apply to them.

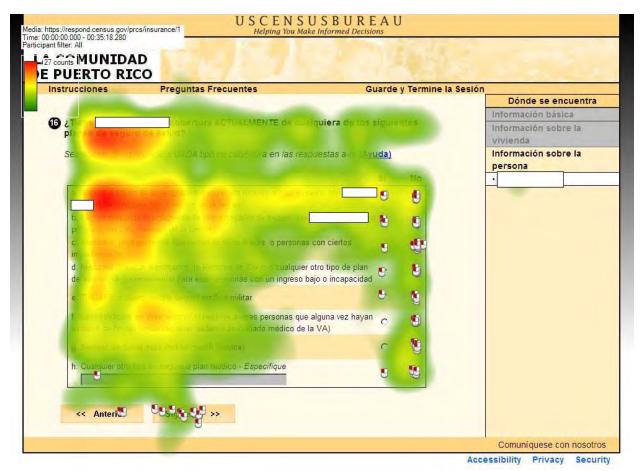


Figure 67: Heatmap for Insurance Question from the PRCS Online Instrument (n=10)

7.9.14. Deaf (Person Q17a)

This question asked respondents whether the person was deaf or had serious difficulty hearing (Figure 68). There were no usability issues observed for this screen.

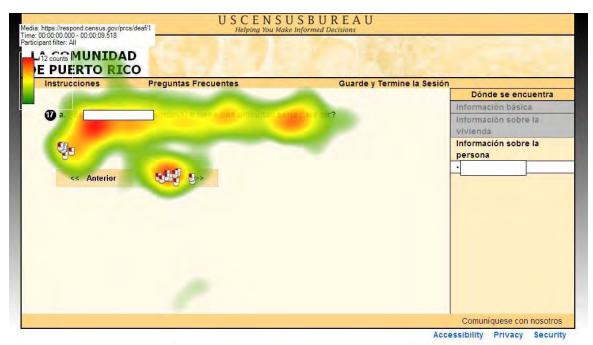


Figure 68: Heatmap for Deaf Screen from the PRCS Online Instrument (n=11)

7.9.15. Blind (Person Q17b)

This question asked respondents whether the person was blind or had serious difficulty seeing even when wearing glasses (Figure 69). There were no usability issues observed for this screen.

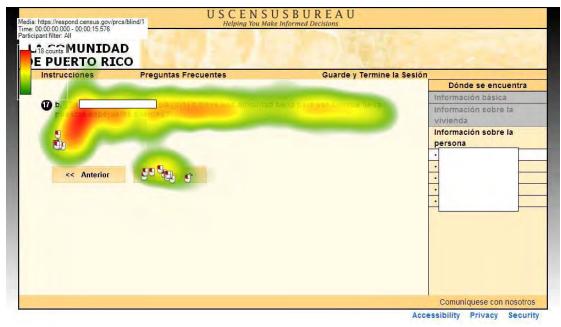


Figure 69: Heatmap for Blind Screen from the PRCS Online Instrument (n=11)

7.9.16. Difficulty Concentrating (Person Q18a)

This question asked whether the person had serious difficulty concentrating, remembering, or making decisions because of physical, mental or emotional condition (Figure 70). There were no usability issues observed for this screen.

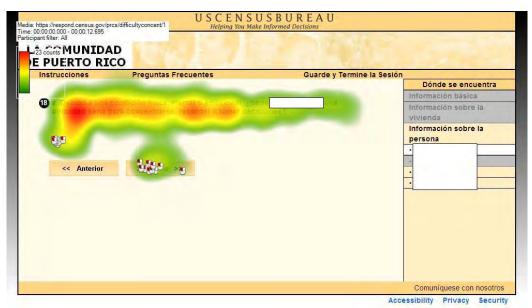


Figure 70: Heatmap for Difficulty Concentrating Screen from the PRCS Online Instrument (n=10)

7.9.17. Difficulty Walking or Climbing Stairs (Person Q18b)

This question asked whether the person had serious difficulty walking or climbing stairs (Figure 71). There were no usability issues observed with this screen.

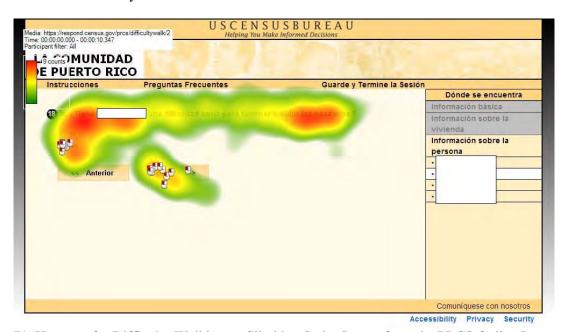


Figure 71: Heatmap for Difficulty Walking or Climbing Stairs Screen from the PRCS Online Instrument (n=10)

7.9.18. Difficulty Dressing or Bathing (Person Q18c)

This question asked whether the person had difficulty dressing or bathing (Figure 72). There were no usability issues observed with this screen.

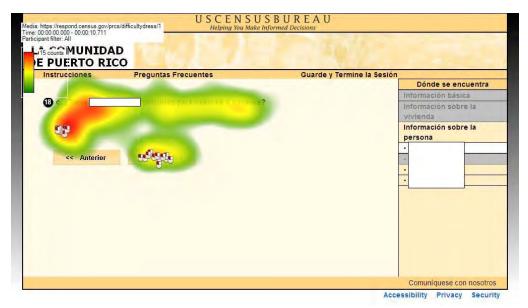


Figure 72: Heatmap for Difficulty Dressing or Bathing Screen from the PRCS Online Instrument (n=10)

7.9.19. Difficulty with Errands (Person Q19)

This question asked whether the person had difficulty doing errands alone such as visiting a doctor's office or shopping because of a physical, mental, or emotional condition (Figure 73). There were no usability issues observed with this screen.

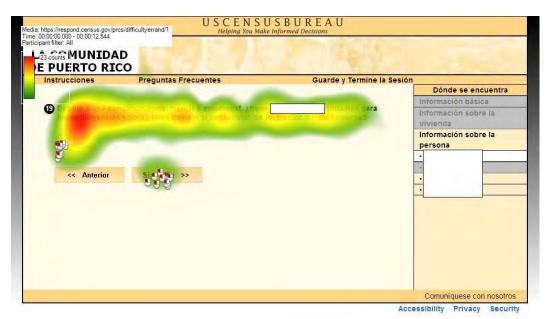


Figure 73: Heatmap for Difficulty with Errands Screen from the PRCS Online Instrument (n=11)

7.9.20. Marital Status (Person Q20)

This question asked the person's marital status (Figure 74). There were no usability issues observed for this screen.

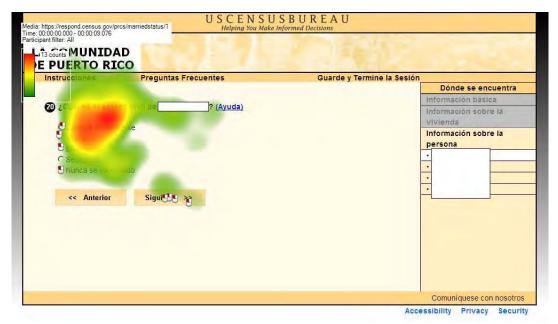


Figure 74: Heatmap for Marital Status Screen from the PRCS Online Instrument (n=4)

7.9.21. Married in the Last 12 Months (Person Q21a)

This question asked whether the person was married in the last 12 months (Figure 75). There were no usability issues observed for this screen.

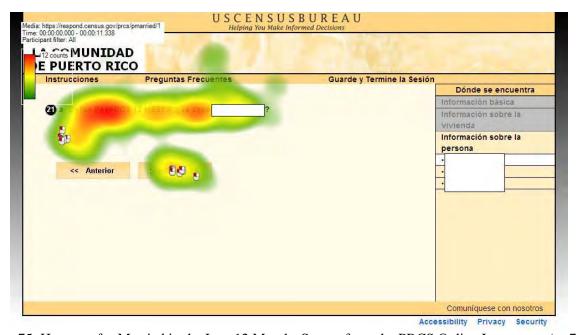


Figure 75: Heatmap for Married in the Last 12 Months Screen from the PRCS Online Instrument (n=7)

7.9.22. Widow (Person Q21b)

This question asks whether the person became a widow in the last 12 months (Figure 76). There were no usability issues observed for this screen.

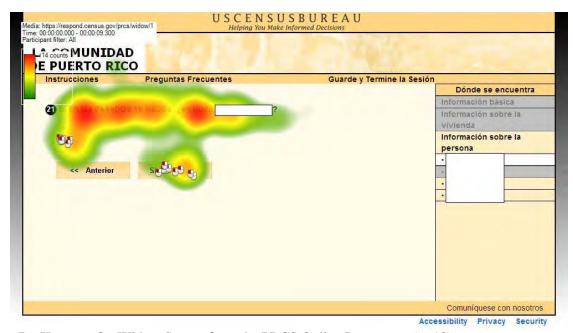


Figure 76: Heatmap for Widow Screen from the PRCS Online Instrument (n=10)

7.9.23. Divorced (Person Q 21c)

This question asked whether the person got divorced in the last 12 months (Figure 77). There were no usability issues observed for this screen.

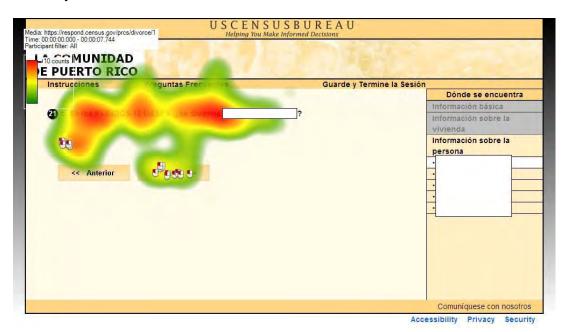


Figure 77: Heatmap for Divorced Screen from the PRCS Online Instrument (n=10)

7.9.24. Number of Marriages (Person Q22)

The question asked the respondent to indicate the number of times the person had been married (one, two, or three or more times: Figure 78). There were no usability issues observed for this screen.

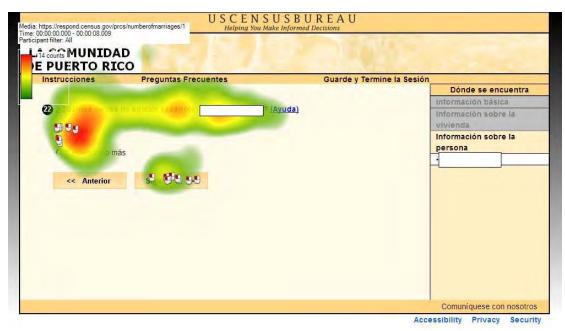


Figure 78: Heatmap for Number of Marriages Screen from the PRCS Online Instrument (n=10)

7.9.25. Year Last Married (Person Q23)

This question asked what year the person last got married (Figure 79). There were no usability issues observed for this screen.

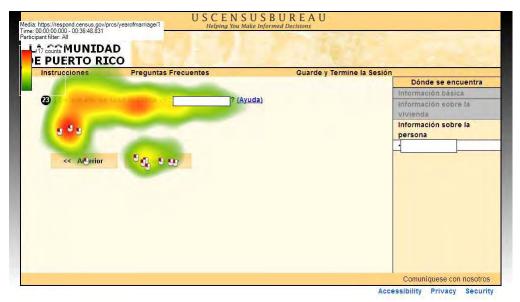


Figure 79: Heatmap for Year Last Married Screen from the PRCS Online Instrument (n=7)

7.9.26. Birth (Person Q24)

The respondent got this question, which asked whether the person gave birth in the past 12 months, for all females in the household (Figure 80). There were no usability issues observed for this screen.

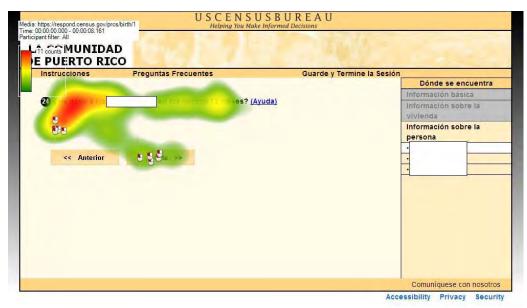


Figure 80: Heatmap for Birth Screen from the PRCS Online Instrument (n=5)

7.9.27. Grandchildren under 18 Living in Household (Person Q25a)

This question asked whether older adults had any grandchildren under the age of 18 living in the household (Figure 81). There were no usability issues observed for this screen.

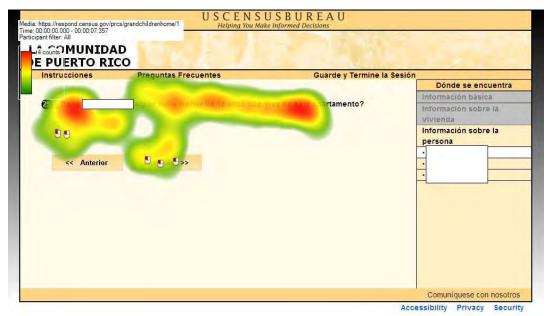


Figure 81: Heatmap for Grandchildren under 18 Living in Household Screen from the PRCS Online Instrument (n=3)

7.9.28. Veteran Status (Person Q26)

This question asked whether the person ever served on active duty in the U.S. armed forces, military reserves, or National Guard (Figure 82). There were no usability issues observed for this screen.

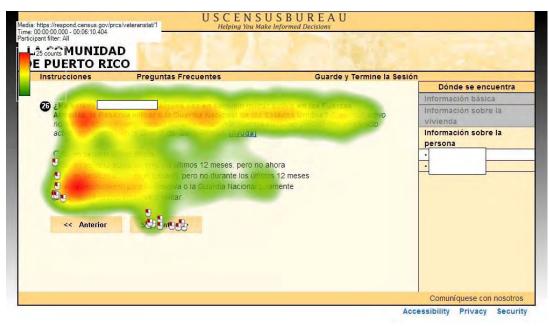


Figure 82: Heatmap for Veteran Status Screen from the PRCS Online Instrument (n=11)

7.9.29. When Served (Person Q27)

If the respondent indicated in the previous question that person served on active military duty for the U.S., then this question will ask the respondent to specify when the duty was served (Figure 83). There were no usability issues observed for this screen.

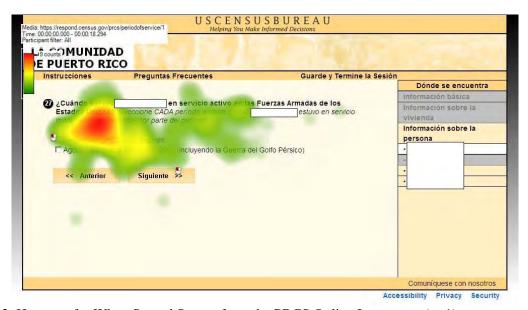


Figure 83: Heatmap for When Served Screen from the PRCS Online Instrument (n=1)

7.9.30. VA Disability Status (Person Q28a)

This question asked whether the person had a VA service-connected disability rating (Figure 84). This question was asked about people with a response other than "No, never served in the military" for the Veteran status question. This screen violates Internet web standards by not defining what "VA" means (i.e., Veteran's Affairs). The acronym could be quite confusing if a potential respondent to the PRCS is unfamiliar with the VA and does not speak English.

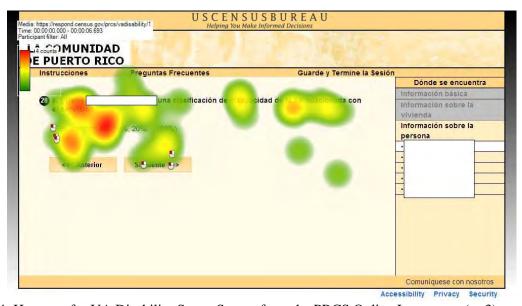


Figure 84: Heatmap for VA Disability Status Screen from the PRCS Online Instrument (n=3)

7.9.31. Work Last Week (Person Q29a)

This question asked whether the person worked for pay at a job or business last week (Figure 85). One respondent clicked the "ayuda" (*help*) link twice for this question and read the first half of the content fairly thoroughly (Figure 86). As discussed in the cognitive results section, the nature of "work" was confusing for some respondents, and one respondent pointed out that the question did not specify whether the work had to be performed outside of the home or not.

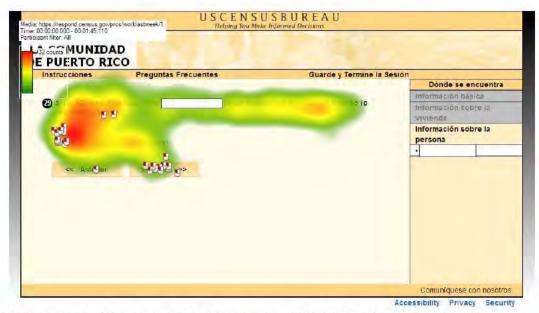


Figure 85: Heatmap for Work Last Week Screen for the PRCS Online Instrument (n=11)



Figure 86: Heatmap for Help Text for the Work Last Week Screen from the PRCS Online Instrument (n=1, but the respondent clicked this link twice)

7.9.32. Any Work (Person Q29b)

If the respondent indicated that the person did not work last week, he or she would see this question next, which asked if the person did any work for pay, even as little as one hour (Figure 87). This question had similar issues to the previous one about the number of hours worked last week (i.e., what

constitutes as work). One respondent clicked the "anterior" (*previous*) button to look at the previous screen and one clicked on the "help" link.

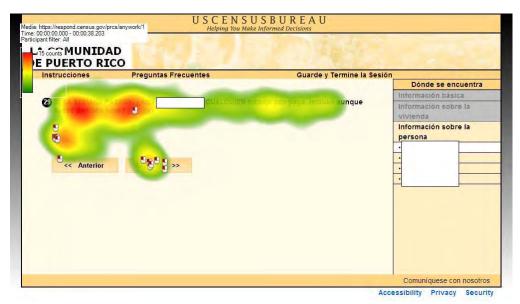


Figure 87: Heatmap for Any Work Screen from the PRCS Online Instrument (n=8)

7.9.33. Work Address Last Week (Person 30)

If the respondent indicated that the person worked last week, he or she would get this question asking for that person's work address last week (Figure 88). This was a difficult question for both the ACS and PRCS respondents because they could not look up this information for their household members during the session as they could at home. However, there were no usability issues observed with the screen itself.

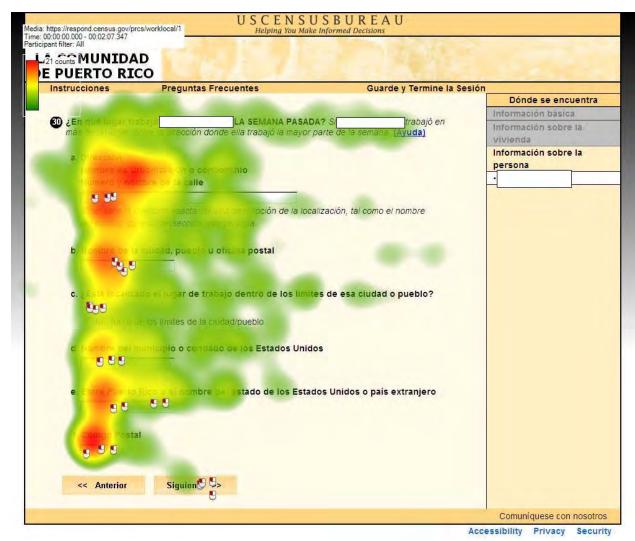


Figure 88: Heatmap for Work Address Last Week Screen from the PRCS Online Instrument (n=4)

7.9.34. Transport to Work Last Week (Person Q31)

This question asks how the person usually got to work last week (Figure 89). This instrument does not allow respondents to mark more than one response; sometimes commuters take a car to a metro rail station, etc. Although this issue did not come up during this round of testing, it could be a potential issue in the field and it did come up during ACS testing.

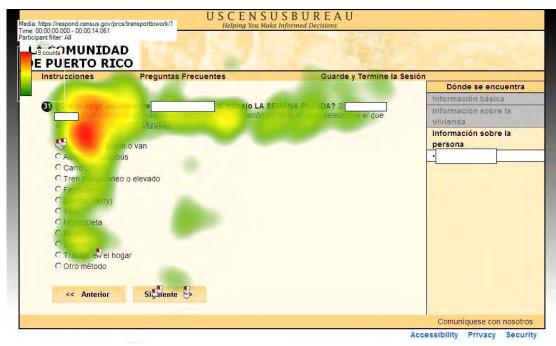


Figure 89: Heatmap for Transport to Work Screen from the PRCS Online Instrument (n=4)

7.9.35. Number of Riders (Person Q32)

If the respondent indicates that the person drove to work, he or she would get this question, which asked how many people rode to work in the car, truck or van, including that person, last week (Figure 90). There were no usability problems observed with this screen.

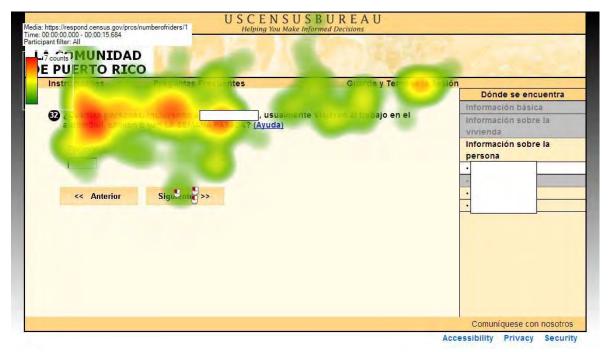


Figure 90: Heatmap for Number of Riders Screen from the PRCS Online Instrument (n=3)

7.9.36. Time Left for Work (Person Q33)

This question asks for the hour and minute that the person usually left for work last week (Figure 91) as well as whether it was in the AM or PM. There were no usability problems observed with this screen.

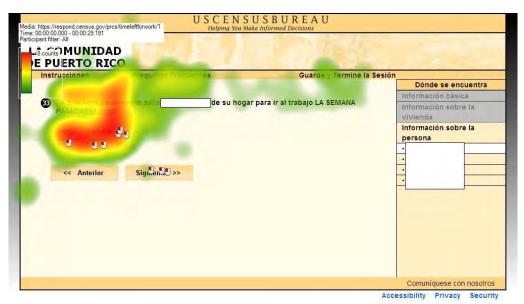


Figure 91: Heatmap for Time Left for Work Screen from the PRCS Online Instrument (n=3)

7.9.37. Minutes to Work (Person Q34)

This question asks how many minutes it usually took the person to get from home to work last week (Figure 92). There were no usability problems observed with this screen.

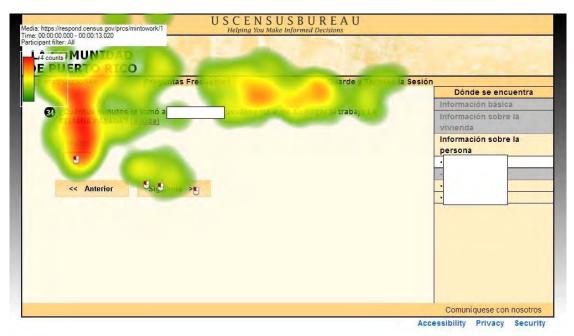


Figure 92: Heatmap for Minutes to Work Screen from PRCS Online Instrument (n=3)

7.9.38 Layoff (Person Q35a)

This question asked whether the person was on layoff from a job last week (Figure 93). There were no usability problems observed with this screen.

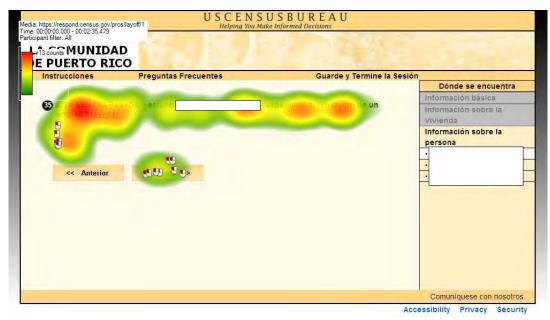


Figure 93: Heatmap for Layoff Screen from the PRCS Online Instrument (n=5)

7.9.39. Temporarily Absent From Job (Person Q35b)

This question asks whether the person was temporarily absent from a job or business last week (Figure 94). There were no usability problems observed with this screen.

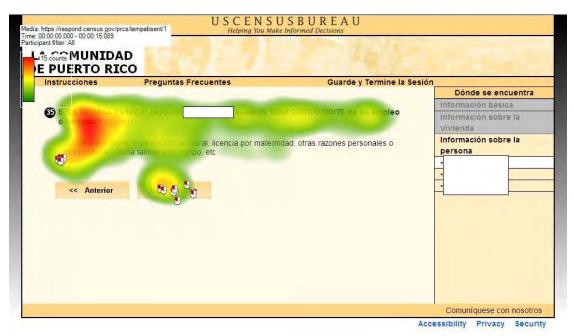


Figure 94: Heatmap for Temporarily Absent from a Job Screen from the PRCS Online Instrument (n=7)

7.9.40. Active Look for Work (Person Q36)

This question asked whether the person had been actively looking for work during the past four weeks (Figure 95). There were no usability problems observed with this screen.

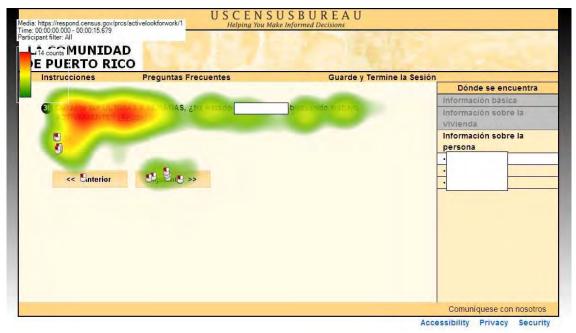


Figure 95: Heatmap for Active Look for Work Screen from the PRCS Online Instrument (n=7)

7.9.41. Could Work (Person Q37)

This question asked whether the person could have started a job if offered one, or returned to work if recalled (Figure 96). There were no usability problems observed with this screen.

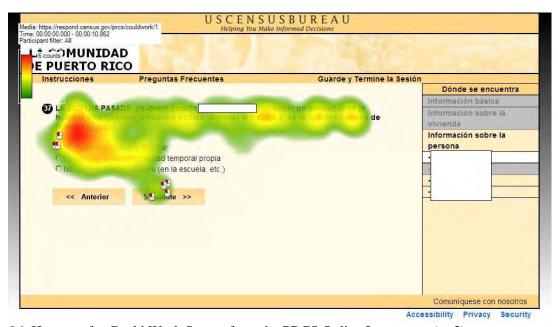


Figure 96: Heatmap for Could Work Screen from the PRCS Online Instrument (n=3)

7.9.42. Last Worked (Person Q38)

This question asked when the person last worked, even for a few days (Figure 97). There were no usability problems observed with this screen.

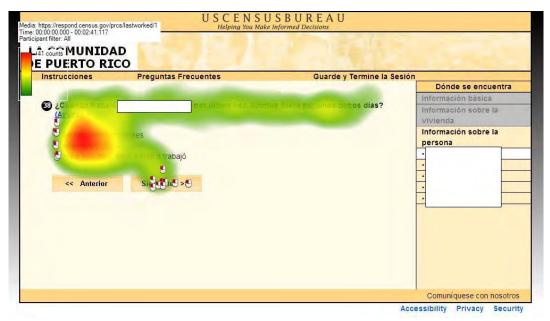


Figure 97: Heatmap for Last Worked Screen from the PRCS Online Instrument (n=7)

7.9.43. Fifty or More Weeks (Person Q39a)

This question asked whether the person worked 50 or more weeks during the past 12 months (Figure 98). There were no usability problems observed with this screen.

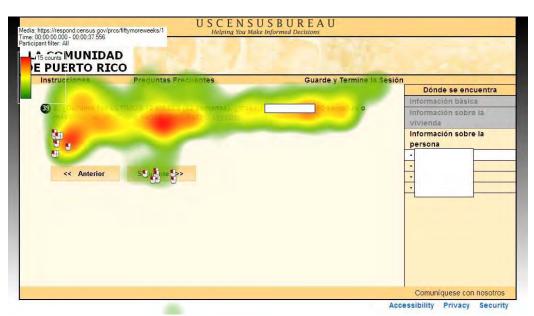


Figure 98: Heatmap for Fifty or More Weeks Question from the PRCS Online Instrument (n=7)

7.9.44. Weeks Worked (Person O39b)

This question asked how many weeks the person worked, even for a few hours, including paid vacation, paid sick leave, and military service (Figure 99). This question gives no reference period (e.g., one month, six months, 50 weeks, one year, etc.). This could potentially cause serious comprehension problems given the changing series of reference periods in this survey.

The heatmap in Figure 99 shows that respondents looked and clicked around the screen, possibly looking for more information about how to answer this question.

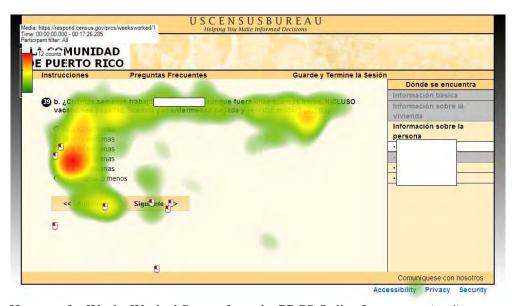


Figure 99: Heatmap for Weeks Worked Screen from the PRCS Online Instrument (n=4)

7.9.45. Hours Usually Worked (Person Q40)

This question asked how many hours the person worked each week in the weeks worked during the past 12 months (Figure 100). There were no usability problems observed with this screen.

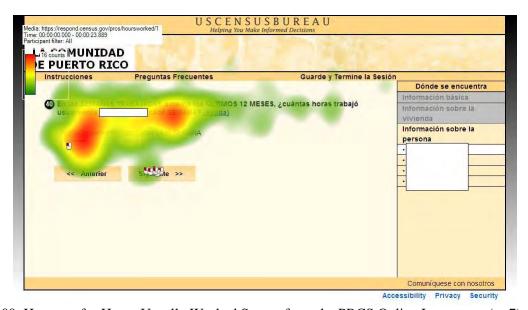


Figure 100: Heatmap for Hours Usually Worked Screen from the PRCS Online Instrument (n=7)

7.9.46. Business Category (Person Q41)

This question asked what kind of business for which the person worked (Figure 101). There were no usability problems observed with this screen.

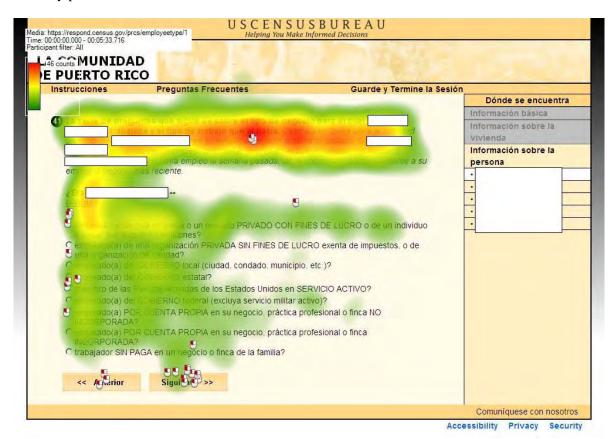


Figure 101: Heatmap for Business Category Screen from the PRCS Online Instrument (n=9)

7.9.47. Military Employer (Person Q42)

If the respondent indicated that the person had a military employer in the previous question, they would then see this one, which asks which branch of the armed forces that he or she works for (Figure 102). There were no usability problems observed with this screen.

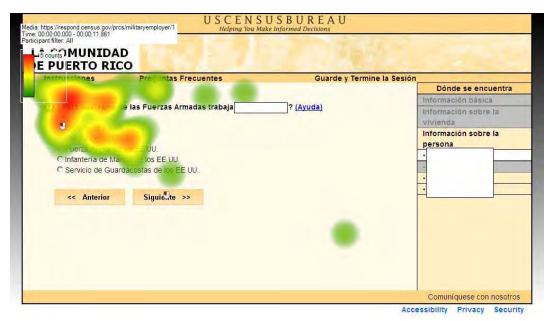


Figure 102: Heatmap for Military Employer Screen from the PRCS Online Instrument (n=1)

7.9.48. Type of Business (Person Q43)

This question asked the respondent to specify the kind of business for which the person worked (Figure 103). There were no usability issues observed for this screen.

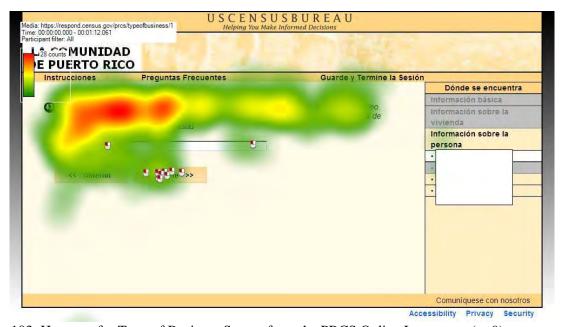


Figure 103: Heatmap for Type of Business Screen from the PRCS Online Instrument (n=9)

7.9.49. Business Class (Person Q44)

This question asked whether the business for which the person worked was mainly concerned with manufacturing, wholesale trade, retail trade, or other (e.g., agriculture, construction, service, government, etc.) (Figure 104). There were no usability issues observed for this screen.

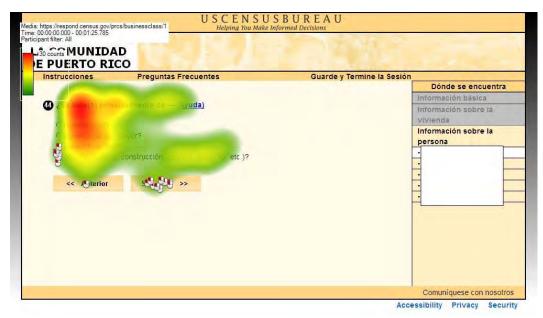


Figure 104: Heatmap for Business Class Screen from the PRCS Online Instrument (n=10)

7.9.50. Type of Work (Person Q45)

This question asked what kind of work the person was doing at his or her job (Figure 105). There were no usability issues observed for this screen.

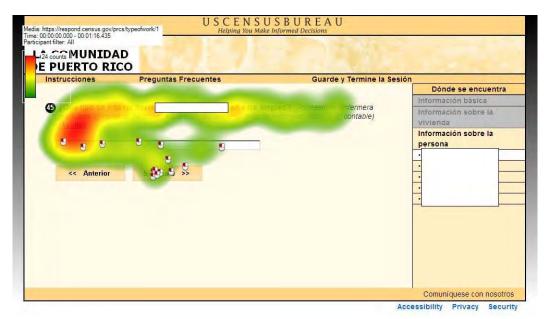


Figure 105: Heatmap for Type of Work Screen from the PRCS Online Instrument (n=9)

7.9.51. Duties (Person Q46)

This question asks what the person's most important activities or duties were at his or her job (Figure 106). There were no usability issues observed for this screen.

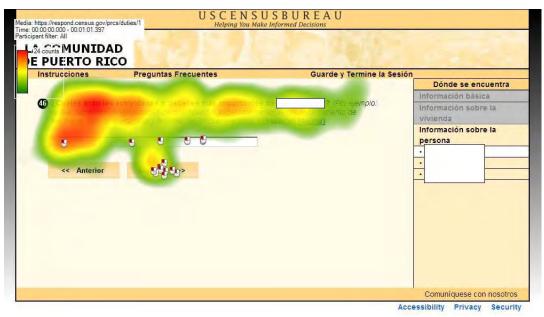


Figure 106: Heatmap for Duties Screen from the PRCS Online Instrument (n=9)

7.10 INCOME QUESTIONS

These questions, overall, were very confusing to respondents. Several navigated back and forth among them because later questions were more specific than earlier ones. Others were unsure that answers to previous questions were correct.

7.10.1. Wages (Person Q47a)

After a dense chunk of precursory text about the series of questions, this question asks whether the person received any wages, salary, commission, bonuses, or tips during the past 12 months. Figure 107 shows that respondents read the entire block of instructions and the question, along with the response options. There were some fixations away from the screen content at the bottom of the page, which could indicate that respondents were looking for more information there.

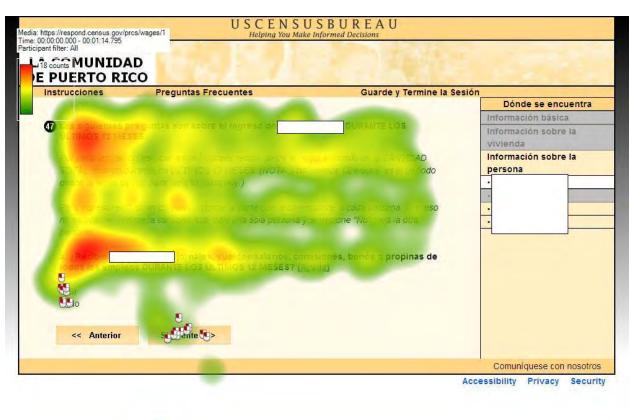


Figure 107: Heatmap for Wages Screen from the PRCS Online Instrument (n=9)

7.10.2. Wages Amount (Person Q47a)

If the respondent answered "sî" (yes) to the previous question, he or she would then be asked to specify an amount in this question. Two respondents went back and changed their answer to "no" when they got this screen. Their mouse clicks on the "anterior" button can be seen in Figure 108. This could be indicative of unwillingness to report income or confusion regarding the types of income to be included, an issue mentioned by several respondents' and discussed in the cognitive results section.

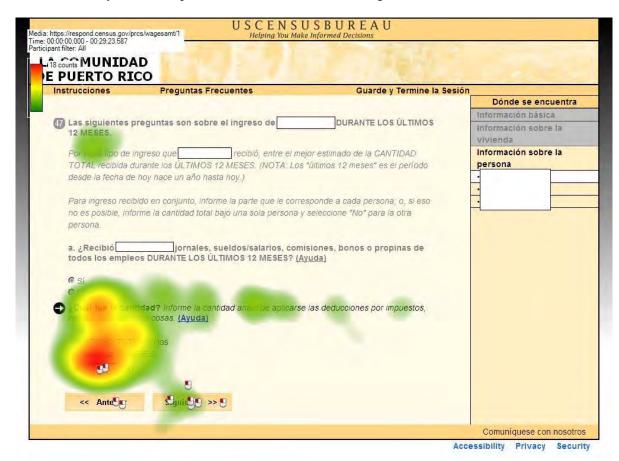


Figure 108: Heatmap for Wages Amount Screen from the PRCS Online Instrument (n=7)

7.10.3. Self-Employment Income (Person Q47b)

This question asks whether the person received any self-employment income from his or her own nonfarm businesses or farm businesses, including proprietorships and partnerships, during the past 12 months. One respondent went back and changed some of his or her answers for previous questions after reading this question. The click on the "anterior" button can be seen in Figure 109.

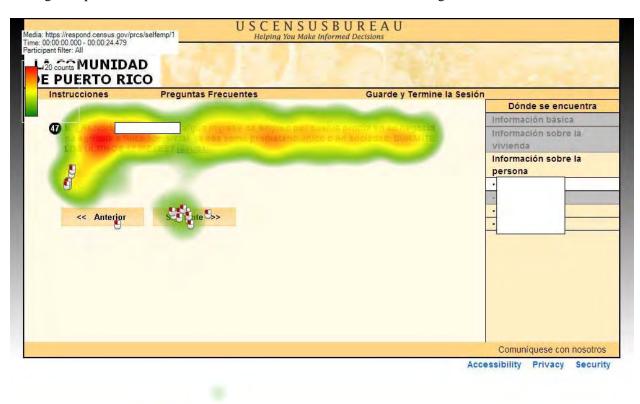


Figure 109: Heatmap for Self-Employment Screen from the PRCS Online Instrument (n=9)

7.10.4. Self-Employment Amount (Person Q47b)

If the respondent indicates that the person did earn some self-employment income, then the instrument will then ask him or her to specify the amount (Figure 110). There were no usability issues observed for this screen.



Figure 110: Heatmap for Self-Employment Amount Screen from PRCS Online Instrument (n=2)

7.10.5. Interest (Person Q47c)

This question asks whether the person received any interest, dividends, net rental income, royalty income, or income from estates and trusts during the past 12 months (Figure 111). There were no usability issues observed for this screen.

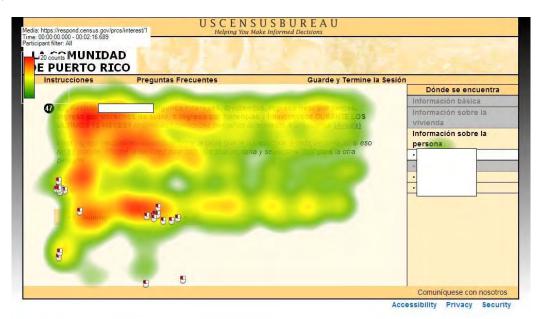


Figure 111: Heatmap for Interest Screen from the PRCS Online Instrument (n=10)

7.10.6. Social Security (Person Q47d)

This question asks whether the person received any Social Security or Railroad Retirement benefits during the last 12 months (Figure 112). There were no usability issues observed for this screen.

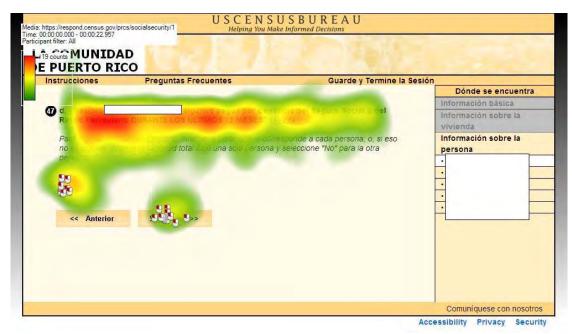


Figure 112: Heatmap for Social Security Screen from the PRCS Online Instrument (n=10)

7.10.7. Social Security Amount (Person 47d)

If the respondent answers "sí" to the Social Security question, he or she would then be asked to specify an amount (Figure 113). There were no usability issues observed for this screen.

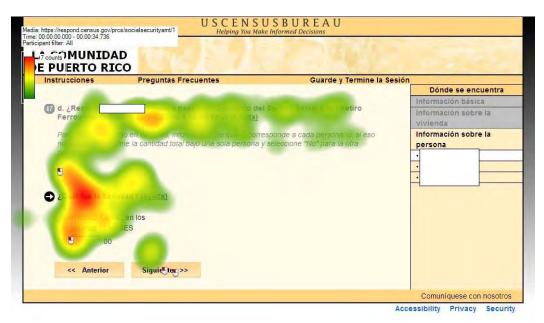


Figure 113: Heatmap for Social Security Amount Screen from the PRCS Online Instrument (n=2)

7.10.8. Supplemental Security Income (Person Q47e)

This question asks whether the person received any Supplemental Security Income payments in the last 12 months (Figure 114). One respondent clicked on "ayuda" (*help*) for this question.

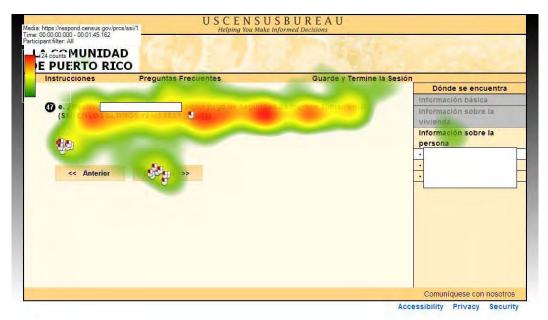


Figure 114: Heatmap for Supplemental Security Insurance Screen from the PRCS Online Instrument (n=11)

7.10.9. Public Assistance (Person Q47f)

This question asked whether the person received any public assistance or welfare payments from the state or local welfare office during the past 12 months (Figure 115). There were no usability issues observed for this screen.

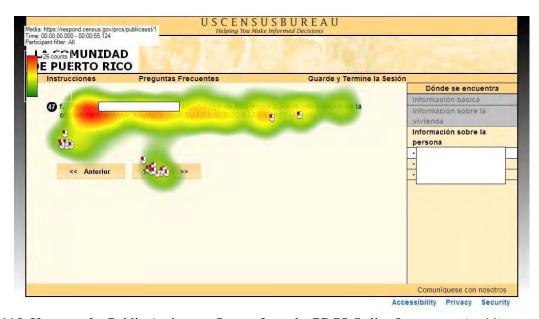


Figure 115: Heatmap for Public Assistance Screen from the PRCS Online Instrument (n=11)

7.10.10. Public Assistance Amount (Person Q47f)

If "si" is selected for the previous question, this question will be next (Figure 116). There were no usability issues observed for this screen.



Figure 116: Heatmap for Public Assistance Amount Screen from the PRCS Online Instrument (n=1)

7.10.11. Retirement (Person Q47g)

This question asks whether the person received any retirement, survivor, or disability pensions during the past 12 months (Figure 117). There were no usability issues observed for this screen.

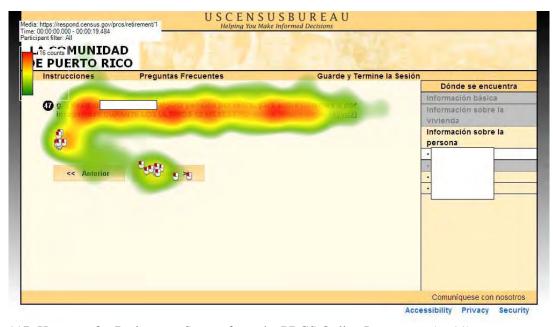


Figure 117: Heatmap for Retirement Screen from the PRCS Online Instrument (n=11)

7.10.12. Retirement Amount (Person Q47g)

If "sî" was selected for the previous question, then the PRCS instrument would then ask the respondent to specify an amount (Figure 118). There were no usability issues observed for this screen.

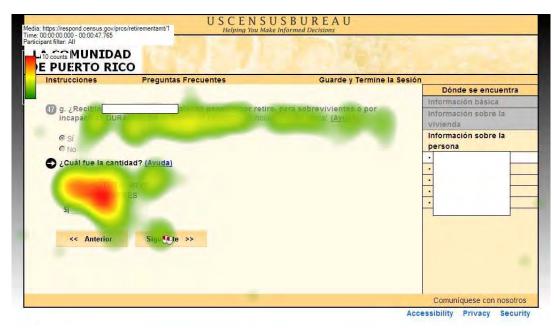


Figure 118: Heatmap for Retirement Amount Screen from the PRCS Online Instrument (n=2)

7.10.13. Other Income (Person Q47h)

This question asks whether the person received any other income on a regular basis, such as VA payments, unemployment compensation, child support, or alimony during the past 12 months (Figure 119). There were no usability issues observed for this screen.

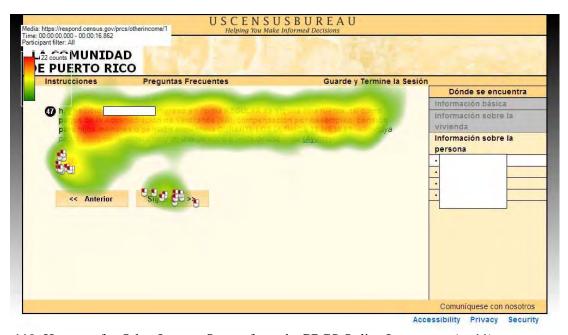


Figure 119: Heatmap for Other Income Screen from the PRCS Online Instrument (n=11)

7.10.14. Other Income Amount (Person Q47h)

If "sí" is selected for the previous question, then the PRCS instrument would then ask the respondent to specify an amount (Figure 120). There were no usability issues observed for this screen.



Figure 120: Heatmap for Other Income Amount Screen from the PRCS Online Instrument (n=3)

7.10.15. Verify Income (Person Q48)

This question totals the amounts from all of the income questions and asks the respondents to verify that this amount was correct. The largest red area in the heatmap in Figure 121 is right over the area where the estimate and "is this correct" would be located, and this area would vary based on the length of the name fill. There were no specific usability issues observed for this screen.

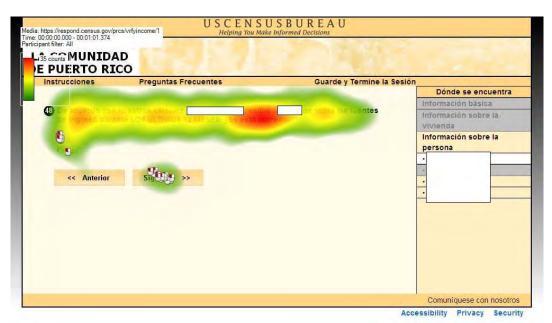


Figure 121: Heatmap for Verify Income Screen from the PRCS Online Instrument (n=11)

7.10.16. Pick Next Person

After the Person questions were completed for each household member, respondents are able to select the next person for which they can answer the PRCS questions (Figure 122). Some respondents went back and forth on their selection and a few clicked the "anterior" button before making a choice. Based on respondents' comments, there may have been some hesitation and lack of confidence about answering such detailed questions about other members of their households. There were also some glances near the "privacy" link at the bottom of the page, so there may have been some concerns about the privacy of others' personal information as well.

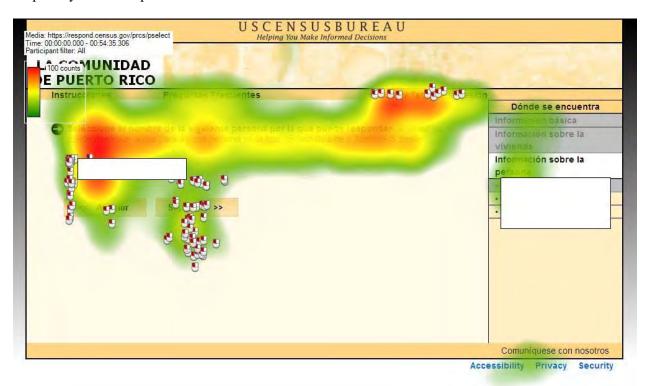


Figure 122: Heatmap for Pick Next Person Screen from the PRCS Online Instrument (n=10)

7.11 PRESUMMARY SCREEN

This screen allows respondents to either submit their data directly from the screen or review it before submitting. For the purposes of usability testing, the test administrators had all of the respondents review their data before they submitted it.

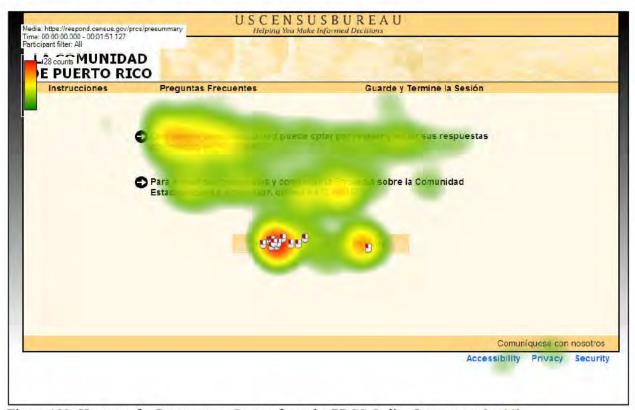


Figure 123: Heatmap for Presummary Screen from the PRCS Online Instrument (n=11)

7.11.1. Review - Person 1

Figure 124 shows a heatmap of the review screen for the questions for Person 1. Note that most of the responses for the health insurance question are filled with "en blanco" (blank) for the example image shown because the respondent did not choose an answer for each category. The click marks indicate where respondents clicked a response to review or change an answer. In some instances, there were some programming errors causing incorrect responses to be displayed on the review screen.

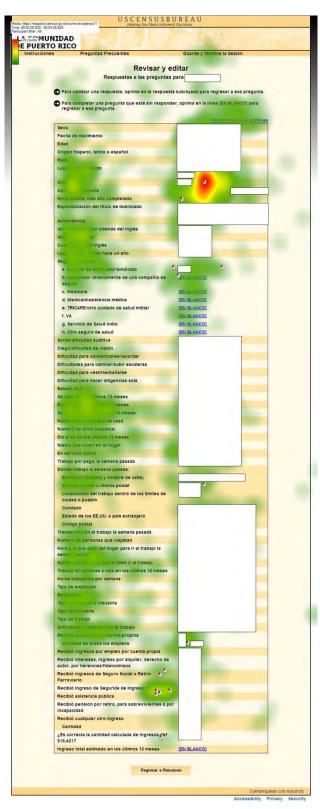


Figure 124: Heatmap for Review Screen for Person 1 from the PRCS Online Instrument (n=7)

7.11.2. Review - Housing

Figure 125 shows a heatmap of the review screen for the housing questions. The click marks indicate where respondents clicked a response to review or change an answer. In some instances, there were some programming errors causing incorrect responses to be displayed on the review screen.

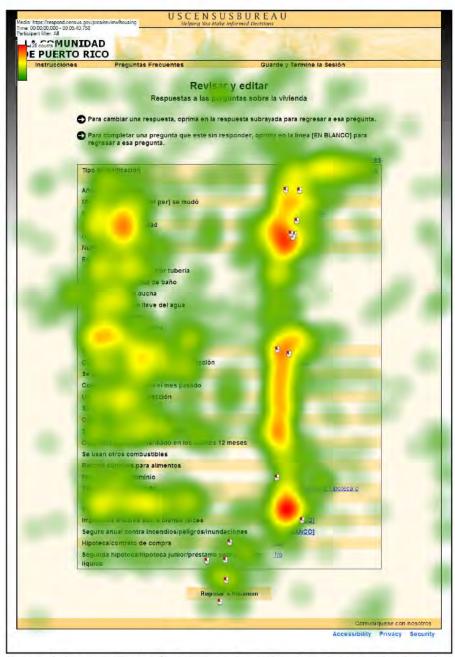


Figure 125: Heatmap for Review Screen for Housing Questions from the PRCS Online Instrument (n=8)

7.11.3. Thank-you screen

After the respondents completed the survey, they saw a screen thanking them for doing so (which actually said "American Community Survey" instead of "Puerto Rico Community Survey") (Figure 127). The screen displayed the time of submission and informed the respondent that their answers had been submitted to the U.S. Census Bureau. There was a large fixation hotspot over the erroneous survey name, but other than this typographical error, no usability issues were observed for this screen.

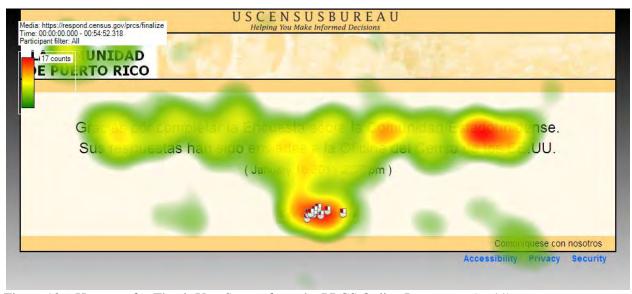


Figure 126: Heatmap for Thank-You Screen from the PRCS Online Instrument (n=11)

8.0 SUMMARY OF USABILITY FINDINGS

Overall, respondents were able to interact with the screens easily. There were a few screens where evidence of confusion was present (e.g., the income questions), but the issues were mostly related to content issues and not to the screens themselves. The patterns of eye-tracking results were similar for both the stateside ACS and the PRCS for the facilities question.

Specific results

- Login screen: Respondents looked at the example mailing label image on the left side of the screen, with a focus on the circled HHID. The areas that received the most fixations and clicks were the entry fields where the respondents needed to enter their HHID.
- Login screen: Respondents did not read the warning message in the white box, nor did they read the OMB burden statement above it, although there were a few glances at this area.
- Roster A: Participants paid particular attention to the instructions below the line marked with an
 arrow, "The following question are about everyone who is living or staying URB LAGO DE LA
 PLATA, 253 CALLE HIBISCUS." These instructions say, "First, create a list of people. Enter
 one person on each line. Leave any extra lines blank. Enter names until you have listed everyone
 who lives or stays there, then click Next." These fixations may indicate that there was some
 confusion about what this additional text meant.
- Roster C: Some respondents tried to click on the list of names collected from Roster A, which means that they did not fully comprehend what this question was asking them to do, at least initially. All of the respondents were able to click "sí" or "no" (yes or no) eventually to proceed with the survey, however.
- Away Now: Although respondents read the question, some tried to click names from the list, as with the Roster C screen.
- Another Place: One respondent tried to click one of the names in the list.
- Roster Check: some people did indeed click "anterior" (*previous*) to go back and make some corrections. Most clicked "siguiente" (*next*) to proceed with the survey. Participants tended to read the instructions thoroughly. There were no usability issues observed with this screen.
- Who Rents or Owns/Reference Person: Although some respondents had some difficulty determining which response option applied to them (as noted in the cognitive results section), none had difficulty entering a response.
- Relationship: Participants looked all over the screen, including at the progress indicator, before selecting a response and proceeding with the survey. This indicates that some confusion about the meaning of the question occurred.
- Race: Some respondents entered "Puerto Rican" as a race in the "Some other race" response option text box, regardless of the instruction that Hispanic origins are not races for this survey. As has been widely documented elsewhere, many Hispanic respondents do not self-identify according to OMB guidelines. Respondents did not have trouble scrolling to the bottom of the screen to find the "siguiente" (next) button to proceed.
- Number of Rooms/Bedrooms: There was some confusion over the meaning of the word "cuarto" as discussed in the cognitive testing results section. Participants who had difficulty understanding the distinction between rooms and bedrooms received the soft edit. Only one respondent clicked the "anterior" button while answering this question (Figure 31). No respondents clicked the "ayuda" (*help*) link, and all were able to eventually proceed to the next screen using the "siguiente" (*next*) button.
- Facilities: The respondents read the list of facilities from top to bottom, then answered vertically by clicking "sí" or "no" (mostly "sí") as well in a similar pattern to what was seen in the last round of testing of the stateside ACS (Figure 32 and Figure 33). One respondent for the PRCS

- testing clicked about halfway across between the question and the response option, perhaps as a method of keeping track of which response paired with which question.
- Heating Fuel: As noted in the cognitive results section, several respondents read the question initially and chose one response option. Upon re-reading it, they chose another option.
- Gas Payment: The area around the "ayuda" link was fixated upon a great deal, but the link was not clicked. Although both respondents with eye-tracking data were able to answer this question, they struggled with the wording of the question and one took over a minute to answer it.
- Gas Amount: One respondent took one minute and ten seconds to answer the question. If the whole survey should take approximately 45 minutes according to the OMB burden statement, the amount of time this respondent spent on a single question is problematic.
- Water and Sewer Amount: As noted in the cognitive results section, respondents had difficulty with the question wording because the reference period changes throughout the PRCS.
- Part of Condo: Two respondents clicked on the "ayuda" (*help*) link for this question, indicating that they were not sure how to answer it and needed help.
- Place of Birth: Several respondents selected the United States initially because they considered Puerto Rico as part of the United States. They then proceeded to look for Puerto Rico as part of the drop-down list. Only after searching for Puerto Rico and not finding it there did those respondents then realize that they should choose the second option and write in "Puerto Rico." This is a potentially serious usability issue because the form's classification of Puerto Rico in the "foreign country" category could offend respondents who identify as U.S. citizens. This could also be confusing to respondents who do not read both options completely or who give up after not finding Puerto Rico in the list of states under the "In the United States" category.
- What Grade: Both respondents who saw this screen seemed surprised to be getting this question and clicked "anterior" at least once to go back and look at the previous question.
- Language: As noted in the cognitive results section, there is a potential issue with this question. Several respondents read the question quickly and marked an answer, and then re-read it, suggesting interpretation difficulties. Most of the respondents were English-Spanish bilingual, so it did not change their answer, but some respondents to the PRCS might not speak English.
- Insurance: As with the stateside English ACS usability testing, respondents tended to answer "sî" for the types of insurance that applied to them and failed to answer "no" to those that did not apply to them.
- VA Disability Status: This screen violates Internet web standards by not defining what "VA" means (i.e., Veteran's Affairs). The acronym may be meaningless if a potential respondent to the PRCS is unfamiliar with the VA and does not speak English.
- Any Work: This question had similar issues to the previous one about the number of hours worked last week (i.e., what constitutes as work). One respondent clicked the "anterior" button to look at the previous screen and one clicked on the "help" link.
- Wages: Participants read the entire block of instructions and the question, along with the response options. There were some fixations off of the screen content at the bottom of the page, which could indicate that respondents were looking for more information down there.
- Wages Amount: Two respondents went back and changed their answer to "no" when they got this screen. Their mouse clicks on the "anterior" Button can be seen in Figure 108. This could be indicative of unwillingness to report income, or of confusion regarding the types of income to include.

SATISFACTION QUESTIONNAIRE RESULTS

As mentioned in the methods section, respondents completed a satisfaction questionnaire after completing the PRCS online. The first item on the satisfaction questionnaire asked for a rating of the overall reaction to the survey; item 2 rated screen layout, item 3 rated the use of terminology throughout

the survey; item 4 rated instructions; item 5 rated how the questions were displayed on the screen; item 6 rated whether questions could be answered in a straightforward manner; item 7 rated the organization of questions, instructions, and response categories in the survey; item 8 rated the forward navigation in the survey; and item 9 rated the overall experience of completing the survey. Items were rated on a scale of 1 to 9 with 9 indicating the most satisfaction.

The results of the survey can be seen in Figure 127. The overall experience item received the highest score (8.6); the terms received the lowest score (7.5). The low score for terms could be related to the numerous issues with translation and word use in the survey as noted in the cognitive and usability results section.

Typically, the goal is to attain at least a 5 on the 9-point satisfaction scale for a usability study. Figure 127 shows that each item surpassed that goal. The overall average score across all of the items was 8.0, so this indicates a high amount of satisfaction with the survey.

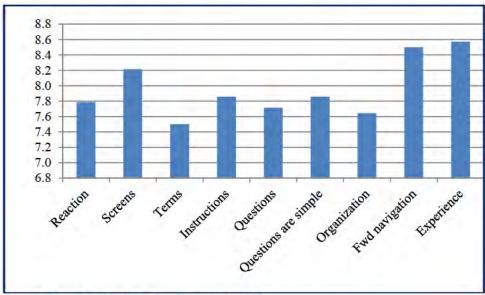


Figure 127: Results from the Satisfaction Survey (n=12)

9.0 RECOMMENDATIONS

In this section we present recommendations resulting from this round of usability testing of the PRCS, beginning with recommendations relating to general survey navigation issues, followed by recommendations on question-specific content. Broader suggestions for usability testing in Spanish and other languages will be discussed in the conclusion.

USABILITY AND SURVEY NAVIGATION RECOMMENDATIONS

Logging into the online survey

- The advancement of the cursor from one text box to the next was a challenge for some respondents because in some cases, the advancement is automatic while other times the respondent must use the "tab" key to move to the next fill-able field. We recommend disabling the automatic advancement for consistency across the survey; this feature should be explored in future usability testing.
- Because most respondents did not read the OMB burden message, we recommend that for future surveys the warning message be more prominent and not require respondents to scroll down vertically.

Rostering

- Deciding who to include on the household roster was challenging for some respondents, as evidenced in both cognitive testing and eye-tracking data. One of the issues most frequently mentioned by respondents was interpreting the time frame for an individual's residence in the household. We recommend testing alternative translations or simplified wording, for example:
 - O Test the wording "¿Alguna de las personas que se listan a continuación se queda más de dos meses en otro lugar, tal como un estudiante universitario que vive en una residencia o apartamento mientras asiste a la universidad o un miembro de las fuerzas armadas que vive en otra parte?" (Do any of the people listed below stay more than two months in another place, such as a university student living in a dormitory or a member of the armed forces?). The current wording is "¿Están algunas de la personas que se listan a continuación en otro lugar AHORA durante más de dos meses, tal como un estudiante universitario que vive en una residencia o apartamento mientras asiste a la universidad o un miembro de las fuerzas armadas que vive en otra parte?" (Are some of the people listed below in another place NOW during more than two months, such as a university student living in a dormitory or a member of the armed forces?).
 - O Test a clarification of the time frame (in English as well as Spanish) with phrasing such as "two months a year" or "has been staying for more than two months," depending on the intent of the question.
 - o Clarify the question regarding whether "two months" refers to consecutive or cumulative time and test the revised question.
 - Test a version of the question that provides the examples in parentheses, in order to separate them from the question and simplify the main sentence. Shortening the question may clarify it for some respondents.

Naming conventions

• Because the naming conventions in Puerto Rico are different from what is common in American English, we recommend testing changes to the name fields. For example, test a version of the screen that would explicitly allow for the entry of two last names while maintaining the option of entering just one. This could be accomplished through explicit instructions on how to enter names in a single text box, or by providing multiple text boxes for multiple last names.

Facilities

• Regarding the layout of this question, we recommend placing the response options horizontally closer to the questions in future rounds of testing. Another option might be to ask a series of short questions on separate screens rather than using the grid format.

Entering dates

• Regarding the entering of dates, we recommend the addition of X's to the date screen to make clear the number of digits required.

Ambiguity regarding Puerto Rico's status vis-à-vis the U.S.

• There was uncertainty among respondents about whether Puerto Rico was considered to be part of the U.S. or a territory outside of it. This distinction was important when respondents had to mark their place of birth either as "in the United States" or "outside the United States." The "in the United States" option includes a drop-down menu and an italicized instruction to choose a state. Although the italicized instruction for the "outside of the United States" explicitly instructs respondents to "enter Puerto Rico or the name of the foreign country, the Virgin Islands or Guam," several respondents nonetheless checked the first option and proceeded to look for "Puerto Rico" in the drop-down menu. It is recommended that a version of the question that lists Puerto Rico as part of the U.S. be tested; for example, the first option could be "In the United States" with the italicized text reading, "Select the name of state, or Puerto Rico, Guam, etc." The second response option "Outside of the United States" could then only include the italicized text "Enter the name of foreign country." This would potentially eliminate confusion over what is and what is not part of the U.S. by grouping U.S. territories and protectorates along with the states and Washington, D.C. Consistency with the citizenship question should also be taken into account in future testing.

Saving and logging out of the survey

- The two general issues identified with "guarde y termine la sesión" (*save and logout*) are 1) the wording; and 2) the placement and appearance of the link.
 - Alternative wordings should be researched (through investigations of Spanish-language websites with similar options as well as cognitive testing) in order to find a phrasing that would make clear that by clicking this link, the respondents do not send their responses to the Census Bureau; rather, it saves them and allows the respondents to return to the survey later. For example, we recommend testing "para podrá volver a la encuesta más tarde..." (to be able to return to the survey later...).
 - O The placement and appearance of the "guarde y termine la sesión" link were factors that contributed to respondent difficulties, and other options should be explored, such as these suggestions from respondents: 1) move the link out of the top row and into another space on the screen, and 2) change the color or make it look like an "action button" similar to "siguiente" (*next*).

Missing information, soft edits and required fields

• In its current form, the online PRCS uses 'soft edits' when a respondent leaves a question blank or to a problem is detected in the respondent's answer. An error message is shown once, and respondents can correct or provide an answer, or go on to the next question. However, the error message can lead respondents to believe that answers are required before a respondent can advance in the survey. We recommend testing the effects of various types of error messages (including some that explicitly inform respondents that responses are not required) on data quality and response rates.

Help screens

• We recommend testing alternative phrases that are more explicit than "ayuda" (help) alone, perhaps along the lines of "explicación de la pregunta" (explanation of the question) or even "haga clic aquí si no entiende la pregunta" (click here if you don't understand the question). It may be that respondents are less accustomed to seeing "ayuda" as a one-word link than English-speaking respondents are to seeing "help" as a link.

Presummary screen

- Because of the confusion regarding the wording of instructions on the presummary screen, where
 respondents may choose to review/edit or submit their responses, we recommend the following
 further testing.
 - o Test alternative translations for "review." Specifically, respondents should be probed on "comprobar" (*confirm*) and "verificar" (*verify*) in comparison with "revisar."
 - O Test alternative wording for the "return" link, which appeared as "regrese para revisar" (return in order to review/revise), in order to reflect the meaning "return to the summary." One possibility is the phrase "regresar al resumen" (return to the summary). It would also be worth comparing respondents' preferences for either "volver" or "regresar," which are synonyms meaning "return."

Summary screen

- Respondents' issues on the summary screen centered on the phrase "[EN BLANCO]" used to indicate a question that was left unanswered by the respondent.
 - O We recommend testing an alternative for the instructions for completing unanswered questions, in order to enhance clarity. Possible alternatives to "la linea [EN BLANCO]" (the blank line) include "la respuesta [EN BLANCO]" (the blank answer) and "la pregunta [EN BLANCO]" (the blank question).
 - o The phrase "en blanco" is recommended over "blanco," which is ungrammatical in this context. However we also recommend testing other alternatives (e.g. "sin contestar," *not answered*).
 - O Because some older respondents did not seem to notice "en blanco" on the summary screen, we recommend a more explicit wording or a visual enhancement (such as bold or red type, or an exclamation mark).
- There is a need for clearer instructions regarding whether respondents should submit the survey with information missing. It might be useful to add an instruction telling respondents to address all answers that appear as "[EN BLANCO]" before they submit the survey. This is an issue that would benefit from further testing of instructions and the summary screen.

OUESTION-SPECIFIC CONTENT RECOMMENDATIONS

Rostering: "De las personas listadas ¿quién es el/la dueño/a o quién alquila esta vivienda?" (Of the people listed, who is the owner or who rents this residence?)

• Further testing of this question is recommended, perhaps with revised instructions that make it clearer what to do in situations where more than one person rents or owns the house, for example some married couples. Instructions could be added that indicate that it is possible to select more than one person, or that respondents must choose only one.

Housing Q7: "¿Cuántos cuartos individuales hay en esta casa, apartamento o casa móvil?" (How many separate rooms are in this house, apartment, or mobile home?)

- Respondents had difficulty deciding what qualified as a "room" in this context, and there were many different interpretations of the meaning of the word "cuarto" (*room*). We recommend continued testing of this question.
- We recommend testing another option for entering the number of rooms and bedrooms, for example, placing the two text entry fields next to each other horizontally following the instruction text to make it clear that "rooms" and "bedrooms" are two distinct concepts.

Housing Q10: "¿Cuál COMBUSTIBLE es el que MÁS se utiliza para calentar esta casa, apartamento o casa móvil?" (Which FUEL is used MOST for heating this house, apartment, or mobile home?)

- In addition to the grammatical error in the question (i.e., "cuál" instead of "qué), which was included in the table of grammatical errors, there were interpretation problems because the majority of homes in Puerto Rico are not heated. However, the phrasing of the question assumes that homes are heated, which caused some respondents to misinterpret this question as simply asking about types of fuel for generic use in the home. Thus respondents answered based on the type of fuel the used for lighting, cooking or other uses. Also, the final answer option, "No se utiliza combustible" (*Fuel isn't used*) is not an appropriate response unless the respondent mentally appends "...to heat this house." Although this is an issue with the content of the survey, it also affects the usability of the web instrument when respondents misread the question on the first pass and select a response option other than the one that most accurately represents their situation. We recommend testing two options for clarifying the question:
 - o Substitute a two-part question in which the respondents are first asked if they use heating fuel, and then, conditional upon their response, they are asked to indicate the type.
 - o Change the final answer option "No se utiliza combustible" to read "No se utiliza combustible para calentar esta casa, apartamento, o casa móvil" (*Fuel isn't used to heat this house, apartment, or mobile home*).

Housing Q11a (part 2): "¿EL MES PASADO, ¿cuánto fue el costo de electricidad para esta casa, apartamento o casa móvil? (LAST MONTH, what was the cost of electricity for this house, apartment, or mobile home?)

- When the respondents selected "si" (yes) in response to the previous question of whether someone in the home pays for electricity, they received this follow-up question asking them to specify how much they paid last month. This second part of the question proved to be much more difficult for respondents; several re-read the question and one tried to click "no" to eliminate the new question.
- We recommend testing alternate versions of this question. One possibility might be simply asking how much is paid for electricity and including the response option "none," thus eliminating the need for two questions.

Housing Q11b (part 1): "¿Paga alguien en este hogar por el servicio de gas? Si el gas y la electricidad se pagan juntos y usted incluyó el pago por la electricidad en la pregunta sobre la electricidad, seleccione 'No.'" (Does someone in this household pay for gas? If gas and electricity are paid together and you included the electricity payment in the question about electricity, choose "No.")

• Further cognitive and usability testing is recommended to determine whether there is a better way to pose this question. Perhaps eliminating the italicized instruction about gas and electicity being billed together might eliminate some confusion.

Person Q11: "¿Cuál es el título o nivel escolar más alto que esta persona ha COMPLETADO?" (What is the highest degree or level of school this person has COMPLETED?)

• We recommend testing a new version of this question that would include the option of a one-year degree or certificate added to the list for the PRCS and the stateside ACS. Some respondents had completed schooling above the high school level, but had not completed associate's or bachelor's degrees, and they did not know how to classify themselves.

Person Q14: "¿Habla esta persona en su hogar un idioma que no sea inglés?" (Does this person speak a language other than English at home?)

- We recommend further testing a version of this question that considers asking whether respondents speak a language other than *Spanish* at home for the PRCS, since the majority of respondents in Puerto Rico are Spanish-speaking. Alternatively, we recommend asking simply what language(s) the person speaks at home, with a follow-up question that asks about English ability.
- It is not at all clear what respondents should do if the person in question does not speak English, so we recommend testing a version of the question with a response option that covers this possibility. (This recommendation is valid if the first is not feasible.)

Person Q28a: "¿Tiene esta persona una clasificación de incapacidad de la VA relacionada con el servicio?" (Does this person have a VA service-connected disability rating?)

• We recommend that "Veterans Affairs" be fully spelled out in the same language as the rest of the question (English or Spanish).

PersonQ29-38: Questions about work, including: "LA SEMANA PASADA, ¿hizo esta persona algún trabajo por paga en un empleo (o negocio)?" (LAST WEEK, did this person work for pay at a job (or business)?); "¿En qué lugar trabajó esta persona LA SEMANA PASADA?" (At what location did this person work LAST WEEK?); "¿Cuándo trabajó esta persona por última vez, aunque fuera por unos pocos días?" (When did this person last work, even for a few days?)

We recommend testing some alternative versions of these questions with alternative help text that
offers respondents more updated assistance with how to answer the questions for situations like
working at home and online, etc. For example, additional italicized instructions could direct
respondents to count time working at home, or provide examples of work, such as freelance
writing, blogging, paid childcare, etc.

Person Q39b: "¿Cuántas semanas trabajó esta persona aunque fuera unas cuantas horas, incluso vacaciones pagadas, licencia por enfermedad pagada y servicio militar?" (How many weeks DID this person work, even for a few hours, including paid vacation, paid sick leave, and military service?)

- This question gives no reference period for the question (e.g., one month, one year, etc.). This could potentially cause comprehension problems given the changing reference periods in this survey; respondents might not remember from the previous screen.
- We recommend specifying the reference period again within this question, for example beginning the question with "Durante los últimos 12 meses..." (*During the last 12 months...*).

• We also recommend testing a version of the question that divides it into two shorter sentences: "¿Cuántas semanas trabajó esta persona aunque fuera unas cuantas horas? Incluya vacaciones pagadas, licencia por enfermedad pagada y servicio militar." (How many weeks DID this person work, even for a few hours? Include paid vacation, paid sick leave, and military service.)

Person Q47a: Jornales, sueldos/salarios, comisiones, bonos o propinas de todos los empleos. (Wages, salary, commissions, bonuses, or tips from all jobs.)

- For many respondents, "income" referred to income from freelance or self-employment work as well as salary; when respondents continued through the survey, they were surprised to find that there was a separate space for the latter types of income (non-salary).
 - We recommend testing an additional instruction on the first page to indicate that there will be an opportunity to report other types of income on the following screen.

Person 47b: "Ingreso de empleo por cuenta propia en su negocio no agrícola o finca comercial, ya sea como propietario único o en sociedad." (Self-employment income from own nonfarm businesses or farm businesses, including proprietorships and partnerships.)

 We recommend consolidating the phrase "nonfarm businesses or farm businesses" to "farm and nonfarm," or testing a version of this question that does not include the mention of nonfarms and farms, since both categories are encompassed anyway.

10.0 GRAMMATICAL ERRORS

In the section of the report that outlines the results from the cognitive interviews, we listed grammatical and typographical errors that appeared in the survey. We repeat the recommendations for addressing the grammatical errors here in order to maintain a complete list of all matters to be considered for future versions of the PRCS. Also, typographical errors are documented in Appendix 2 as well, and have been addressed by the American Community Survey Office.

Solutions for grammatical errors

Person O10

- Add the object for "asistir" (*attend*) as suggested. Alternatively, the verb "estudiar" (*study*) could be used, to maintain consistency with the question. This verb is used in the paper version.
- The response option would be more comprehensible with a preposition, as in "Sí, en una escuela pública" (*Yes*, *in a public school*) or with a verb, as in "Sí, asistió a una escuela pública" (*Yes*, *attended a public school*). Also, make the same change for the private school answer option.
- Make all verb tenses consistent (either "asistía" or "asistió").

Person O29

• Change the summary to read "retirada," the feminine form of "retired." Alternatively, change the response option to include both genders.

Person Q48

• The response option should read "no recibió ingreso de ninguna fuente" (*did not receive income from any source*).

Person O23

• Change the summary to be consistent with the question (list the year the respondent was last married). It should read "el año en que se casó la última vez." (year last married).

Housing Q10

• Replace "cuál" with "qué" to make the question grammatically correct.

11.0 CONCLUSION

This round of testing was intended to assess usability issues with the PRCS online instrument. This report has described the testing procedures and detailed and analyzed the results, with particular emphasis on the mode-specific difficulties that arose for respondents (such as the terminology related to online surveys, the visual characteristics of links and buttons, and the meaning of navigational instructions). Based on these results, we have made specific recommendations for improving the instrument, or for further testing.

In addition to mode-specific usability issues, we also encountered and documented various typographical and programming errors (such as the malfunction of navigation buttons), many of which were corrected immediately following the completion of the testing. Our testing also revealed numerous issues with the survey questions related to the form (e.g., the grammatical structure of sentences, etc.) and content (e.g., meaning of the questions, inadequacy or inaccuracy of the response options). Many of these issues were specifically related to the Spanish translations of survey questions (such as awkward phrasing or the use of vocabulary not typically used in Puerto Rico), while others were related to the concepts underlying the questions (such as determining what type or amount of work should count as "employment" or whether Puerto Rico is considered inside or outside the United States).

Usability and content issues are interrelated, and the linguistic and content-related problems, while not the focus of the current testing, nonetheless had an impact on the users' experience completing the survey. When such problems caught the respondents' attention, other usability issues may have been overshadowed. For example, when respondents focused on the difficulty of locating Puerto Rico on the Place of Birth screen, they were probably less likely to comment on issues related to navigation or visual features. It is important to note that the grammar and content issues that surfaced in this round of testing likely affect all modes, rather than just the online instrument. Thus, the findings documented here offer empirical evidence of the need for additional research and testing on other modes such as paper, CATI/CAPI, and formats designed for new technology.

Further, this round of testing of an online instrument translated from English to Spanish highlights the fact that usability involves both non-linguistic and linguistic components. Examples of non-linguistic aspects of usability testing include exploring and documenting how on-screen visual elements such as arrows or the use of color (e.g., in hyperlinks or gray type) are interpreted by users. Other usability issues are linguistic in nature and have to do with how users interpret specific words or phrases. In the case of translated instruments it is crucial to examine the grammatical accuracy and contextual appropriateness of translations (e.g., "save and logout") which may bear little resemblance to what users are used to or prefer. We recommend following the translation guidelines and review procedures established for Census Bureau materials (Pan & de la Puente, 2005) when translating linguistic terms related to navigation or other aspects of usability. In addition, we recommend increased consideration of linguistic and cultural issues in the development of protocols for usability testing in languages other than English. Defined procedures and systematic processes for translating and reviewing testing protocols would increase the validity of the results.

Moving forward, this round of testing highlights the growing need for research in cross-linguistic and cross-cultural usability issues. For example, research on usability issues specific to Spanish-language instruments would be useful, in order to establish best practices unique to translated Spanish instruments. As a first step, research on existing online instruments originally created for Spanish speakers (particularly in Puerto Rico) could help to determine phrasing and layouts that are popular and effective. Because Puerto Rican Spanish speakers may use online resources differently than English speakers, it is important to view the development of online surveys of this community as a bottom-up endeavor. A research and development program comprised of cognitive interviewing, usability testing, and original research on already-established, successful instruments would be an effective way to proceed. As the Census Bureau becomes increasingly interested in ways to reach respondents via the Internet, all of the aforementioned concerns will require further study.

REFERENCES

- Ashenfelter, K. T., Holland, T., Quach, V., & Nichols, E. (2011). Final Report for the Usability Evaluation of the ACS Online Instrument Rounds 4a and 4b. *Center for Survey Measurement, Research and Methodology Directorate* (Under Review). U.S. Census Bureau.
- Childs, J. H., Terry, R., Jurgenson, N., Clifton, M., & Higbie, G. E. (2010). Iterative Cognitive Testing of the 2010 Race and Hispanic Origin Alternative Questionnaire Experiment (AQE) Reinterview. *Statistical Research Division Study Series (Survey Methodology #2010-13)*. Washington, DC: U.S. Census Bureau. Available online at http://www.census.gov/srd/papers/pdf/ssm2010-13.pdf>.
- Chin, J. P., Diehl, V. A., & Norman, K. L. (1988). Development of an instrument measuring user satisfaction of the human-computer interface. *Proceedings of the SIGCHI conference on Human factors in computing systems* (pp. 213-218). Washington, DC: ACM. doi:10.1145/57167.57203
- Gerber, E. R., & Crowley, M. (2005). Report on Cognitive Testing of a Shortened Sequence of Hispanic Origin, Race and Modified Ancestry Questions: Content Development for the 2005 National Content Test. *Statistical Research Division* (Internal report). U.S. Census Bureau.
- Goerman, P., Caspar, R., Sha, M., McAvinchey, G., & Quiroz, R. (2008). Census Bilingual Questionnaire Research Final Round 1 Report. *Statistical Research Division Study Series (Survey Methodology #2008-01)*. Washington, DC: U.S. Census Bureau. Available online at http://www.census.gov/srd/papers/pdf/ssm2008-01.pdf.
- Goerman, P., Caspar, R., Sha, M., McAvinchey, G., & Quiroz, R. (2007). Census Bilingual Questionnaire Research Final Round 2 Report. *Statistical Research Division Study Series (Survey Methodology #2007-27)*. Washington, DC: U.S. Census Bureau. Available online at http://www.census.gov/srd/papers/pdf/ssm2007-27.pdf.
- Pan, Y., & de la Puente, M. (2005). Census Bureau Guidelines for the Translation of Data Collection Instruments and Supporting Materials: Documentation on How the Guidelines Were Developed. *Statistical Research Division Study Series (Survey Methodology #2005-06)*. Washington, DC: U.S. Census Bureau. Available online at http://www.census.gov/srd/papers/pdf/rsm2005-06.pdf>.
- Terry, R. L., & Fond, M. (2011). Cognitive Pretesting of 2010 Alternative Questionnaire Experiment (AQE) Race and Hispanic Origin Questionnaires Translated Into Spanish. *Center for Survey Measurement, Research and Methodology Directorate (Survey Methodology #2011-11)*. U.S. Census Bureau. Available online at http://www.census.gov/srd/papers/pdf/ssm2011-11.pdf>.

APPENDIX 1: Cognitive testing protocol

Date	
Participant #	
Experimenter	

General Introduction: American Community Survey Internet Instrument

Buenos días/Buenas tardes/Buenas noches. Gracias por su tiempo hoy. Me llamo X, y soy del Negociado del Censo de los Estados Unidos. Trabajo para el grupo de factores humanos y usabilidad con mi colega, Y. Nosotras vamos a trabajar con usted hoy. Si usted tiene un teléfono celular, apáguelo o ajústelo a vibrar por favor (o silencio). Hoy vamos a evaluar el diseño de la encuesta de la comunidad de Puerto Rico al tener que llenarla. Su experiencia con la encuesta es una parte indispensable de nuestro trabajo. No escribí la encuesta, así que por favor comparta conmigo sus reacciones y sentimientos positivos y negativos. Esta sesión debe durar una hora más o menos. Los diseñadores de esta encuesta van a recibir sus comentarios para que se pueda mejorarla.

Thank you for your time today. My name is X, I'm from the U.S. Census Bureau and I work here with the Human Factors and Usability group with my colleague, Y. I will be working with you today. If you have a cell phone, please turn it off or put it in vibrate. We will be evaluating the design of the online Puerto Rican Community Survey by having you complete it. Your experience with the survey is an essential part of our work. I did not create the survey, so please share both your positive and negative reactions to it. We are not evaluating you or your skills, but rather you are helping us see how well the survey works. The entire session should last about an hour. Your comments and feedback will be given to the developers of the survey and may be used to improve it.

Primero, me gustaría pedirle que lea y firme el formulario de consentimiento. Este documento le explica el propósito de esta sesión de investigación académica y sus derechos como respondente. También le informe que nos gustaría hacer una grabación de video de esta sesión con su permiso. Solamente nosotros que estamos afiliados con este proyecto van a mirar el video o cualquier otro dato recopilado y la vamos a utilizar solamente para fines de investigaciones académicas. También podemos utilizar partes del video para ilustrarle puntos claves sobre la encuesta al equipo de diseño de la Red.

First, I would like to ask you to read and sign this consent form. It explains the purpose of today's session and informs you of your rights as a respondent. It also tells you that we would like to videotape the session, with your permission. Only those of us connected with the project will review the tape and any other data collected during the session, and it will be used solely for research purposes. We may also use clips from the tape to illustrate key points about the survey to the Web design team.

- → Hand the respondent the consent form; give time to read and sign; sign own name and date if you have not already done so.
- \rightarrow Start the tape/recording equipment.

Mientras complete la encuesta, nosotros vamos a grabar los movimientos de sus ojos con nuestro monitor de rastrear ojos para tener un registro de que parte de la pantalla mira usted y vamos a grabar los movimientos del ratón para ver que tan bien interactúa usted con la encuesta.

While you are completing the survey, we will record the movements of your eyes with our eyetracking monitor to get a record of where you are looking on the screen and we will record your mouse movements to see how you are interacting with the survey.

Ahora le vamos a calibrar los ojos para el proceso de rastrear ojos. Now we are going to calibrate your eyes for the eye-tracking.

\rightarrow *Do eye-tracking calibration.*

Ahora que tenemos sus ojos calibrados, estamos listos para empezar. Por favor responde a la encuesta en línea como si estuviera en casa. Usted podría contestar las preguntas de la encuesta como le aplican a usted en su vida verdadera. Aunque las materiales le dan una dirección del Internet o URL, para tener acceso a la encuesta, usted no va a necesitar entrarla porque nuestro programa de prueba le va abrir la encuesta.

Now that we have your eyes calibrated, we are ready to begin. Please respond to the survey online as you would at home. You may answer the survey questions as they apply to you in your real life. Although the materials will give you an internet address, or URL, to enter to access the survey, you will not need to enter that because our testing software will open the survey for you.

Por favor, imagine que recibió este paquete por correo postal en su casa. Éstos son las materiales de correo que va a necesitar para empezar la encuesta. Por favor, imagine que recibió este paquete por correo postal en su casa. Si usted recibiría la encuesta en su casa, las materiales de correo tendrían su dirección verdadera. Ya que no podemos replicar eso en este ambiente de laboratorio, todos los respondentes van a utilizar la misma dirección. A los efectos de este estudio, vamos a simular que su dirección es URB LAGO DE PLATA, 253 CALLE HIBISCUS, CUALQUIER PUEBLO, PR 03631.

Please imagine that you received this packet in the mail at your home. These are the mailing materials you will need to start the survey. If you were to receive the survey at your home, the mailing materials would have your real address. Since we cannot replicate that for the lab setting, all respondents will use the same address. For the purposes of this study, please pretend that your address is URB LAGO DE PLATA, 253 CALLE HIBISCUS, CUALQUIER PUEBLO, PR 03631.

Ahora vamos a llevar a cabo una prueba de sonido. Mientras hacemos eso, por favor tome un momento para completar este cuestionario corto.

Now we are going to do a sound check. While we are doing that, please take a moment to complete this questionnaire.

→ Hand respondent questionnaire on computer experience and demographics (PRCS Background Survey).

¿Tiene usted alguna pregunta antes de empezar?

Do you have any questions before we begin?

- \rightarrow Do a sound check and start the eye-tracking software: Tobii Studio. The mouse tracing software will start when Studio opens Internet Explorer.
- \rightarrow Ask probe questions about what they are thinking if they are having trouble with any part of the survey.
- → Overall Probe: Make a note if a person left a page with a blank answer.
- → If it had a soft edit, ask them whether the edit persuaded them to answer it.
- → PIN Screen: Seemed to read it []

Wrote PIN down []	
→ Write down the PIN in case the Participant does not:	
→ STOP AFTER ROSTER CHECK (Final List of eligible people)!	

→ Check awareness or use of progress indicator.

Voy a pedirle que tomemos una pausa ahora.

I'm going to ask that we take a pause now.

¿Cuánto tiempo le tomará la encuesta, más o menos? ¿Cómo ha llegado a esa respuesta?

About how much longer do you think the survey will take? How did you come up with that answer?

→ STOP PARTICIPANT AFTER MORTGAGE QUESTIONS

\rightarrow Check awareness or use of progress indicator (2nd TIME).

Voy a pedirle que tomemos una pausa ahora.

I'm going to ask that we take a pause now.

¿Cuánto tiempo le tomará la encuesta, más o menos? ¿Cómo ha llegado a esa respuesta?

About how much longer do you think the survey will take? How did you come up with that answer?

Finjamos que usted tiene que salir para una cita, ¿qué haria?

Let's say you have to leave for an appointment, what would you do?

- → Observe: did they find "save & logout" button?
- → Observe: Use "save & logout" []

Close browser []

Other (explain) []

Seleccionamos "guarde y termine la sesión" ahora. Finja que ha salido y ya ha vuelto. Quiere regresar a la encuesta. ¿Qué haria?

Let's select "save & logout" right now. Pretend you have left for your appointment and have returned. You want to return to the survey. What would you do?

→ Observe: if they mention PIN, and if they remember it.

Gracias por sus respuestas, okay, puede seguir.

Thanks for your responses, okay, you can continue.

→ STOP PARTICIPANT AT "PICK NEXT PERSON" (The PICK NEXT PERSON comes before Person Questions)

¿Qué piensa que esta pregunta le pide?

What do you think this question is asking of you?

→ STOP PARTICIPANT AT PRESUMMARY SCREEN (list of Names with Review Answers Links)



Voy a pedirle que tomemos una pausa otra vez.

I'm going to ask that we take a pause again.

Antes de seleccionar una opción en la pantalla, por favor, dígame qué haría si completara la encuesta en casa, y ¿por qué?

Before making a selection on the screen, please tell me what you would do if you were taking this at home and why?

→ IF THEY CHOOSE "SUBMIT (ENVIAR)"

¿Por qué no escogería "repasar" primero?

Why wouldn't you select "review" first?

Vamos a la pantalla de "repasar", para ver si la pantalla funciona bien para usted.

Now let's go to "review", to see how that screen works for you.

Suponga que quería repasar las respuestas que dió para si mismo, ¿qué haría? Suppose you wanted to review the answers you gave for yourself, what would you do?

- \rightarrow *Note what they say/do.*
- \rightarrow If they don't click the "review answers" link, have them do that.

Suponga que quería cambiar su respuesta para "lugar de nacimiento", de los Estados Unidos a Inglaterra, ¿cómo lo haría?

Suppose you wanted to change the answer for place of birth from the United States to England, how would you do that?

- → After they made the change, did they click return, or did you have to tell them?
- → When they got back to review and edit screen, did they notice the new line on the table for Citizenship with a [Blank] for the response?
- → What did they do? IF they didn't notice it, point it out and ask them what they would do now.

 \rightarrow *Note:* This one only works if the person is born in the U.S. If they aren't born in U.S. have them edit housing question 4 (how many acres?) to more than 1 acre so the agricultural sales question is added to the review and edit screen.

Debriefing Questions

- \rightarrow Show each relevant screen and allow the respondent to look at each screen as you ask questions about it.
- ¿Cuál fue su reacción a la encuesta en general? What was your overall impression of the survey?
- \rightarrow Probe about any unusual responses.
- → If they mentioned that someone in their household uses more than one mode of transportation to get to work (such as bus and subway) and they chose one, ask why they chose that one.

→ MOVE ON TO THE POWERPOINT SLIDES

Slide 1:

- ¿Vio usted el indicador de progreso en el lado derecho de la pantalla? Did you notice the progress indicator on the right side of the screen?
- ¿Qué piensa que significa el texto que está cubierto y escrito en gris? What do you think the grayed out text indicates?
- ¿Qué piensa usted que le pregunta la pregunta abajo? What do you think the question below is asking you?



Slide 2:

¿Por qué piensa usted que la pregunta en la parte superior de la página está escrita en gris? Why do you think the question at the top of the page is grayed out?

¿Piensa usted que podría cambiar su respuesta para la pregunta que esta escrita en gris? Did you think you could change the answer to the grayed out question?



Slide 3:

Suponga que usted tuviera un niño o una niña adolescente que ahora vive en un internado. ¿Cómo contestaría esta pregunta?

Suppose you had a high-school age student living away at boarding school right now. How would you answer this question?



Slide 4:

Suponga que usted tuviera un niño o una niña custodia compartida quien normalmente vive con el/la otro/a padre pero está con usted en el día en que usted complete esta encuesta. ¿Incluiría este/a niño/a mientras completa esta encuesta?

Suppose you had a child in shared custody that usually lives with you but is with the other parent on the day you complete this survey. Would you include that child when you complete this survey?



Debriefing Questions (PART 2)

Preguntas generales:

¿Tiene algún comentario acerca de la encuesta (por ejemplo, el diseño, el color, algo así)?

Do you have any comments about the survey (for example, the layout, the color, something like that)?

¿Tiene algún comentario acerca de los mensajes que ha visto en la pantalla cuando hizo un error?

Do you have any comments about the messages you saw on the screen when you made an error? ¿En su opinión, habían preguntas, o instrucciones, o repuestas específicas que se encontraban confusas o complicadas?

In your opinion, were there specific questions, or instructions, or responses that you found confusing or complicated?

Preguntas sobre "revisar y editar" (see Slide 5 if necessary):

¿Tiene algún comentario acerca de la pantalla que dice "revisar y editar"?

Do you have any comments about the screen that says "review and edit"?

¿En su opinión, se encuentra esta parte de la encuesta útil, fácil de leer y fácil de entender?

In your opinion, did you find this part of the survey useful, easy to read and easy to understand? ¿Fue fácil o difícil de cambiar una respuesta?

Was it easy or difficult to change a response?

¿Qué significa la frase [BLANCO]? ¿Entiende lo que quiere decir?

What does the phrase [BLANK] mean? Do you understand what it's saying?

Preguntas sobre el orden de entrar datos, p.e. NOMBRES (see Slide 6 if necessary):

Esta encuesta le pide que entre los nombres de las personas que viven con usted en el orden siguiente: primero, nombre; segundo, inicial; tercero, apellidos. ¿Se fijó en estas instrucciones? ¿Son complicadas estas instrucciones?

This survey asks that you enter the names of the persons that live with you in the following order: first, name; second, middle initial; third, last name. Did you notice these instructions? Are they complicated?

Preguntas sobre el orden de entrar datos, p.e. LA FECHA (see Slide 7 if necessary):

Esta encuesta le pide que entre las fechas en el orden siguiente: primero, el mes; segundo, el día; tercero, el año. ¿Se fijó en estas instrucciones? ¿Son complicadas estas instrucciones?

This survey asks that you enter dates in the following order: first, month; second, day; third, year. Did you notice these instructions? Are they complicated?

Otras preguntas (see Slides 8, 9, 10 if necessary):

¿Qué quiere decir la frase "guarde y termine la sesión"? What does the phrase "save and logout" mean?

¿Qué es el número de identificación personal (PIN)? ¿Para qué utilizaría este número? What is the personal identification number (PIN)? What would you use this number for?

¿Se fijó en la frase "imprima para sus archives"? ¿Qué significa la frase? ¿Cree usted que esta opción es útil, o no?

Did you notice the phrase "print for your records"? What does this phrase mean? Do you think this option is useful, or not?

Participant #	
Race	American Indian or Alaska Native Asian Native Hawaiian or Other Pacific
	Islander White Asian Other
Age range	< 30 31-45 46-60 61+
Gender	M F
Education	HS/GED Some Coll/AA Bachelor's Some grad
Date of interview	
Interviewer	

APPENDIX 2: Observation report

OBSERVATION REPORT

PRCS Internet Usability Test

Observer: Herman A. Alvarado, ACSO

Location: Puerto Rico

Dates: January 16-18, 2011

Participants observed: 7 (total)

The following main instrument issues were reported to ACSO Staff for immediate correction. These issues were observed at the time of the usability test.

1. PSELECT screen

This is the screen after the housing questions, in which the respondent will have to choose which person he/she will provide detailed demographic information. During our testing, 6 out of 7 respondents selected one person in the household, and when the "Next" button was selected, the instrument went back to the same question. Most respondents were able to figure out and re-selected the person, and then the instrument worked fine. Only one of our respondents selected another person from the list, because he thought "it was an error to select yourself." After some follow-up testing in ACSO, the error happens only if the respondent logout at this screen before making the selection.

2. *P39b* (Weeks Worked question)

In the PRCS instrument, this question preselects the "48 to 49 weeks" option. Participants were able to change the answer, however, when they used the "Review and Edit" screen, this question was shown as "BLANK." If you click to change the answer, you will see the preselection of "48 to 49 weeks", and you will be allowed to change it, but the change will not be reflected in the Review and Edit screen. It will still show as "BLANK."

3. Review and Edit Screen

This is the section that needs more work. During testing, most of our respondents were confused by some of the category labels (e.g. acres vs cuerdas), and responses not showing what was checked on the instrument. Here is a list of the main issues:

- At the time of the test, the PRCS instrument used the labels from the stateside version, therefore some of the terminology was not understood by the respondents. Also the categories for some questions (e.g. citizenship) are different. In the case of the citizenship question, if the person checked "Born in Puerto Rico", the category label showing in the Review and Edit screen is "Born in the US".
- In school enrollment, if you selected, for example, 5th grade, the Review and Edit screen will show "nursery or preschool". This only happened with one of our respondents.
- The "year of marriage" label was wrongfully translated as "years married", which created a lot of confusion with our respondents. It needs to replace "Número de años casado(a)" with "Año del último matrimonio."
- For blank answers, the instrument displays "EN BLANCO" and "BLANCO". For consistency purposes, use "EN BLANCO" which seemed to be preferred by most of our respondents.
- Some of the labels still have "<fill ref per>" as part of the label.

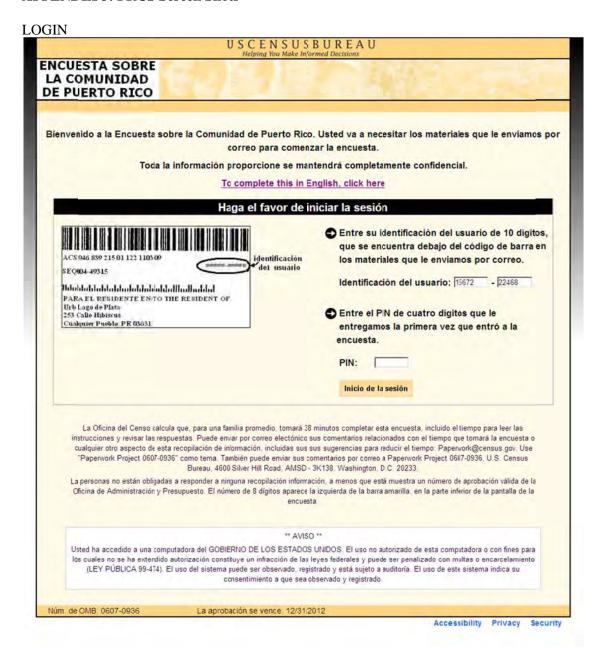
4. Date of Birth

With one of our respondents, when she was entering her date of birth, she made a mistake, and entered "1997", which gave her an age of 13. When she changed to "1979", then she typed the last nine twice, and her age showed as "931". It seems that the instruments allow editing of the age field.

The following chart summarizes the reported problems observed, some of which were mentioned in the report above:

					ACS Reporting		
Date	Topic - (0	Screen	Priority	Error Type	Issue / Browser	Correction	Reporte
						Add a question mark (¿) at the	
1/19/2011	3	Another Home	minor	wording/content	Missing question mark	beginning of the question.	alvarado
2/25/2022	_	H-12 (Food		wording/content	misspelling of the word "targeta" on	and decision	arraraa
1/19/2011	14	Stamps)	major	wording/content	question text.	change to "tarjeta"	alvarado
		H-12 (Food			misspelling of the word "Programa" on	change to "Programa" (the final	
1/19/2011	14	Stamps)	major	wording/content	question text.	"a" is missing).	alvarado
1/19/2011	16	Review/Edit	minor	wording/content	Instruction "Imprimir para sus archives" has a typo	It should be "Imprimir para sus archivos" (replace e with o in "archives")	alvarado
1/15/2011	10	neview/ Eart	IIIIIIII	wording/content	The term "o desagüe" is not used in	dictives /	uivaiaa
					PRCS. It only applies to stateside		
		H11c-Waterpay			Spanish. This correction should be	Delete the words "o desagüe"	
1/19/2011	15	& Wateramt	major	wording/content	reflected in the spec document.	from the question text.	alvarado
		P-16 Health Insurance			Missing accent. In the PRCS version, the word "(union)" needs an accent mark. No accent mark needed in the stateside		
1/19/2011	12	Coverage	minor	wording/content	version.	Replace "(union)" with "(unión)"	alvarado
1/19/2011	12	P-29a Work Last Week	major	wording/content	Second answer category. The word "retirada" should be "retirado(a)". "Retirada" is used for female members of the household, however "retirado(a)" is more generic.	Replace "retirada" with "retirado(a)"	alvarado
		P-48 Verify				Remove quote marks at the end of	
1/19/2011	12	Income screen	minor	wording/content	Extra quote marks	the question.	alvarado
1/19/2011	10 & 11	Place of Birth/Citizenshi p/Year of Entry		pathing	PRCS instrument needs to ask Year of Entry to respondents born in the United States.	Please use DSSD's new spec	alvarado
1/19/2011	9	P-20 Marital Status	major	wording/content	First four categories are in feminine. OK to use with female members of household, but for male members it looks ackward.	Categories should say: "Casado(a) Actualmente", "Viudo(a)", "Divorciado(a), "Separado(a)", "Nunca se ha Casado". PLEASE make corrections to the spec document.	alvarado
1/19/2011	12	P-48 Verify Income screen	major	wording/content	In case of no income, current sentence syntax makes no sense in Spanish.	In case of no income, the sentence should say: "De acuerdo con nuestros cálculos, <name> no recibió ingresos de Use the text in red to update spec.</name>	alvarado
1/19/2011	16	Error message	major	wording/content	In case the participant is entering a User ID less than 10 digits, the error message needs to be corrected	Use the term "dígitos" instead of "cifras"	alvarado

APPENDIX 3: PRCS Screen Shots³



³ Because the images were retrieved from files generated by the Tobii eye tracker, some screens have the color-coding legend on the upper left side of the screen. Participants did not see this legend.

RESPONDENT NAME

		J S B U R E A U e Informed Decisions
NCUESTA SOB LA COMUNIDA DE PUERTO RIC	RE D	
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesión
¿Cuál es su nomi tenemos alguna pr llombre Cōdigo de àrea y núme Siguiente >>	Inicial Apellido	nos comuniquemos con usted si
		Comuniquese con nosotro

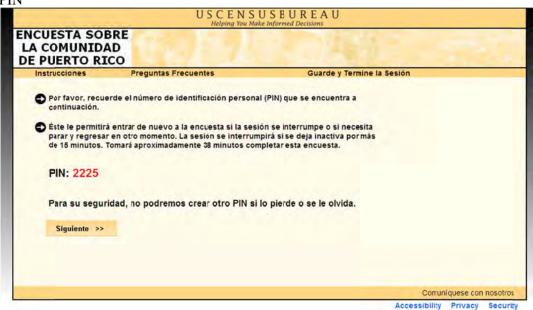
ADDRESS



RESIDENCY (LIVEU)



PIN



ROSTER A

		U S B U R E A U ske Informed Decisions
ENCUESTA SOBR LA COMUNIDAD DE PUERTO RICO		
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesión
URB LAGO DE PLAT	juntas son acerca de todas las perso A, 253 CALLE HIBISCUS.	
cualquier linea extra.	sta de personas. Entre una persona e Entre los nombres hasta que haya listad noes oprima en Siguiente. (Ayuda)	
Nombre Ir	icial Apellidos	
Oprima ad	quí para añadir a más personas	
<< Anterior	Siguiente >>	
		Comuniquese con nosotros

ROSTER B



ADD1

Las siguientes preguntas son para asegurarnos de que esta lista esté lo más completa como sea posible. Además de las personas que se listan a continuación, ¿ALGUIEN MÁS vive o se queda allí? Por ejemplo, compañeros de casa o de cuarto, hijos de crianza, pupilos o empleados que viven allí. (Ayuda) Entre los nombres y luego oprima Siguiente. No incluya a nadie que ya esté en la anterior lista (Ayuda) Nombre inicial Apellidos	como sea posible. Además de las personas que se listan a continuación, ¿ALGUIEN MÁS vive o se queda alil? Por ejemplo, compañeros de casa o de cuarto, hijos de crianza, pupilos o empleados que viven alil. (Ayuda) © SI Entre los nombres y luego oprima Siguiente. No incluya a nadie que ya esté en la anterior lista (Ayuda)			
Además de las personas que se listan a continuación, ¿ALGUIEN MÁS vive o se queda alií? Por ejemplo, compañeros de casa o de cuarto, hijos de crianza, pupilos o empleados que viven allí. (Ayuda) © Si © No Entre los nombres y luego oprima Siguiente. No incluya a nadie que ya esté en la anterior lista. (Ayuda) Nombre inicial Apellidos	Además de las personas que se listan a continuación, ¿ALGUIEN MÁS vive o se queda allí? Por ejemplo, compañeros de casa o de cuarto, hijos de crianza, pupilos o empleados que viven allí. (Ayuda) © SI © No Entre los nombres y luego oprima Siguiente. No incluya a nadle que ya esté en la anterior lista (Ayuda) Nombre inicial Apellidos Oprima aquí para añadir a más personas			esta lista esté lo más completa
alli? Por ejemplo, compañeros de casa o de cuarto, hijos de crianza, pupillos o empleados que viven allí. (Ayuda) © Si © No Entre los nombres y luego oprima Siguiente. No incluya a nadie que ya esté en la anterior lista (Ayuda) Nombre Inicial Apellidos	alli? Por ejemplo, compañeros de casa o de cuarto, hijos de crianza, pupilos o empleados que viven allí. (Ayuda) © SI © NO Entre los nombres y luego oprima Siguiente. No incluya a nadie que ya esté en la anterior lista (Ayuda) Nombre Inicial Apellidos Oprima aqui para añadir a más personas			august and a second
© SI © No D Entre los nombres y luego oprima Siguiente. No incluya a nadie que ya esté en la anterior lista. (Ayuda) Nombre Inicial Apellidos	Entre los nombres y luego oprima Siguiente. No incluya a nadle que ya esté en la anterior lista (Ayuda) Nombre inicial Apellidos Oprima aquí para añadir a más personas	alli? Por ejemplo	, compañeros de casa o de cuarto, hijos	
Entre los nombres y luego oprima Siguiente. No incluya a nadie que ya esté en la anterior lista. (Ayuda) Nombre Inicial Apellidos	Entre los nombres y luego oprima Siguiente. No incluya a nadie que ya esté en la aniterior lista (Ayuda) Nombre inicial Apellidos Oprima aquí para añadir a más personas	empleados que v	viven alli. (Ayuda)	
Entre los nombres y luego oprima Siguiente. No incluya a nadie que ya esté en la anterior lista. (Ayuda) Nombre Inicial Apellidos	Entre los nombres y luego oprima Siguiente. No incluya a nadie que ya esté en la aniterior lista (Ayuda) Nombre inicial Apellidos Oprima aquí para añadir a más personas			
Entre los nombres y luego oprima Siguiente. No incluya a nadie que ya esté en la anterior lista. (Ayuda) Nombre Inicial Apellidos	Entre los nombres y luego oprima Siguiente. No incluya a nadie que ya esté en la aniterior lista (Ayuda) Nombre inicial Apellidos Oprima aquí para añadir a más personas			
Entre los nombres y luego oprima Siguiente. No incluya a nadie que ya esté en la anterior lista. (Ayuda) Nombre Inicial Apellidos	Entre los nombres y luego oprima Siguiente. No incluya a nadie que ya esté en la aniterior lista (Ayuda) Nombre inicial Apellidos Oprima aquí para añadir a más personas			
Entre los nombres y luego oprima Siguiente. No incluya a nadle que ya esté en la anterior insta. (Ayuda) Nombre Inicial Apellidos	Entre los nombres y luego oprima Siguiente. No incluya a nadle que ya esté en la anterior insta (Ayuda) Nombre Inicial Apellidos Oprima aquí para añadir a más personas	@ Si		
Nombre Inicial Apellidos	Nombre Inicial Apellidos Oprima aquí para añadir a más personas	€ No		
Nombre Inicial Apellidos	Nombre Inicial Apellidos Oprima aquí para añadir a más personas	Entre los nombre	es y luego oprima Siguiente. No incluya a i	nadie que va esté en la anterior
	Oprima aqui para añadir a más personas			
	Oprima aqui para añadir a más personas	Nombro	Inicial Apollidas	
Corina anui nara altarir a mán naronas		Nombre	Inicial Apellidos	
Onima anui nava alkatir a mán naronae				
Oncina aqui nara añadir a más netsonas				
Optima adul para ariadir a mas personas		Oncima	a aquí para añadir a más parennas	
		Oprima	a aquí para añadir a más personas	

ROSTER C



ADD2

	Preguntas Frecuentes	Guarde y Termine la Sesión	
alli, aunque sea invitados que pas © Si	ersonas que se listan a continuación, ¿AL. a por un período breve? Por ejemplo, un am san la noche o el fin de semana y que viven en	igo o pariente. No incluya a otro lugar <mark>(Ayuda)</mark>	
Nombre	Inicial Apellidos		

Accessibility Privacy Security

AWAY NOW



ANOTHER PLACE

counts		SUSBUREAU Make Informed Decisions
ICUESTA SOB A COMUNIDA E PUERTO RIC	RE D	
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesión
C Si C No	n usualmente? (Ayuda) Siguiente >>	
<< Anterior	Siguiente >>	

Accessibility Privacy Security

ANOTHER HOME SELECT

Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesión
Seleccione el nom queda habitualme	nbre o nombres de cualquier persona nte (Avuda)	a que tenga otro lugar donde se
queda nabitualine	me. totagat	
□ Nadie en esta lista	a tiene otro lugar donde se queda habitu	almente
The second secon	Siguiente >>	
<< Anterior		
<< Anterior		
<< Anterior		

MORE THAN TWO

PUERTO RIC	Preguntas Frecuentes	Guarde y Termine la Sesión
330000000000000000000000000000000000000		
⊕ ¿Está durante MÁS de (quedándose en URB LAGO DE PLA dos meses? (<u>Ayuda)</u>	ATA, 253 CALLE HIBISCUS
C Si		
© No		
<< Anterior	Siguiente >>	

Accessibility Privacy Security

ROSTER CHECK

0 counts	USCENS Helping You Mo	USBUREAU ke Informed Decisions
NCUESTA SOBRE LA COMUNIDAD DE PUERTO RICO		
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesión
Gracias por sus respi acerca de las siguien (Ayuda) Oprima en Siguiente		de la encuesta hará preguntas
		Comuníquese con nosotr

Accessibility Privacy Security

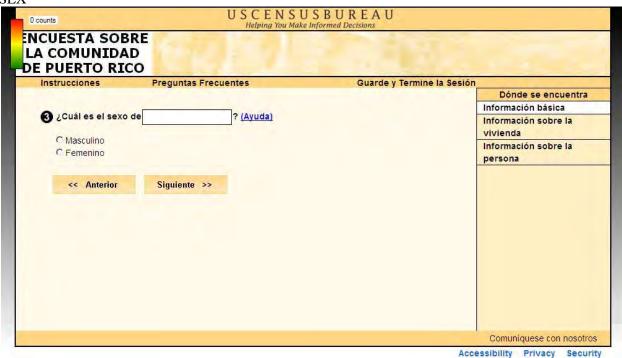
WHO RENTS OR OWNS

NCUESTA SOBRE A COMUNIDAD E PUERTO RICO		ke Informed Decisions	Time:
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesión	
			Dónde se encuentra
O De las haves use lists	dan	wills and white wide 2 Ci no ovieto	Información básica
	das, ¿quién es dueño(a) o quién alo a cualquier adulto que está viviendo o		Información sobre la vivienda
			Información sobre la persona
<< Anterior	Siguiente >>		
			Comuniquese con nosot

RELATIONSHIP



SEX



AGE/DATE OF BIRTH



HISPANIC ORIGIN



RACE

6 ¿Cuál es la raza de	la compressionation of the tree of		Dónde se encuentra
	a a regional programme of the control		
	? Puede seleccionar 1 o más razas.	Para esta encuesta	Información básica
origen nispano no es un	a raza. (Ayuda)	Fala esta encuesta,	Información sobre la Vivienda
□ Blanca			Información sobre la
☐ Negra o africana ame	ricana		persona
tribu principal	iva de Alaska - Entre el nombre de la tribu en la cu	jai esta inscrita o la	
□ India asiática			
☐ China			
Filipina			
☐ Japonesa			
□ Coreana			
□ Vietnamita	The second secon	Contract to the Contract	
etc.	a raza, por ejemplo, hmong, laosiana, tallandesa,	paquistani, camboyana,	
□ Nativa de Hawaii			
☐ Guameña o Chamorro			
□ Samoana			
Otra de las islas del P	acífico - Entre la raza, por ejemplo, fiyiana, tongal	na, etc.	
☐ Alguna otra raza - Ent	re la raza.		

HOUSING QUESTIONS

TYPE OF UNIT



Accessibility Privacy Security

TENURE



YEAR OF CONSTRUCTION

0 counts	USCENSU Helping You Make	JSBUREAU Informed Decisions	
NCUESTA SOBRI LA COMUNIDAD DE PUERTO RICO			
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesión	
			Dónde se encuentra
Anrayimadamente	cuándo se construyó originalmente e	cto odificio? (Avuda)	iformación básica
		The second secon	iformación sobre la ivienda
C 2000 ó después E	specifique el ano		iformación sobre la ersona
C 1990 a 1999		-	
C 1980 a 1989			
C 1970 a 1979			
C 1960 a 1969			
C 1950 a 1959 C 1940 a 1949			
C 1939 ó antes			
1939 0 antes			
<< Anterior	Siguiente >>		
			Comuniquese con nosotr

YEAR MOVED IN



ACRES



AGRICULTURAL SALES



BUSINESS ON PROPERTY

NCUESTA SOBRE LA COMUNIDAD DE PUERTO RICO	69.7		
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesión	
6 ¿Hay un negocio, tal o propiedad? (Ayuda)	omo una tienda o barbería o una o	ficina médica en esta	Dónde se encuentra Información básica Información sobre la vivienda
CSI CNo			Información sobre la persona
<< Anterior	Siguiente >>		

NUMBER OF ROOMS/BEDROOMS



FACILITIES

	UERTO RICO trucciones Preguntas Frecuentes	Guarde y Te	ermine la Se	esión
				Donde se encuentr
0	¿Tiene este apartamento — (Ayuda)	Si	No	Información básica Información sobre la vivienda Información sobre la
	a. agua callente y fría por tubería?	c		persona
	b. un inodoro?	c	c	
	c. una bañera o ducha?	C	r	
	d. fregadero con pluma del agua?	C	c	
	e. una estufa?	0	C	
	f. una nevera?	C	C	
	g. servicio telefónico del cual usted puede hacer y recibir llamadas? <i>Inclu</i> teléfonos celulares.	ya c	c	

Accessibility Privacy Security

VEHICLES



HEATING FUEL



ELECTRICITY



ELECTRICITY AMOUNT

Instrucciones	Preguntas Frecuentes	Guarde y Termine la Se	
			Dónde se encuentra
a. ¿Paga alguie seleccione "Si". (n en este hogar por electricidad? Si la l 'Ayuda)	electricidad y el gas se pagan juntos,	Información básica Información sobre la vivienda
€ Si € No			Información sobre la persona
Costo el mes pas	ado -Dólares		

GAS USE



GAS PAYMENT



Accessibility Privacy Security

GAS AMOUNT



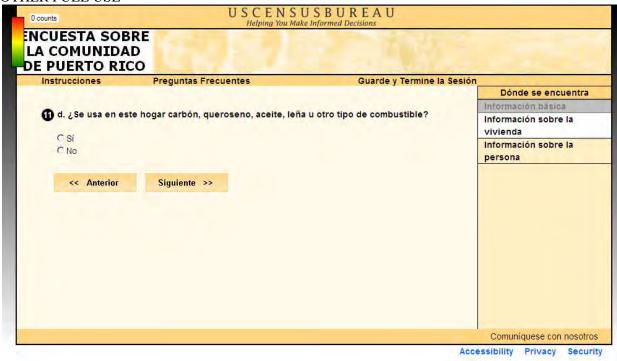
WATER AND SEWER PAYMENT



WATER AND SEWER AMOUNT



OTHER FUEL USE



FOOD STAMPS



PART OF A CONDO



CONDO FEE



Accessibility Privacy Security

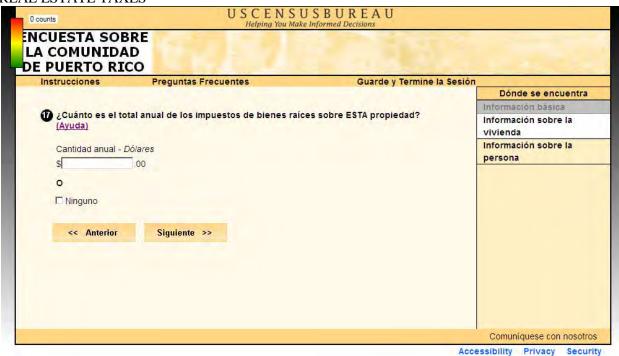
CONDO FEE AMOUNT



PROPERTY VALUE

0 counts NCUESTA SOBR	Helping You Mak	J S B U R E A U e Informed Decisions	
A COMUNIDAD E PUERTO RICO			
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Se	esión
			Dónde se encuentra
•			Información básica
Valor - Dólares	sted que se vendería esta casa si esti	uviera para la venta (<u>(Ayuda)</u>	Información sobre la vivienda
	0		Información sobre la persona
<< Anterior	Siguiente >>		
			Comuníquese con nosotr

REAL ESTATE TAXES



PROPERTY INSURANCE

0 counts	Helping You Mak	USBUREAU se Informed Decisions	
NCUESTA SOBRI A COMUNIDAD E PUERTO RICO			
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesión	
			Dónde se encuentra
(A) : Cuánto os al nago	anual de la prima por concepto de se	Aura contra incondice vicegos	Información básica
e inundaciones para	a ESTA propiedad? (Ayuda)	guio contra incendios, nesgos	Información sobre la vivienda
Cantidad anual - Dóla			Información sobre la persona
0			
Ninguno			
<< Anterior	Siguiente >>		
			Comuníquese con nosotr

MORTGAGE



MORTGAGE AMOUNT



MORTGAGE REAL ESTATE TAXES



SECOND MORTGAGE

0 counts	Helping You Make	JSBUREAU e Informed Decisions	
NCUESTA SOB LA COMUNIDA DE PUERTO RIC	D		
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesión	
		Dónde se encu	entra
6		Información básica	
	o algún otro miembro de este hogar una s el valor líquido (Home Equity Loan) de ES		la
C Sí un préstamo	sobre el valor liquido de esta propiedad	Información sobre	la
C Si, una segunda		persona	
	i hipoteca y un préstamo sobre el valor liquido	o de esta propiedad	
C No	Cimilant		
<< Anterior	Siguiente >>		
			nosoti

PERSON QUESTIONS

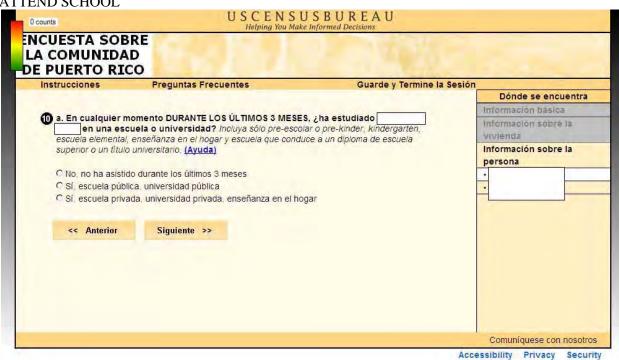
PLACE OF BIRTH



CITIZENSHIP

Instrucciones	Preguntas Frecuentes	Guarde y Termine la Ses	
			Donde se encuentr
(8 ¿Es	ciudadano(a) de los Estados Unidos	? (Ayuda)	Información básica Información sobre la
			vivienda
C Sí, nació en Pue			Información sobre la
	estado de los Estados Unidos, el Distrito de Inidos o las Islas Marianas del Norte	Columbia, Guam, las Islas Virgenes	persona
700	xtranjero de padre o madre que es ciudada	ano(a) de los EE.UU	·
C Sí, es ciudadano	o(a) de los Estados Unidos por naturalizació	ón - Escriba el año de naturalización	()
			3
C No, no es ciudad	dano(a) de los Estados Unidos		
			1
<< Anterior	Siguiente >>		

ATTEND SCHOOL



WHAT GRADE



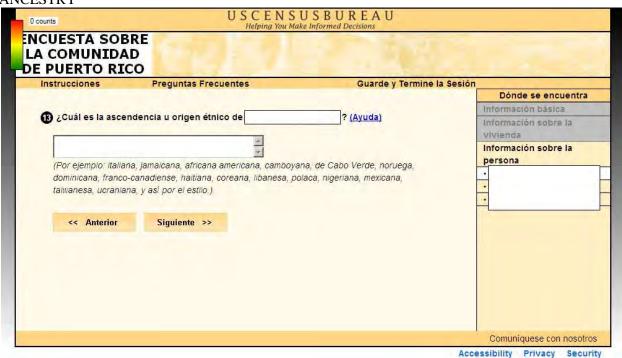
EDUCATIONAL ATTAINMENT

Instrucciones	Preguntas Frecuentes	Guarde y Termine la Se	esión
			Dónde se encuentr
Cuál os al títula a min	vel escolar más alto que	ha COMPLETADO? Si está	Información básica
	ente, seleccione el grado escolar anter		Información sobre la vivienda
			Información sobre la
NO HA COMPLETADO N C No ha completado nin			persona
	KINDER HASTA GRADO 12		
C Pre-escolar o Pre-kin	der		
C Kindergarten C Grado 1 al 11 - Espec	cifique grado 1 -11		
Grado Fai II - Espec	unque grado 1-11		
C Grado 12, SIN DIPLO	DMA		
GRADUADO(A) DE ESC	UELA SUPERIOR		
C Diploma de escuela s			
C GED o examen equiva	alente		
UNIVERSIDAD O ALGUI	NOS CRÉDITOS UNIVERSITARIOS		
C Algunos créditos univ	rersitarios, pero menos de 1 año de cre	éditos universitarios	
	tos universitarios, sin título		
	rsitario (por ejemplo: AA, AS)		
○ Titulo de bachillerato	universitario (por ejemplo: BA, BS)		
	DE BACHILLERATO UNIVERSITARIO		
	or ejemplo: MA, MS, MEng, MEd, MSV		
	s allá de un título de bachillerato unive	rsitario (por ejemplo: MD, DDS,	
DVM, LLB, JD) © Título de doctorado ()	nor ejemplo: PhD EdD)		
Titulo de doctorado ()	por ejempio. Prib, Eub)		

FIELD OF DEGREE

counts		NSUSBUREAU ou Make Informed Decisions	
ICUESTA SOBI A COMUNIDAI E PUERTO RIC			
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesi	
			Dónde se encuentra
A Esta progunta so	enfoca en el TÍTULO DE BACHILLE	BATO LINIVERSITABIO do	Información básica
. Por favor, e		centración de estudio de cualquier haya recibido. (Por	Información sobre la Vivienda
	química, enseñanza de educación pri		Información sobre la persona
		A 7.	•
<< Anterior	Siguiente >>		

ANCESTRY



LANGUAGE

NCUESTA SOBRE LA COMUNIDAD LE PUERTO RICO		Informed Decisions	
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesión	
			Dónde se encuentra
14 a. ¿Habla	en su hogar un idioma que no se	a inglés? (Ayuda)	Información básica
CSI	en sa negar an Idiolila que no se	a marea · tulnami	Información sobre la Vivienda
CNo			Información sobre la
	Siguiente >>		
			Comuníquese con nosoti

SPECIFY LANGUAGE



ENGLISH PROFICIENCY

NCUESTA SOBRE LA COMUNIDAD LE PUERTO RICO		Helping You Make Inform		
Instrucciones	Preguntas Freci	uentes	Guarde y Termine la Sesión	
				Dónde se encuentra
10 c. ¿Cuán bien habla		el inglés? (Ayuda)		Información básica
				Información sobre la vivienda
C Muy bien				Información sobre la
C Bien				persona
C No bien				
C No habla inglés				
				•
<< Anterior	Siguiente >>			
				•

RESIDENCE ONE YEAR AGO



SPECIFY OTHER ADDRESS

counts		SBUREAU Informed Decisions
ICUESTA SOBR A COMUNIDAD E PUERTO RICC		
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesión
		Dónde se encuentra
1 b. ¿Dónde vivía	hace 1 año? (Ayuda)	Información básica
D (200 1.1/10	Total and Columnia	Información sobre la
Dirección		vivienda
Nombre de urbaniza	atión o condominio	Información sobre la
Número y nombre d	e la calle	persona
	olo o condado de los Estados Unidos Rico o el nombre del estado de los Esta	ados Unidos
<< Anterior	Siguiente >>	Comuníquese con nosoti

INSURANCE



DEAF

NCUESTA SOB LA COMUNIDA LE PUERTO RIC	D	
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesión
		Dónde se encuent
🕡 a. ¿Es	sordo(a) o tiene una dificultad seria pa	ra oir? Información básica Información sobre la
		vivienda
C Sí C No		Información sobre la
QNO		persona
<< Anterior	Siguiente >>	

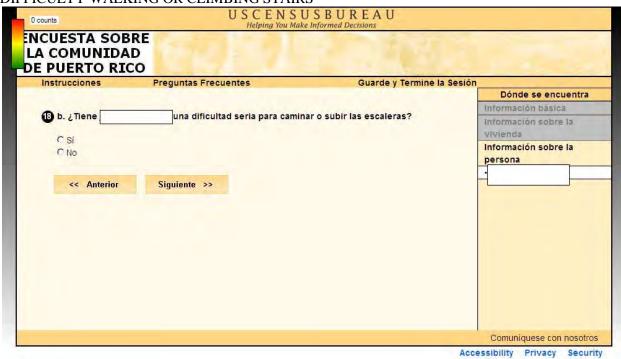
BLIND



DIFFICULY CONCENTRATING

0 counts NCUESTA SOBI	USCENSU Helping You Make I		
LA COMUNIDAD DE PUERTO RIC			
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Ses	ión
			Dónde se encuentra
(B) a. Debido a una co	ndición física, mental o emocional, ¿tien	una	Información básica
	ra concentrarse, recordar o tomar decision		Información sobre la vivienda
Csi			Información sobre la
CNo			persona
			-
<< Anterior	Siguiente >>		
	The state of the s		
			Comuniques services
			Comuníquese con nosotro

DIFFICULTY WALKING OR CLIMBING STAIRS

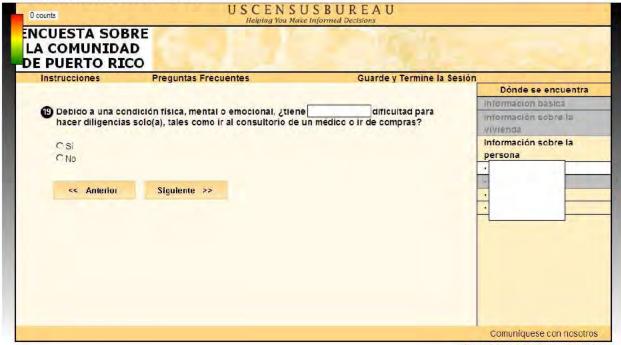


DIFFICULTY DRESSING OR BATHING

ICUESTA SOBI A COMUNIDAI E PUERTO RIC			
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesión	
18 c. ¿Tiene	dificultad para vestirse o bañarse?	Dónde se enc Información básic	ia
osi		Información subre vivienda	e la
C No		Información sobre persona	e la
<< Anterior	Siguiente >>	List of Names	

Accessibility Privacy Security

DIFFICULTY WITH ERRANDS



Accessibility Privacy Security

MARITAL STATUS

0 counts	Helping You Ma	USBUREAU tke Informed Decisions	
NCUESTA SOBR LA COMUNIDAD LE PUERTO RICO			
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesión	
			Dónde se encuentra
20 ¿Cuál es el estado	civil de ? (Ayuda)		Información básica
20 Couai es el estado	: (Ayuda)		Información sobre la Vivienda
C Casada actualmer	ite		Información sobre la
C Viuda			persona
C Divorciada			
C Separada C Nunca se ha casa			
Nunca se na casa	10		
<< Anterior	Siguiente >>		
			Comuniquese con nosoti

MARRIED IN THE LAST 12 MONTHS



WIDOW

NCUESTA SOB LA COMUNIDA DE PUERTO RIO	RE D	e Informed Decisions
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesión
		Dónde se encuentra
2 b. En los PASADOS 12 MESES, ¿enviudó		Información básica
<u> </u>	OS 12 MESES, ¿enviudó ?	Información sobre la
C Si		Información sobre la
C No		persona persona
		Comuniquese con nosotr

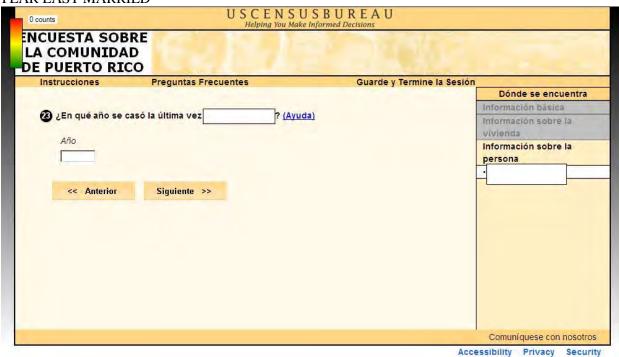
DIVORCED



NUMBER OF MARRIAGES

NCUESTA SOBR		te Informed Decisions
A COMUNIDAD		
E PUERTO RIC		
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesión
		Dónde se encuentra
2 ¿Cuántas veces ha	a estado casado(a)	Ayuda)
Conamas veces in	: t	imormación soute la
C Una vez		vivienda
C Dos veces		Información sobre la
C Tres veces o más		persona
<< Anterior	Siguiente >>	
		Comuniquese con nosotro

YEAR LAST MARRIED



BIRTH

NCUESTA SOBR LA COMUNIDAD DE PUERTO RICO		7,74/17	
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesión	
			Dónde se encuentra
24 ¿Ha dado a luz	en los últimos 12 meses? (Ayuda)		Información básica
G	The second secon		Información sobre la
O Sí			Información sobre la
<< Anterior	Siguiente >>		persona
			Comuniquese con nosotr

GRANDCHILDREN UNDER 18 LIVING AT HOME



VETERAN STATUS

Instrucciones	Preguntas Frecuentes	Guarde y Termine la Ses	
			Dónde se encuentra Información básica
	rva militar o la Guardia Nacional de los l	alguna vez en servicio militar activo en las Fuerzas ilitar o la Guardia Nacional de los Estados Unidos? El servicio activo para la Reserva militar, o la Guardia Nacional, pero SÍ incluye servicio	
	en la Guerra del Golfo Pérsico. (Ayuda)	National, pero 31 marge servicio	Información sobre la persona
C Sí, en servicio ad	THE PROPERTY OF THE PROPERTY O		•
	tivo durante los últimos 12 meses, pero no		•
	tivo en el pasado, pero no durante los últim		
C No, nunca estuvo	to para la Reserva o la Guardia Nacional so o en servicio militar	namente	
<< Anterior	Siguiente >>		

WHEN SERVED (PERIOD OF SERVICE)

NCUESTA SOB .A COMUNIDA E PUERTO RIC	D	1 Se 1	
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Se	
militar, aunque fuel ☐ Septiembre del 2	Seleccione CADA período durante el cual ra sólo por parte del período.	estuvo en servicio el Golfo Pérsico)	Dónde se encuentra Información basica Información sobre la Vivienda Información sobre la persona .

VA DISABILITY STATUS

ICUESTA SOB A COMUNIDA E PUERTO RIC	RE D	Informed Decisions	lining.
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Se	sión
			Dónde se encuentra
② a. ¿Tiene	una clasificación de incapa	cidad de la VA relacionada con	Información básica
el servicio?			Información sobre la vivienda
C Sí (tal como 0%,	10%, 20%,, 100%)		Información sobre la persona
<< Anterior	Siguiente >>		
			Comuníquese con nosotr

WORK LAST WEEK



ANY WORK

NCUESTA SOBR A COMUNIDAD E PUERTO RICC		7	1	
Instrucciones	Preguntas Frecue	ntes	Guarde y Termine la Ses	
				Dónde se encuentra
b. LA SEMANA PASA fuese por una hora		CUALQUIER trabajo po	or paga, incluso aunque	Información básica Información sobre la vivienda
C Sí C No				Información sobre la persona
<< Anterior	Siguiente >>			
				Comuniquese con nosotr

WORK ADDRESS LAST WEEK

Instrucciones	Preguntas Frecuentes	Guarde y Termine la Se	sión
			Dónde se encuentra
🛈 ¿En qué lugar trab	pajó LA SEMANA PASAD	DA? Si trabajó en	Información básica
más de un lugar, en	tre la dirección donde ella trabajó la mayor	parte de la semana. (Ayuda)	Información sobre la Vivienda
a. Dirección			Información sobre la
Nombre de urb	panización o condominio		persona
Número y nom	bre de la calle		
Si no sabe la dir	rección exacta, dé una descripción de la loc	alización, tal como el nombre	
	e o intersección más cercana.		
and designation and			
b browker de la c	alicated accepted in a state of the state of		
b. Nombre de la c	ciudad, pueblo u oficina postal		
c. ¿Está localizad	lo el lugar de trabajo dentro de los límit	tes de esa ciudad o pueblo?	
	do el lugar de trabajo dentro de los límit	tes de esa ciudad o pueblo?	
CSI		tes de esa ciudad o pueblo?	
CSI	lo el lugar de trabajo dentro de los límitos los límitos de la ciudad/pueblo	tes de esa ciudad o pueblo?	
C Sí C No, fuera de	los límites de la ciudad/pueblo		
C Sí C No, fuera de			
C Sí C No, fuera de	los límites de la ciudad/pueblo		
C Sí C No, fuera de	los límites de la ciudad/pueblo		
C Si C No, fuera de d. Nombre del mu	los límites de la ciudad/pueblo	los	
C Si C No, fuera de d. Nombre del mu	los límites de la ciudad/pueblo unicipio o condado de los Estados Unid	los	
C Si C No, fuera de d. Nombre del mu	los límites de la ciudad/pueblo unicipio o condado de los Estados Unid	los	
C Si C No, fuera de d. Nombre del mu e. Entre Puerto R	los límites de la ciudad/pueblo unicipio o condado de los Estados Unid	los	
C Si C No, fuera de d. Nombre del mu	los límites de la ciudad/pueblo unicipio o condado de los Estados Unid	los	
C Si C No, fuera de d. Nombre del mu e. Entre Puerto R	los límites de la ciudad/pueblo unicipio o condado de los Estados Unid	los	
C Si C No, fuera de d. Nombre del mu e. Entre Puerto R	los límites de la ciudad/pueblo unicipio o condado de los Estados Unid	los	
C Si C No, fuera de d. Nombre del mu e. Entre Puerto R	los límites de la ciudad/pueblo unicipio o condado de los Estados Unid	los	

TRANSPORT TO WORK LAST WEEK

		Guarde y Termine la Sesión
		Dónde se encuer
A sector to	Annual Control of the	Información básica
30 ¿Cómo llegó usua	ilmente jai trabajo LA SEII Itilizó más de un medio de transportación dura	MANA PASADA? Si
utilizó por más dista		vivienda
20022		Información sobre la
C Automóvil, camión	n o van	persona
C Autobús o trolebu	is	
C Carro público		
C Tren subterráneo	o elevado	
C Ferrocarril		
C Lancha (ferry)		
C Taxi		
C Motocicleta		
C Bicicleta		
C Caminó		
	nar .	
C Trabajó en el hog		
C Trabajó en el hog C Otro método		
	jai	

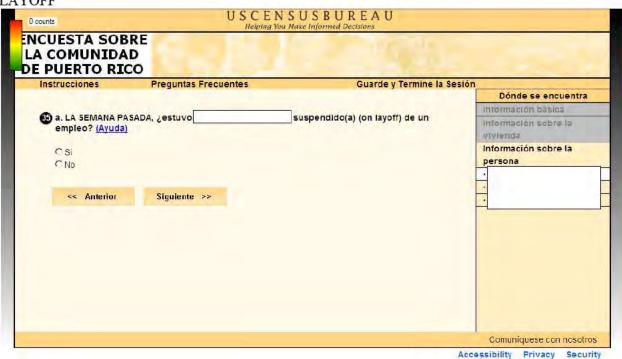
NUMBER OF RIDERS



MINUTES TO WORK

E PUERTO RIC	Preguntas Frecuentes	Guarde y Termine Ia	Sesión
¿Cuántos minutos SEMANA PASADA? Minutos	le tomó a usualmente	ir de su hogar al trabajo LA	Dónde se encuentra Intornación básica Información sobre la Vivienda Información sobre la persona List of Names

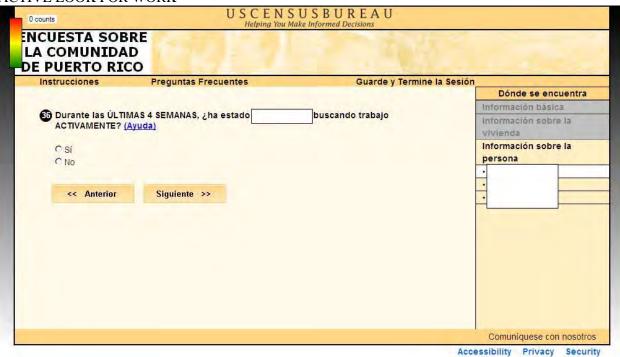
LAYOFF



TEMPORARILY ABSENT FROM A JOB

0 counts		JSBUREAU e Informed Decisions	
NCUESTA SOBI A COMUNIDAD E PUERTO RIC			
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Ses	sión
5 b. LA SEMANA PAS o negocio? (Ayuda		MPORERAMENTE de su empleo	Dónde se encuentra Información básica Información sobre la vivienda
C Si, de vacaciones relacionadas con € No	s. enfermedad temporal, licencia por matern la familia, mal tiempo, etc. Siguiente >>	idad, otras razones personales o	Información sobre la persona
			Comuníquese con nosoti

ACTIVE LOOK FOR WORK



COULD WORK

Instrucciones	Preguntas Frecuentes	Guarde y Termine la Se	
			Dónde se encuentra
1 LA SEMANA PASAD	DA, ¿hubiera podido	comenzar un empleo si se le	Información básica
hubiera ofrecido uno, o hubiera podido regresar al trabajo si se le hubiera llamado de nuevo? (Ayuda)		Información sobre la Vivienda	
C Sí, hubiera podide	o ir a frabajar		Información sobre la persona
	enfermedad temporal propia		
O No. debido a otra	s razones (en la escuela, etc.)		
<< Anterior	Siguiente >>		

LAST WORKED



FIFTY OR MORE WEEKS

0 counts	USCENSUSB Helping You Make Inform		
NCUESTA SOBI A COMUNIDAI E PUERTO RIC	D		
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesión	
			Dónde se encuentra
🔞 a : Durante los III	LTIMOS 12 MESES (52 semanas), ¿trabajó	50 semanas o	Información básica
	o libre pagado como trabajo. (Ayuda)	Job Sellialias o	Información sobre la
			Información sobre la
C Sí C No			persona
<< Anterior	Siguiente >>		
			Comuniquese con nosot

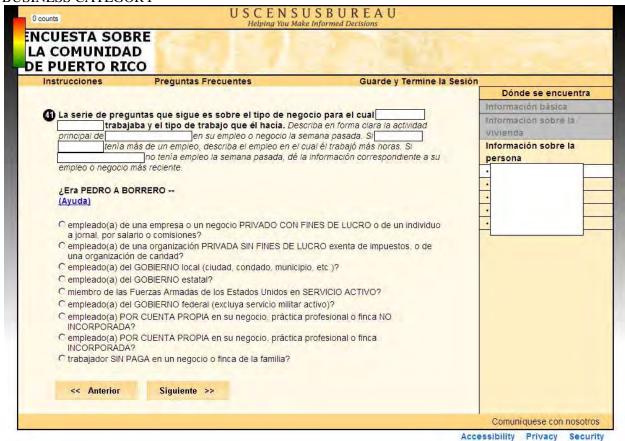
WEEKS WORKED



HOURS USUALLY WORKED

E PUERTO RI	Preguntas Frecuentes	Guarde y Termine la Sesión	
		Dónde se en	
En las SEMANAS usualmente	S TRABAJADAS durante los ÚLTIMOS 12 ME cada SEMANA? <u>(Ayuda)</u>	ESES, ¿cuántas horas trabajó Información bási Información sobi	-
<< Anterior	siguiente >>	persona	

BUSINESS CATEGORY

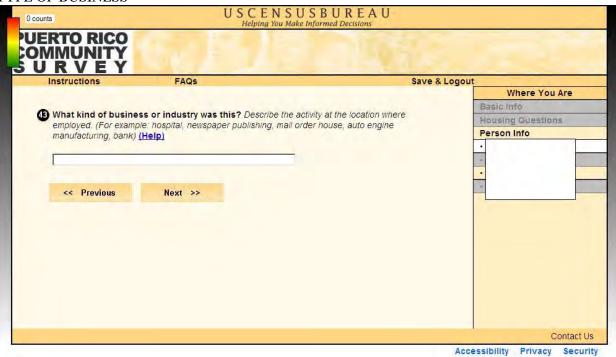


Accessibility Privacy Security

MILITARY EMPLOYER



TYPE OF BUSINESS



BUSINESS CLASS



TYPE OF WORK



DUTIES

Instrucciones	Preguntas Frecuentes	Guarde y Termine la Se	
			Dónde se encuent
cuidar pacientes, di	actívidades o deberes más importantes de irigir políticas de contratación, supervisar personal de máquina y archivar, reconciliar registros financieros		Información básica Información sobre la vivienda
ondargoo, oddraw	- magana y araman, reservana regiones inansistes	, 111111	Información sobre la persona
<< Anterior	Siguiente >>		

INCOME QUESTIONS

WAGES



WAGES AMOUNT

	Preguntas Frecuentes	Guarde y Termine la Ses	sión
			Dónde se encuentr
Las siguientes p 12 MESES.	reguntas son sobre el ingreso de	DURANTE LOS ÚLTIMOS	Información básica Información sobre la
	ngreso que recibió, entre el mej urante los ÚLTIMOS 12 MESES. (NOTA: Los ' hoy hace un año hasta noy.)	or estimado de la CANTIDAD "últimos 12 meses" es el período	Información sobre la persona
	ido en conjunto, informe la parte que le corres rme la cantidad total bajo una sola persona y s		
a. ¿Recibió todos los emple	jornales, sueldos/salarios, comis os DURANTE LOS ÚLTIMOS 12 MESES? <u>(Ay</u>		
© Si © No			
	idad? Informe la cantidad antes de aplicarse ras cosas. (Ayuda)	las deducciones por impuestos,	
CANTIDAD TOTA Últimos 12 ME	(E) 1333160		
GIGINOS 12 IVIE			

SELF-EMPLOYMENT INCOME



SELF-EMPLOYMENT AMOUNT



Accessibility Privacy Security

INTEREST



SOCIAL SECURITY

0 counts		ke Informed Decisions	
NCUESTA SOBR LA COMUNIDAD DE PUERTO RICO			
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Se	
	algunos pagos por bene DURANTE LOS ÚLTIMOS 12 MESES? (A	ficio del Seguro Social o del yuda)	Dónde se encuentra Información básica Información sobre la Vivienda
	en conjunto, informe la parte que le corr e la cantidad total bajo una sola persona		persona
<< Anterior	Siguiente >>		
			Comuniquese con nosotr

SOCIAL SECURITY AMOUNT



SUPPLEMENTAL SECURITY INCOME

Preguntas Frecuentes Preguntas Frecuentes Preguntas Frecuentes Preguntas Frecuentes algún pago de Seguridad de Ingentia (SSI) EN LOS ÚLTIMOS 12 MESES? (Ayuda) Siguiente >>	Guarde y Termine la Sesión Dónde se encuer Información básica Información sobre la vivienda Información sobre la persona .
(SSI) EN LOS ÚLTIMOS 12 MESES? (Ayuda) C Sí C No	greso Suplemental Información básica Información sobre la vivienda Información sobre la
C No	Información sobre la

PUBLIC ASSISTANCE



PUBLIC ASSISTANCE AMOUNT

0 counts	Helping You Mak	USBUREAU se Informed Decisions	
NCUESTA SOBR .A COMUNIDAD E PUERTO RICO			
Instrucciones	Preguntas Frecuentes	Guarde y Termine la S	
			Dónde se encuentra
17 f. ¿Recibió	algún pago de asistencia o biene	estar público de la oficina de	Información básica
	TOCAL EN LOS ÚLTIMOS 12 MESES? (Ay		Información sobre la vivienda
€ Sí			Información sobre la
G No			persona
Cuál fue la cantid	ad? (Ayuda)		
CANTIDAD TOTAL últimos 12 MESI			
\$.00			
<< Anterior	Siguiente >>		
			Comuníquese con nosot

RETIREMENT



RETIREMENT AMOUNT

A COMUNIDA E PUERTO RI			
Instrucciones	Preguntas Frecuentes	Guarde y Termine la S	esión Dónde se encuentra
g. ¿Recibió incapacidad DU	alguna pensión por retir RANTE LOS ÚLTIMOS 12 MESES? NO inclu	o, para sobrevivientes o por ya Seguro Social. (Ayuda)	Información básica Información sobre la vivienda
CANTIDAD TOT últimos 12 N S	AL en los ESES		Información sobre la persona

OTHER INCOME



OTHER INCOME AMOUNT

NCUESTA SOB LA COMUNIDA E PUERTO RIC	RE D	e Informed Decisions	le la
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Ses	sión
			Dónde se encuentra
n. ¿Recibió	ingress on forms RECIII AR o	le alguna otra fuente, tal como	Información básica
pagos de la Adm	inistración de Veteranos (VA), compensa res o pensión alimenticia DURANTE LOS Ú	ción por desempleo, pensión	Información sobre la Vivienda
© Sí © No Cuál fue la cant CANTIDAD TOTA últimos 12 ME \$ 00	AL en los	a casa. [Myuua]	Información sobre la persona
			Comuniquese con nosotr

VERIFY INCOME



PICK NEXT PERSON SCREEN

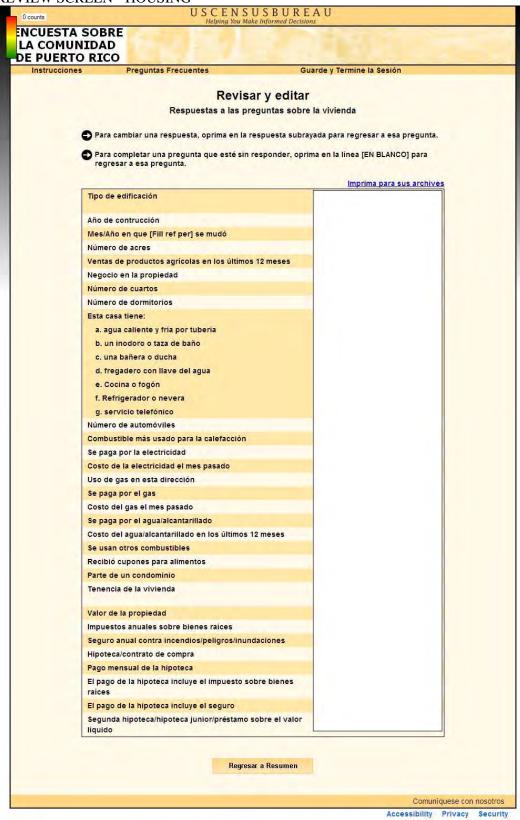
Instrucciones	Preguntas Frecuentes	Guarde y Termine la Sesión
		Dónde se encue Información básica
	ombre de la siguiente persona por la que ahora para alguna persona en la lista, oprima	puede responder. Si usted no
0		Información sobre l persona
-		
<< Anterior	Siguiente >>	<u>.</u>

PRESUMMARY SCREEN

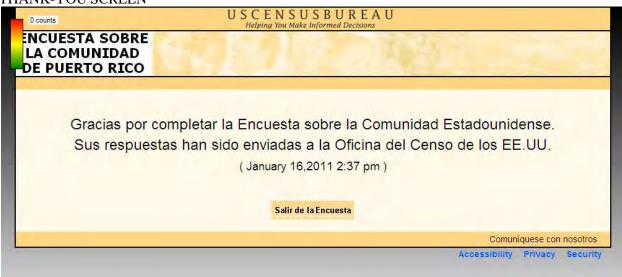




REVIEW SCREEN - HOUSING



THANK-YOU SCREEN



APPENDIX 4: Consent Form in Spanish with English Translation



HOJA DE CONSENTIMIENTO

El estudio de la usabilidad de la encuesta de la comunidad de Puerto Rico

Cada año, el Negociado del Censo lleva a cabo muchos estudios acerca de encuestas diferentes. Por ejemplo, el Negociado del Censo examina las palabras, el diseño, y cómo se usan los productos (por ejemplo, las páginas web, las encuestas en línea y las cartas enviadas por correo postal) para obtener la mejor información posible.

Usted se ha ofrecido como voluntario para participar en un estudio que tiene el objetivo de mejorar la usabilidad de una versión en línea de la encuesta de la comunidad de Puerto Rico, que en este momento se desarrolla. Para documentar sus comentarios, vamos a hacer una grabación de video de esta sesión. Usaremos la grabación para mejorar el diseño de la encuesta. Solamente el personal que trabaja directamente en este estudio tendrá acceso a las grabaciones. También, durante esta sesión vamos a rastrear los ojos; es decir que vamos a grabar los movimientos de los ojos. Su participación en este proyecto es totalmente voluntaria, y las respuestas que usted nos dará se mantendrán estrictamente confidenciales.

Este estudio se lleva a cabo bajo la autoridad del Título 13 del Código de los Estados Unidos. El número de control de OMB para este estudio es 0607-0725. Esta recolección de información es certificado legalmente por este número válido de aprobación.

Me he ofrecido como voluntario para participar en este estudio de diseño de cuestionarios de la Oficina del Censo, y doy permiso para que se utilice la grabación de mi entrevista para los propósitos explicados anteriormente en esta hoja.

Nombre del/de la respondente en letra de molde:
Firma del/de la respondente:
Fecha:
Nombre del/de la entrevistador(a) en letra de molde:
Firma del/de la entrevistador(a):
Fecha:

El número de control de OMB (0607-0725) se vence el 31 de agosto, 2013. El Negociado del Censo calcula que, para una familia promedio, tomará 38 minutos completar esta encuesta, incluido el tiempo para leer las instrucciones y revisar las respuestas. Puede enviar por correo electónico sus comentarios relacionados con el tiempo que toma la encuesta o cualquier otro aspecto de esta recopilación de información, incluidas sus sus sugerencias para reducir el tiempo: Paperwork@census.gov. Por favor, utilice "Paperwork Project 0607-0936" como tema. También puede enviar sus comentarios por correo a "Paperwork Project 0607-0936, U.S. Census Bureau, 4600 Silver Hill Road, AMSD - 3K138, Washington, D.C. 20233." La personas no están obligadas a responder a ninguna recopilación de información, a menos que está muestra un número de aprobación válida de la Oficina de Admintración y Presupuesto.



Consent Form For Individual Participants

Usability Testing of the Puerto Rico Community Survey

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

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

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

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

Participant's Name:	
Participant's Signature:	Date:
Researcher's Name:	
Researcher's Signature:	Date:

OMB number 0607-0725 expires on August 31, 2013. The Census Bureau estimates that, on average, this form will take 20 minutes to complete, including the time for reviewing the instructions and answers. Send comments regarding this burden estimate or any other aspect of this burden to: Paperwork Reduction Project 0607-0725, U.S. Census Bureau, AMSD 3K138, 4600 Silver Hill Road, Washington, DC 20233. You may e-mail comments to <Paperwork@census.gov>; use Paperwork Project 0607-0725" as the subject. Respondents are not required to respond to any information collection unless it displays a valid approval number from the Office of Management and Budget.

APPENDIX 5: Background Survey in Spanish with English Translation

Cuestionario acerca de la experiencia con estadísticas, el uso de la computadora, y experiencia con internet

SUS RESPUESTAS SON ESTRICTAMENTE CONFIDENCIALES

Sus datos personales
1. ¿Cuál es su edad?
2. ¿Es usted de sexo masculino o femenino?
3. ¿Cuál es el título o nivel escolar más alto que usted ha completado?
Grado 1-8 Grado 9-12 (sin diploma) Grado 12 (diploma de escuela secundaria) Algunos créditos universitarios Título asociado universitario (2 años) Título de bachiller universitario (4 años) Algunos créditos de maestría o profesionales Título de maestría, título profesional, o título de doctorado
Su experiencia con la computadora
1. ¿Usa usted una computadora en su casa, su sitio de trabajo, o los dos? En su casa En su sitio de trabajo Los dos
2. ¿Si tiene usted una computadora en su casa, a. ¿Qué tipo de modem usa usted en su casa? conexión Dial Up servicio de cable modem servicio de DSL servicio inalámbrica (Wi-Fi) Otro tipo No sabe
b. ¿Cuál es el navegador que suele usar usted en casa? Por favor, dígame la versión si se puede acordar. Firefox Internet Explorer Netscape Otro navegador No sabe

c. ¿Cuál es	el sistema _ MAC O		vo que usa	la coi	mputado	ora en su	casa	ι?				
	_ Window											
	_ Window											
	_ Window											
	_ Window											
	_ Otro sist											
	No sabe											
3. En promedio, ap	roximadar	nente ¿c	uántas hor	as pas	a usted	en el inte	rnet	alo	lía?			
0 horas		O		1								
1-3 ho	ras											
4-6 ho	ras											
7 horas	s o más											
4. Por favor, califiq números que refleja						(Haga u	n ur	ı cír	culo	alr	ededor d	le los
		Ning	una experi	iencia					M	Iuch	a experi	encia
La computa El internet	adora	1	2	3	4	5	6	5	,	7	8	9
El internet		1	2	3	4	5	6	5	,	7	8	9
Interne Progra Hojas Progra Otras a	mas para o de cálculo mas de co mas de inquiplicaciono	crear doc (Excel, ntabilida geniería, es:	Lotus, Quad o programa:	attro nmas c s cien) le impue tíficos, o	estos o progran	nas (esta				
Para las siguientes	preguntas	s, por fav	vor, marqu	ie un s	solo nún						, .	
						Cómodo	(a)		No	mu	y cómoc	lo(a)
6. ¿Qué tan cómodo navegar nuevos síti			prendiend	o a			1	2	3	4	5	
7. Equipo de "Wind cambiar de tamaño cómodo(a) se encue	, y desplaz	zar. ¿Qué	ž tan	?			1	2	3	4	5	
8. ¿Qué tan cómodo navegando por inte		cuentra u	itilizando y	y			1	2	3	4	5	
navegando por inte	inct:					Nun	ca		Co	on fr	ecuencia	a
9. ¿Con cuánta frec tipo de datos/núme		-	_				1	2	3	4	5	
10. ¿Con cuánta fre	cuencia h	ace análi	isis de dato	os			1	2	3	4	5	

complejos usando una computadora?

- 11. ¿Con cuánta frecuencia utilize el internet o los sítios web para encontrar información (por ejemplo, reportajes, artículos del periodico, tablas de datos, "blogs"...)?
- 12. ¿Está usted familiarizado con los términos, los datos, etc. del Censo?
- 13. ¿ Está usted familiarizado con los términos, los datos, etc., del sitio en Internet de la Encuesta sobre la Comunidad Puertorriqueña y "American FactFinder (AFF)"?

1	2	3	4	5

No muy familiarizado				Mı	uy familiarizado
	1	2	3	4	5

1 2 3 4 5

Questionnaire on Statistical Background, Computer Use, Internet Experience

YOUR ANSWERS ARE CONFIDENTIAL

D	emographics
1.	What is your

1. What is y	our age?
2. Are you	male or female?
3. What is y	cour level of education? Grade school Some high school High school degree Some college 2-year college degree 4-year college degree Some postgraduate study Master's degree, professional degree, or doctorate
Computer	experience
2. If you ha	use a computer at home, at work, or both? Home Work Somewhere else, such as school, library, etc. ave a computer at home, What kind of modem do you use at home? Dial-up Cable DSL Wireless (Wi-Fi) Other
	Other Don't know
b. V	Which browser do you typically use at home? Please indicate the version if you can recall it. Firefox Internet Explorer Netscape OtherDon't know
c. V	Vhat operating system does your home computer run in? MAC OS Windows 95 Windows 2000 Windows XP Windows Vista OtherDon't know

3. On average, about r0 hours	now many nou	rs do yo	u spena	on the Ir	iternet p	er day?			
1-3 hours									
4-6 hours									
7 or more l	nours								
4. Please rate your ove	erall experienc	e with th	ne follow	ving: Cir	cle one i	number.			
	No	experien	ice				Very	experie	enced
Computers	1	2	3 4	4	5	6	7	8	9
Internet	1	2	4	5	5	6	7	8	9
5. What computer appl	ications do vo	u use? M	Iark (X)	for all th	hat apply	v			
E-mail	,		().	J	11 2				
Internet									
Word proc	essing (MS-W	ord, Wo	rdPerfec	et, etc.)					
Spreadshee	ets (Excel, Lot	us, Quat	tro, etc.))					
•	g or tax softwa	_							
-	g, scientific, o		cal softv	vare					
•	ications, please								

For the following questions, please circle one number.	Comfortable			Not Co	mfortable
6. How <i>comfortable</i> are you in learning to navigate new Web sites?	1	2	3	4	5
7. Computer windows can be minimized, resized, and scrolled through. How <i>comfortable</i> are you in manipulating a window?	1	2	3	4	5
8. How <i>comfortable</i> are you using, and navigating through the Internet?	1	2	3	4	5
	Never			Ve	ry Often
9. How <i>often</i> do you work with any type of data through a computer?	1	2	3	4	5
10. How <i>often</i> do you perform complex analyses of data using a computer?	1	2	3	4	5
11. How <i>often</i> do you use the Internet or Web sites to find information? (e.g., printed reports, news articles, data tables, blogs, etc.)	1	2	3	4	5
01050, etc.)	Not familiar			Very	familiar
12. How <i>familiar</i> are you with the Census (terms, data, etc)?	1	2	3	4	5
13. How <i>familiar</i> are you with the current American Community Survey (ACS) and American FactFinder (AFF) sites (terms, data, etc.)?	1	2	3	4	5

APPENDIX 6: Satisfaction Questionnaire in Spanish with English translation

Cuestionario acerca de la satisfacción del usuario

Por favor, haga un un círculo alrededor de los números que reflejan adecuadamente sus impresiones acerca del uso de la PRCS:

1. Su reacción a la encuesta en general:	horrible excelente 1 2 3 4 5 6 7 8 9 no aplica
2. Los diseños de las pantallas:	ilógicos lógicos 1 2 3 4 5 6 7 8 9 no aplica
3. El uso de la terminología en toda la encuesta:	incongruente congruente 1 2 3 4 5 6 7 8 9 no aplica
4. Las instrucciones que aparecen en las pantallas:	inadecuadas adecudadas 1 2 3 4 5 6 7 8 9 no aplica
5. Las preguntas que aparecen en las pantallas:	complicadas claras 1 2 3 4 5 6 7 8 9 no aplica
6. Las preguntas se pueden contestar de manera sencilla:	nunca siempre 1 2 3 4 5 6 7 8 9 no aplica
7. La organización de las preguntas, las instrucciones y las categorías de respuestas en la encuesta:	complicada clara 1 2 3 4 5 6 7 8 9 no aplica
8. La navegación adelante:	difícil fácil 1 2 3 4 5 6 7 8 9 no aplica
9. La experiencia de completar la encuesta, en general:	difícil fácil 1 2 3 4 5 6 7 8 9 no aplica

10. Otros comentarios acerca de la encuesta:

Questionnaire for User Interface Satisfaction

Please circle the numbers that most appropriately reflect your impressions about using the ACS Web survey.

1. Overall reaction to the Web Survey: terrible wonderful

1 2 3 4 5 6 7 8 9 not applicable

2. Screen layouts: illogical logical

1 2 3 4 5 6 7 8 9 not applicable

3. Use of terminology throughout the survey: inconsistent consistent

1 2 3 4 5 6 7 8 9 not applicable

4. Instructions displayed on the screens: inadequate adequate

1 2 3 4 5 6 7 8 9 not applicable

5. Questions displayed on the screens: confusing clear

1 2 3 4 5 6 7 8 9 not applicable

6. Questions can be answered in a straight- never always

forward manner: 1 2 3 4 5 6 7 8 9 not applicable

7. Organization of question, instructions, confusing clear

and response categories in the survey: 1 2 3 4 5 6 7 8 9 not applicable

8. Forward navigation: difficult easy

1 2 3 4 5 6 7 8 9 not applicable

9. Overall experience of completing the survey: difficult easy

1 2 3 4 5 6 7 8 9 not applicable

10. Additional Comments: