2022 American Community Survey Content Test

Cognitive Testing Kickoff Meeting

Census Bureau's Materials Inventory

Proposals, N = 10

TOPIC
Person Level
1. Household Roster
2. Educational Attainment
3. Health Insurance Coverage
4. Disability
5. Means of Transportation to Work
6. Income
Housing
7. Sewer
8. Electric Vehicles
9. Home Heating Fuel
10. Solar Panels
~~11.~~ HOA Fees (delivered closer to Round 2)

2022 ACS Content Test – Cognitive Testing
TOPIC – Household Roster
Wednesday, February 19, 2020

Subcommittee Lead:

Elizabeth Poehler, U.S. Census Bureau

Subcommittee Team Members:

Derek Breese, U.S. Census Bureau
Sandy Clark, U.S. Census Bureau
Mary Davis, U.S. Census Bureau
Sarah Heimel, U.S. Census Bureau
Eric Jensen, U.S. Census Bureau
Grace Kena, Bureau of Justice Statistics
Kathleen Kephart, U.S. Census Bureau
Scott Konicki, U.S. Census Bureau
Dave Raglin, U.S. Census Bureau
Andrew Roberts, U.S. Census Bureau
Mary Frances Zelenak, U.S. Census Bureau

Objective:

The objective is to test a new set of rostering instructions and coverage questions to improve the within household coverage of the American Community Survey (ACS). There are known coverage issues with census and survey data, such as the undercount of young children. In addition, while the complexity of household living arrangements in the United States has increased, the instructions used for the ACS have not changed since the late 1990s. Prior research has demonstrated that respondents find the household roster portion of the survey confusing and hard to understand (see Clark,2017; DeMaio and Hughes, 2003; Ashenfelter, et al, 2011; Ashenfelter et al, 2013).[1]

Cognitive Testing Research Goals:

- Which version helps respondents understand better that they should include unrelated people on the roster?
- Do respondents notice and comprehend all of the text about who to include or exclude outside of the main question stems? Are they utilizing this text when responding?
- Which version of the paper form yielded the more accurate roster?
- (For paper) Was one format preferred by respondents?

[1] Clark, S. (2017) "Analysis of the Household Roster Questions on the ACS" U.S. Census Bureau. Accessed 5/3/2019 at https://www.census.gov/library/working-papers/2017/acs/2017_Clark_01.html.
DeMaio, T. and Hughes, K. (2003) "Report of Cognitive Research on the Residence Rules and Seasonality Questions on the American Community Survey (ACS)", U.S. Census Bureau, Survey Methodology #2003-08.
Ashenfelter, K., Holland, T., Quach, V., Nicols, E. and Lakhe, S. (2011). "ACS Internet 2011 Project: Report for Rounds 1 and 2 of ACS Wireframe Usability Testing and Round 1 of ACS Internet Experiment Mailing Materials Cognitive Testing." U.S. Census Bureau Survey Methodology #2012-01.
Ashenfelter, K., Holland, T., Quach, V. and Nichols, E. (2013). "Final Report for the Usability Evaluation of ACS 2011 Online Instrument Rounds 4a and 4b" U.S. Census Bureau. Survey Methodology #2013-04

- (For CAPI version 1) What do the terms “short visit,” “short time,” and “overnight stay” mean to respondents?
- (For CAPI version 2) What does the term “short time” mean to respondents?
- Were respondents hesitant or unsure about including anyone that lives or stays with them?
  - If so, what are the relationships and/or living situations of those people?
  - What was the reason they were hesitant or unsure to include them?
  - Were they unsure how long someone had to live there to be included?
- Do respondents have privacy concerns about reporting certain household members?
  - If so, what are the relationships and/or living situations of those people?
  - What wording increased or decreased their concerns?
- (For CAPI only) Did the respondents express annoyance or confusion about why we were asking the series of coverage questions?
- If the respondent doesn't have a complex living situation now (they didn’t add or delete people via the coverage questions), have they ever have had one (lived with someone else or have someone else live with them)? How would they have answered the questions about that situation?

Cognitive Testing Recruiting Requirements:

- Households with multiple families cohabitating
- Households with related subfamilies
- Households with unrelated subfamilies/individuals
- Households where children are in the subfamily, especially children aged 0-4
- Households with children in custody arrangements
- Households with foster children
- Households with no one related to each other
- Families with someone in the Armed Forces and on deployment (lower priority)
- Families with children who live away at college (lower priority)

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TOPIC – Household Roster
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Paper

CURRENT PRODUCTION VERSION	TEST VERSION 1	TEST VERSION 2
How many people are living or staying at this address? • **INCLUDE** everyone who is living or staying here for more than 2 months. • **INCLUDE** yourself if you are living here for more than 2 months. • **INCLUDE** anyone else staying here who does not have another place to stay, even if they are here for 2 months or less. • **DO NOT INCLUDE** anyone who is living somewhere else for more than 2 months, such as a college student living away or someone in the Armed Forces on deployment. **Number of people**	**How many people, including yourself, are living or staying at this address?** • **INCLUDE** everyone living or staying here, even if they are not related to you. • **INCLUDE** children, related or unrelated, such as babies, grandchildren, or foster children. • **INCLUDE** anyone else staying here now, such as roommates and other families who have no other place to stay. • **DO NOT INCLUDE** anyone who is living somewhere else, such as a college student living away or someone in the Armed Forces on deployment. **Number of people** **Fill out pages 2 – 7 for everyone, including yourself, who is living or staying at this address. Then complete the rest of the form.**	**How many people, including people not related to you, are living or staying at this address?** **INCLUDE...** ✓ yourself if you live here. ✓ children, related or unrelated, such as babies, grandchildren, or foster children. ✓ anyone else staying here now, such as roommates and other families who have no other place to stay. **DO NOT INCLUDE...** ✗ anyone who is living somewhere else, such as a college student living away or someone in the Armed Forces on deployment. **Number of people** **Fill out pages 2 – 7 for everyone, including yourself, who is living or staying at this address. Then complete the rest of the form.**

2022 ACS Content Test – Cognitive Testing
TOPIC – Household Roster
Wednesday, February 19, 2020

Computer Assisted Interview Script

CURRENT PRODUCTION VERSION	TEST VERSION 1	TEST VERSION 2	Notes or Comments
Original Roster **I'm going to be asking some questions about everyone who is living or staying at this address. First let's create a list of the people, starting with you.** **What is your name? What is the name of the next person living or staying here?** ***Enter first name. If there are no additional people to list, enter 999 to continue.**	**Original Roster** **Let's create a list of everyone, including people not related to you, living or staying at this address.** **What is your name?** (**What is the name of the next person living or staying here?**) ❖ Make sure to include the respondent if he/she is staying there.	**Original Roster** **Let's create a list of everyone living or staying at this address, even if they are not related to you.** **What is your name?** (**What is the name of the next person living or staying here?**) ❖ Make sure to include the respondent if he/she is staying here.	1. Subcommittee is interested in using a flashcard for V1. Does contractor agree? 2. Overcount Follow-Up will be at the end of the interview testing Household Roster (Group 1, Versions 1 and 2).

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Undercount -1 **The following questions are to make sure this list is as complete as possible…Does anyone else live or stay here, such as roommates, foster children, boarders, or live-in employees?** ***Enter first name. If there are no additional people to list, enter 999 to continue.** **Undercount -2** **Is there anyone else staying here even for a short time, such as a friend or relative?** ***Do not include overnight or weekend guests who have a residence somewhere else.** ***Enter first name. If there are no additional people to list, enter 999 to continue.**	**Undercount Probe (Single Question)** **The following questions are to make sure everyone is included.** **The people you have listed so far are…** ❖ Read all names. **Other than these people, is there anyone else staying here such as…** • **Babies** • **Grandchildren** • **Foster children** • **Any other children, related or unrelated to you** • **Roommates** • **People or families who have no other place to stay?** ❖ Do not include overnight or weekend guests who have a residence somewhere else. ❖ List additional names to the right.	**Undercount -1** **The following questions are to make sure everyone is included.** **Other than the people you have already mentioned, are there any children living or staying here, such as babies, grandchildren, or foster children? These children could be related or unrelated to you.** **Undercount -2** **Other than the people you have already mentioned, is there anyone else staying here, such as roommates and other people or families who have no other place to stay?** ❖ Do not include overnight or weekend guests who have a residence somewhere else.	

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Overcount - 1 **The next questions are to help refine this list. I have listed….** **(read names)** ***Read all bolded names.** **Are any of these people away NOW for more than two months, like a college student or someone in the military?** ***DO NOT select children in boarding school or summer camp.** ***Select children in shared custody who are not currently staying at the sample address, regardless of the length of stay.** ***Select the persons who are away NOW for more than two months.** ***Enter all that apply, separate with commas.** ***The two-month period is not anchored by a specific reference date, but can encompass the two months prior to survey contact or the two months following the survey contact date.** ***If no one is away, enter 999 to continue.**	**Overcount - 1** ❖ Copy names from Original Roster, Undercount Probe. **The following questions are to make sure everyone we have listed should be included in this survey.** **I have…** ❖ Read all names. **Do any of these people live somewhere else now, such as a college student or someone in the Armed Forces on deployment?** ❖ MARK "No" for: (1) children in boarding school or summer camp ❖ MARK "Yes" for: (1) children in shared custody who are not currently staying at the sample address, regardless of the length of stay; (2) persons who are away NOW for more than two months^ ^ - The two-month period is not anchored by a specific reference date, but can	**Overcount - 1** ❖ Copy names from Original Roster, Undercount – 1, and Undercount – 2. **I have listed…** ❖ Read all names. **Do any of these people live somewhere else, such as a college student or someone in the Armed Forces on deployment?** ❖ MARK "No" for: (1) children in boarding school or summer camp ❖ MARK "Yes" for: (1)children in shared custody who are not currently staying at the sample address, regardless of the length of stay; (2)persons who are away NOW for MORE than two months^ ^ - The two-month period is not anchored by a specific reference date, but can encompass the two months prior to the interview or the two months following the interview date.	

Overcount – 2 **(Do you/Do any of these people)…** ***Read all bolded names.** **have some other place where they usually stay?** ***DO NOT select children in shared custody who are currently staying at the sample address, regardless of where they usually stay.** ***DO NOT select commuter workers who stay in some other residence closer to work when their family residence is the sample address.** ***Select commuter workers who stay at the sample address to be closer to work.** ***Select the persons who have some other residence.** ***Enter all that apply, separate with commas.** ***If no one has another place where they usually stay, enter 999 to continue.**	encompass the two months prior to the interview or the two months following the interview date. **Overcount – 2** ❖ Copy names from Original Roster and Undercount Probe, but OMIT anyone with a "Yes" response to Overcount – 1. **I have listed…** ❖ Read all remaining names. **Are any of these people staying here for a short visit or for an overnight stay?** ❖ MARK "No" for: (1) children in shared custody who are currently staying at the sample address, regardless of where they usually stay; (2) commuter workers who stay in some other residence closer to work when their family residence is the sample address. ❖ MARK "Yes" for: (1) Commuter workers who stay at the sample address to be closer to work; (2) Persons who have some other residence.	**Overcount – 2** ❖ Copy names from Original Roster, Undercount – 1, and Undercount – 2, but OMIT anyone with a "Yes" response to Overcount – 1. **I have listed…** ❖ Read all remaining names. **Are any of these people staying here for a short time?** ❖ MARK "No" for: (1) children in shared custody who are currently staying at the sample address, regardless of where they usually stay; (2) commuter workers who stay in some other residence closer to work when their family residence is the sample address. ❖ MARK "Yes" for: (1) commuter workers who stay at the sample address to be closer to work; (2) persons who have some other residence.	

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More than 2 Months Question **(Are / Are you/ Is <Name>** ***<Read all bolded names.>** **staying here for MORE than two months?** ***Select the persons who are staying MORE than two months.** ***Select children in shared custody who are currently staying at the sample address, regardless of where they usually stay.** ***Select commuter workers who stay at the sample address to be closer to work.** ***Enter all that apply, separate with commas.** ***The two month period is not anchored by a specific reference date, but can encompass the two months prior to survey contact or the two months following the survey contact day.** ***If no one is staying more than two months, enter 999 to continue.**	**More than 2 Months Question** ❖ Copy names with a "Yes" response to Overcount – 2. **I have listed…** ❖ Read names with a "Yes" response to Overcount – 2. **Are you/Is <Name> staying here for MORE than two months^?** ❖ MARK "Yes": (1) persons who are staying MORE than two months^; (2) children in shared custody who are currently staying at the sample address, regardless of where they usually stay; (3) commuter workers who stay at the sample address to be closer to work ^ - The two-month period is not anchored by a specific reference date, but can encompass the two months prior to the interview or the two months following the interview date.	**More than 2 Months Question** ❖ Copy names with a "Yes" response to Overcount – 2. **I have listed…** ❖ Read names with a "Yes" response to Overcount – 2. **Are you/Is <Name> staying here for MORE than two months^?** ❖ MARK "Yes": (1) persons who are staying MORE than two months^ (2) children in shared custody who are currently staying at the sample address, regardless of where they usually stay commuter workers who stay at the sample address to be closer to work ^ - The two-month period is not anchored by a specific reference date, but can encompass the two months prior to the interview or the two months following the interview date.	

Roster Check Screen ***If you have keyed in a name in error, delete the name by selecting it below.** ***Enter all that apply, separate with commas.** ***If you do not need to delete anyone, enter 999 to continue.**	❖ Generate the final roster using the first 1-6 names remaining in the order they were mentioned: - Copy names from Original Roster and Undercount Probe - OMIT anyone with a "Yes" response to Overcount – 1 - OMIT anyone with a "No" response to More than 2 Months Question **Overcount Follow-up** **We are conducting research to understand why people stay in more than one place. Earlier in the survey you indicated that [Auto fill all names from overcount 1 and 2] sometimes live(s) somewhere else or is (are) only staying here for a short time. Could you briefly explain [Autofill all names from overcount 1 and 2]'s living situation?**	❖ Generate the final roster using the first 1-6 names remaining in the order they were mentioned. - Copy names from Original Roster, Undercount – 1 and Undercount - 2 - OMIT anyone with a "Yes response to Overcount - 1 - OMIT anyone with a "No" response to More than 2 Months Question **Overcount Follow-up** **We are conducting research to understand why people stay in more than one place. Earlier in the survey you indicated that [Auto fill all names from overcount 1 and 2] sometime(s) live(s) somewhere else or is (are) only staying here for a short time. Could you briefly explain [Autofill all names from overcount 1 and 2]'s living situation?**	

2022 ACS Content Test – Cognitive Testing
TOPIC – Educational Attainment
Wednesday, February 19, 2020

Subcommittee Lead:

Kurt Bauman, U.S. Census Bureau

Subcommittee Team Members:

Maribel Aponte, Department of Veterans Affairs
Chris Chapman, Department of Education
Tamara Lee, Department of Veterans Affairs
Laura Nixon, U.S. Census Bureau
Broderick Oliver, U.S. Census Bureau
David Raglin, U.S. Census Bureau
Erik Schmidt, U.S. Census Bureau
Kristi Scott, Social Security Administration
Stephen Simoncini, U.S. Census Bureau

Objective:

A relatively high percentage of people are selecting the response category "No schooling completed" in the self-response modes of the American Community Survey, including adults who have probably completed some level of schooling.

Our goal is to improve respondents' understanding of the category that currently is called "no schooling completed." Our intent is that this category would include only those people who have not completed as much as a single grade of formal schooling. That is, they never completed formal schooling at any level to the point where they would be qualified for the next level of instruction (e.g. going from kindergarten to first grade). "Home school" that follows a curriculum would count as formal schooling in this sense.

Cognitive Testing Research Goals:

- Do respondents understand this question and the overall meaning?
- Use of the term "grade" (V1) rather than "level" (V2) of school in the base question - Is one easier to understand)?
- How do people currently enrolled in school answer this question? Does the instruction help them answer?
- Use of "less than grade 1" (V1) versus expanded three categories "less than 1 year of school completed," "nursery school or preschool," and "kindergarten" (V2) - Does one version better help people understand who should select these response options? Specifically, does a broader category (V1) help people respond? How do those with no schooling, schooling in levels below first grade, and others respond? This difference in wording between versions also results in differences in the main headings that the specific categories fall under. Do the heading differences affect respondents' understanding of the categories?

- Unlike the current version, both test versions remove the heading and subheading "No schooling completed." Do those with no schooling know how to respond?
- Do individuals with homeschooled children understand the question and response categories and know where their child should be classified?

Cognitive Testing Recruiting Requirements:

- Parents/legal guardians of homeschooled children who have not attended regular school
- Individuals aged 25 or over who do not have a high school diploma or a GED or equivalent
- Parents/legal guardians of at least one child aged 3 to 5

2022 ACS Content Test – Cognitive Testing
TOPIC – Educational Attainment
Wednesday, February 19, 2020

Paper

CURRENT PRODUCTION VERSION	TEST VERSION 1	TEST VERSION 2	Notes or Comments
What is the highest degree or level of school this person has COMPLETED? *Mark (X) ONE box. If currently enrolled, mark the previous grade or highest degree received.* NO SCHOOLING COMPLETED ☐ No schooling completed NURSERY OR PRESCHOOL THROUGH GRADE 12 ☐ Nursery school ☐ Kindergarten ☐ Grade 1 through 11 – *Specify grade 1 – 11* ☐ 12th grade – **NO DIPLOMA** HIGH SCHOOL GRADUATE ☐ Regular high school diploma ☐ GED or alternative credential COLLEGE OR SOME COLLEGE ☐ Some college credit, but less than 1 year of college credit ☐ 1 or more years of college credit, no degree ☐ Associate's degree *(for example: AA, AS)* ☐ Bachelor's degree *(for example: BA, BS)* AFTER BACHELOR'S DEGREE ☐ Master's degree *(for example: MA, MS, MEng, MEd, MSW, MBA)* ☐ Professional degree beyond a bachelor's degree *(for example: MD, DDS, DVM, LLB, JD)* ☐ Doctorate degree *(for example: PhD, EdD)*	**What is the highest grade of school or degree this person has COMPLETED?** *If currently enrolled, select the previous grade or highest degree received. Mark (X) ONE box.* LESS THAN GRADE 1 ☐ Less than grade 1 GRADE 1 THROUGH GRADE 12 ☐ Grade 1 through 11 – *Specify grade 1 – 11* ☐ 12th grade – **NO DIPLOMA** HIGH SCHOOL GRADUATE ☐ Regular high school diploma ☐ GED or alternative credential COLLEGE OR SOME COLLEGE ☐ Some college credit, but less than 1 year of college credit ☐ 1 or more years of college credit, no degree ☐ Associate's degree *(for example: AA, AS)* ☐ Bachelor's degree *(for example: BA, BS)* AFTER BACHELOR'S DEGREE ☐ Master's degree *(for example: MA, MS, MEng, MEd, MSW, MBA)* ☐ Professional degree beyond a bachelor's degree *(for example: MD, DDS, DVM, LLB, JD)* ☐ Doctorate degree *(for example: PhD, EdD)*	**What is the highest level of school or degree this person has COMPLETED?** *If currently enrolled, select the previous grade or highest degree received. Mark (X) ONE box.* LESS THAN 1 YEAR OF SCHOOL COMPLETED ☐ Less than 1 year of school completed NURSERY OR PRESCHOOL THROUGH GRADE 12 ☐ Nursery school or preschool ☐ Kindergarten ☐ Grade 1 through 11 – *Specify grade 1 – 11* ☐ 12th grade – **NO DIPLOMA** HIGH SCHOOL GRADUATE ☐ Regular high school diploma ☐ GED or alternative credential COLLEGE OR SOME COLLEGE ☐ Some college credit, but less than 1 year of college credit ☐ 1 or more years of college credit, no degree ☐ Associate's degree *(for example: AA, AS)* ☐ Bachelor's degree *(for example: BA, BS)* AFTER BACHELOR'S DEGREE ☐ Master's degree *(for example: MA, MS, MEng, MEd, MSW, MBA)* ☐ Professional degree beyond a bachelor's degree *(for example: MD, DDS, DVM, LLB, JD)* ☐ Doctorate degree *(for example: PhD, EdD)*	1. Probe to see if respondents read the italicized instruction. 2. Probe to see if respondents understand the "less than grade1" and "less than 1 year of school completed" phrases. Do respondents of Young children in pre school and K check the less than 1 year of school completed?

2022 ACS Content Test – Cognitive Testing
TOPIC – Educational Attainment
Wednesday, February 19, 2020

Computer Assisted Interview Script

CURRENT PRODUCTION VERSION	TEST VERSION 1	TEST VERSION 2	NOTES OR COMMENTS
[Fill 3: Using this list, what/ What] is the highest degree or level of school [Fill 2: (you have/ <Name> has)] COMPLETED? 51. No schooling completed 52. Nursery school 53. Kindergarten 54. Grade 1 55. Grade 2 56. Grade 3 57. Grade 4 58. Grade 5 59. Grade 6 60. Grade 7 61. Grade 8 62. Grade 9 63. Grade 10 64. Grade 11 65. Grade 12, no diploma 66. Regular high school diploma 67. GED or alternative credential 68. Some college, no degree 69. Associate's degree (for example: AA, AS) 70. Bachelor's degree (for example: BA, BS)	**Using this list, what is the highest grade of school or degree you have/<NAME> has COMPLETED? If you are/<NAME> is currently enrolled, select the previous grade or highest degree received.** Less than grade 1 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 6 Grade 7 Grade 8 Grade 9 Grade 10 Grade 11 Grade 12, no diploma Regular high school diploma GED or alternative credential Some college, no degree Associate's degree (for example: AA, AS) Bachelor's degree (for example: BA, BS) Master's degree (for example: MA, MS, MEng, MEd, MSW, MBA)	**Using this list, what is the highest level of school or degree you have/<NAME> has COMPLETED? If you are/<NAME> is currently enrolled, select the previous grade or highest degree received.** Less than 1 year of school completed Nursery school or preschool Kindergarten Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 6 Grade 7 Grade 8 Grade 9 Grade 10 Grade 11 Grade 12, no diploma Regular high school diploma GED or alternative credential Some college, no degree Associate's degree (for example: AA, AS) Bachelor's degree (for example: BA, BS)	1. Flashcards will be used.

71. Master's degree (for example: MA, MS, MEng, MEd, MSW, MBA) 72. Professional degree beyond a bachelor's degree (for example: MD, DDS, DVM, LLB, JD) 73. Doctorate degree (for example: PhD, EdD) 74. Vocational or technical license <**DO NOT READ**>	Professional degree beyond a bachelor's degree (for example: MD, DDS, DVM, LLB, JD) Doctorate degree (for example: PhD, EdD) ❖ Do not read "Vocational and technical license."	Master's degree (for example: MA, MS, MEng, MEd, MSW, MBA) Professional degree beyond a bachelor's degree (for example: MD, DDS, DVM, LLB, JD) Doctorate degree (for example: PhD, EdD) ❖ Do not read "Vocational and technical license."	

2022 ACS Content Test – Cognitive Testing
TOPIC – Health Insurance
Wednesday, February 19, 2020

Subcommittee Lead:

Sharon Stern, U.S. Census Bureau

Subcommittee Team Members:

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Richard Chard, Social Security Administration
Robin Cohen, National Center for Health Statistics
Ken Finegold, U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation
Sarah Heimel, U.S. Census Bureau
Paul Jacobs, Agency for Health Research and Quality
Tamara Lee, National Center for Veterans Analysis and Statistics
Toks Oluwole, Social Security Administration
Jonathan Vespa, U.S. Census Bureau
Jessica Vistnes, Agency for Health Research and Quality

Objective:

The objective is to improve the accuracy of the ACS Health Insurance Coverage question, especially Medicaid and direct-purchase coverage.

Revisions to the health insurance question would enhance question reliability and validity. Prior research has found that Medicaid and other means-tested programs are underreported in the ACS and that direct-purchase coverage is overreported (Boudreaux, Ziegenfuss, Graven, Davern, & Blewett, 2011; Boudreaux, Call, Turner, & Fried, 2014; Boudreaux, Call, Turner, Fried, & O'Hara, 2013; Lynch, Kenney, Haley, & Resnick, 2011; O'Hara, 2010). Data are used "to enable the Department of Health and Human Services (HHS) and other federal agencies to more accurately distribute resources and better understand state and local health insurance needs" (U.S. Census Bureau, 2007). The proposed revisions would help to capture changes to the health insurance landscape that occurred with the passage of the Patient Protection and Affordable Care Act (United States Congress, 2010). The primary objectives of revising the health insurance coverage question (Q16) is to do a better job measuring public coverage, to improve accuracy of direct purchase coverage, and to reduce over-count of single-service insurance plans.

Note: Currently we only have one set of text that we will test in both version 1 and version 2.

Cognitive Testing Research Goals:

- How are respondents reporting Medicaid and direct-purchase plans?
- Are the additional instructions ("Do NOT include plans that cover only one type of insurance, such as dental, drug, or vision plans") clear to respondents and are respondents including single-service health insurance plans in their responses?
- How do people with Medicare Advantage plans classify their health insurance coverage?

- How do people with Marketplace coverage classify their coverage?
- How do respondents with household members who have coverage through the state Children's Health Insurance Program (CHIP) classify the child's coverage?
- For respondents who check more than one option, are they double reporting single coverage or do they have more than one type?
- What types of insurance or health plans do respondents associate with "current or former employer, union, or professional association"?

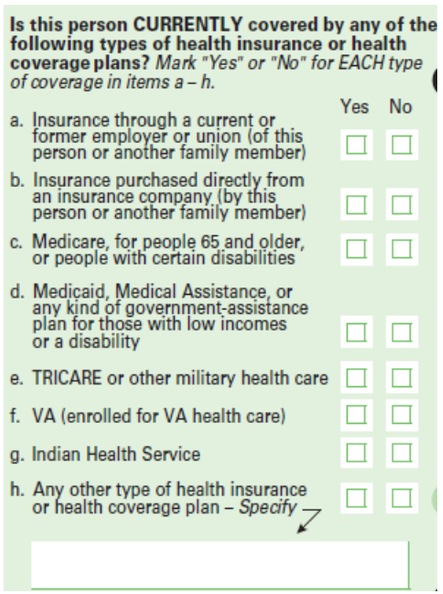
Cognitive Testing Recruiting Requirements:

We are requesting that the cognitive testing has a sufficient sample of:

- Persons aged 65 or older
- Persons enrolled in Medicaid
- Persons with household members enrolled in CHIP
- Marketplace enrollees (state or federal marketplace)

2022 ACS Content Test – Cognitive Testing
TOPIC – Health Insurance
Wednesday, February 19, 2020

Paper

CURRENT PRODUCTION VERSION	TEST VERSIONS 1 + 2
	

2022 ACS Content Test – Cognitive Testing
TOPIC – Health Insurance
Wednesday, February 19, 2020

Computer Assisted Interview Script

CURRENT PRODUCTION VERSION	TEST VERSIONS 1 + 2
I am now going to ask you some questions about [Fill 1: your/<Name>'s] health insurance and health coverage. [Fill 2: Are you/Is <Name>] currently covered by health insurance through a current or former employer or union of [Fill 3: yours or another family member/<him/her> or another family member]? 1. Yes 2. No [Fill 1: Are you/Is <Name>] currently covered by health insurance purchased directly from an insurance company by [Fill 2: you or another family member/<him/her> or another family member]? 1. Yes 2. No [Fill 1: Are you/Is <Name>] currently covered by Medicare, for people age 65 or older or people with certain disabilities? 1. Yes 2. No [Fill 1: Are you/Is <Name>] currently covered by Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability? 1. Yes 2. No	**I am now going to ask you some questions about your/<NAME's> health insurance and health coverage. Do NOT include plans that cover only one type of service, such as dental, drug or vision plans.** **Are you/Is <NAME> currently covered by health insurance through a current or former employer, union, or professional association of yours or another family member/<[him/her] or another family member>?** **Yes** **No** **Are you/Is <NAME> currently covered by Medicare, for people age 65 or older or people with certain disabilities?** **Yes** **No** **Are you/Is <NAME> currently covered by Medicaid, the Children's Health Insurance Program (CHIP) or any kind of government-assistance plan for those with low incomes or a disability?** **Yes** **No** **Are you/Is <NAME> currently covered by health insurance purchased directly from an insurance company, through a State or Federal Marketplace, HealthCare.gov, or a similar website by you or another family member/<[him/her] or another family member>?** **Yes** **No**

[Fill 1: Are you/Is <Name>] currently covered by TRICARE or other military health care? 1. Yes 2. No [Fill 1: Are you/Is <Name>] currently covered through the VA or enrolled for VA health care? 1. Yes 2. No [Fill 1: Are you/Is <Name>] currently covered through the Indian Health Service? 1. Yes 2. No [Fill 1: Are you/Is <Name>] currently covered by any other health insurance or health coverage plan? 1. Yes 2. No	**Are you/Is <NAME> currently covered by TRICARE or other military health care?** **Yes** **No** **Are you/Is <NAME> currently covered through the VA or enrolled for VA health care?** **Yes** **No** **Are you/Is <NAME> currently covered through the Indian Health Service?** **Yes** **No** **Are you/Is <NAME> currently covered by any other health insurance or health coverage plan?** **Yes** **No**

2022 ACS Content Test – Cognitive Testing
TOPIC – Disability
Wednesday, February 19, 2020

Subcommittee Lead:

Sharon Stern, U.S. Census Bureau

Subcommittee Team Members:

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Jenny Berkley, U.S. Census Bureau
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Fran Chevarley, Agency for Healthcare Research and Quality
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Jennifer Madans, National Center for Health Statistics
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Jennifer Ortman, U.S. Census Bureau
Amy Steinweg, U.S. Census Bureau
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Julie Weeks, National Center for Health Statistics

Objective:

The objective is to improve accuracy of disability measures and increase comparability across other major surveys.

We want to determine if respondents understand the questions, what is being asked for, and if they can easily determine what response category they should select. It is important to evaluate how the proposed questions perform when a person is responding for themselves and when the person is serving as a proxy reporter. We want to understand how respondents select a response to the proposed four answer response categories and ensure that respondents understand the proposed questions without creating undue burden.

Cognitive Testing Research Goals:

- Modified response categories in both versions to be more detailed than current "Yes/No" response categories: How do respondents distinguish between categories when selecting a category?
- Introductory text in Computer Assisted Instrument (CAI) before Q18: Does having introductory text, "**The next questions ask about difficulties [NAME] may have doing certain activities."** help transition from the previous set of questions to the disability section?

- Q19a: Do respondents think there is a difference between "stairs" (*Version 1*) and "steps" (*Version 2*)? Does one term help respondents understand the question better than the other?
- Q19b*:* Do adults think this question only applies to people with dementia? Do respondents focus on the term "remembering," on the term "concentrating," or both? How do people with a learning disability (or people answering for someone who has one) answer this question? Do respondents associate particular health conditions with difficulty remembering or concentrating?
- Q19c: Do respondents understand the text "washing all over" (*Version 2*) as being a more broad (i.e., inclusive) description of bathing? Do respondents find "washing all over" to be odd or too personal? Do respondents find "bathing" (*Version* 1) to be odd or too personal?
- 19d: What types of disabilities/conditions are being identified for children when the response indicates difficulty with communication? Does the question makes sense for younger children who are not old enough to talk? Do respondents understand that this question is not referring to mastering English as a second language (particularly those who do not speak English very well)?
- Q20: In Version 2, the question preamble, "Because of a physical, mental, or emotional condition,…" is included in the beginning of the question. Does this preamble result in a better understanding that this question is asking about disability limitations regarding doing errands? What types of problems/issues do respondents mention when discussing "difficulty doing errands alone such as visiting a doctor's office or shopping"?
- Do respondents age 50+ interpret the difficulties in this series of questions as part of the normal aging process? If so, do respondents age 50+ underreport?

Cognitive Testing Recruiting Requirements:

- Parents/legal guardians of children with disabilities
- People with disabilities, especially learning disabilities
- People whose first language is not English and who do not speak English very well
- People 50 years or older

2022 ACS Content Test – Cognitive Testing
TOPIC – Disability
Wednesday, February 19, 2020

Paper

CURRENT PRODUCTION VERSION	TEST VERSION 1	TEST VERSION 2
a. Is this person deaf or does he/she have serious difficulty hearing? ☐ Yes ☐ No **b. Is this person blind or does he/she have serious difficulty seeing even when wearing glasses?** ☐ Yes ☐ No	**a. Does this person have difficulty seeing, even if wearing glasses?** ☐ No difficulty ☐ Some difficulty ☐ A lot of difficulty ☐ Cannot do at all **b. Does this person have difficulty hearing, even if using a hearing aid?** ☐ No difficulty ☐ Some difficulty ☐ A lot of difficulty ☐ Cannot do at all	**a. Does this person have difficulty seeing, even if wearing glasses?** ☐ No difficulty ☐ Some difficulty ☐ A lot of difficulty ☐ Cannot do at all **b. Does this person have difficulty hearing, even if using a hearing aid?** ☐ No difficulty ☐ Some difficulty ☐ A lot of difficulty ☐ Cannot do at all

Answer questions 19a – c if this person is 5 years old or over. Otherwise, SKIP to the questions for Person 2 on page 12.

a. Because of a physical, mental, or emotional condition, does this person have serious difficulty concentrating, remembering, or making decisions?

- ☐ Yes
- ☐ No

b. Does this person have serious difficulty walking or climbing stairs?

- ☐ Yes
- ☐ No

c. Does this person have difficulty dressing or bathing?

- ☐ Yes
- ☐ No

Answer question 19a – d if this person is 5 years old or over. Otherwise, SKIP to the questions for Person 2 on page 19.

a. Does this person have difficulty walking or climbing stairs?

- ☐ No difficulty
- ☐ Some difficulty
- ☐ A lot of difficulty
- ☐ Cannot do at all

b. Does this person have difficulty remembering or concentrating?

- ☐ No difficulty
- ☐ Some difficulty
- ☐ A lot of difficulty
- ☐ Cannot do at all

c. Does this person have difficulty bathing or dressing?

- ☐ No difficulty
- ☐ Some difficulty
- ☐ A lot of difficulty
- ☐ Cannot do at all

d. Using his or her usual language, does this person have difficulty communicating, for example understanding or being understood?

- ☐ No difficulty
- ☐ Some difficulty
- ☐ A lot of difficulty
- ☐ Cannot do at all

Answer question 19a – d if this person is 5 years old or over. Otherwise, SKIP to the questions for Person 2 on page 19.

a. Does this person have difficulty walking or climbing steps?

- ☐ No difficulty
- ☐ Some difficulty
- ☐ A lot of difficulty
- ☐ Cannot do at all

b. Does this person have difficulty remembering or concentrating?

- ☐ No difficulty
- ☐ Some difficulty
- ☐ A lot of difficulty
- ☐ Cannot do at all

c. Does this person have difficulty washing all over or dressing?

- ☐ No difficulty
- ☐ Some difficulty
- ☐ A lot of difficulty
- ☐ Cannot do at all

d. Using his or her usual language, does this person have difficulty communicating, for example understanding or being understood?

- ☐ No difficulty
- ☐ Some difficulty
- ☐ A lot of difficulty
- ☐ Cannot do at all

2022 ACS Content Test – Cognitive Testing
TOPIC – Disability
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CURRENT PRODUCTION VERSION	TEST VERSION 1	TEST VERSION 2
Answer question 20 if this person is 15 years old or over. Otherwise, SKIP to the questions for Person 2 on page 12. **Because of a physical, mental, or emotional condition, does this person have difficulty doing errands alone such as visiting a doctor's office or shopping?** ☐ Yes ☐ No	*Answer question 20 if this person is 15 years old or over. Otherwise, SKIP to the questions for Person 2 on page 19.* **Does this person have difficulty doing errands alone such as visiting a doctor's office or shopping?** ☐ No difficulty ☐ Some difficulty ☐ A lot of difficulty ☐ Cannot do at all	*Answer question 20 if this person is 15 years old or over. Otherwise, SKIP to the questions for Person 2 on page 19.* **Because of a physical, mental, or emotional condition, does this person have difficulty doing errands alone such as visiting a doctor's office or shopping?** ☐ No difficulty ☐ Some difficulty ☐ A lot of difficulty ☐ Cannot do at all

2022 ACS Content Test – Cognitive Testing
TOPIC – Disability
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Computer Assisted Interview Script

CURRENT PRODUCTION VERSION	TEST VERSION 1	TEST VERSION 2
For all people… **I am now going to ask some questions about difficulty you may have with ordinary daily activities.** **Is this person deaf or does he/she have serious difficulty hearing?** ❑ Yes ❑ No **Is this person blind or does he/she have serious difficulty seeing even when wearing glasses?** ❑ Yes ❑ No	**The next questions ask about difficulties you/<NAME> may have doing certain activities.** **Do you/does <NAME> have difficulty seeing, even if wearing glasses?** **No difficulty** **Some difficulty** **A lot of difficulty** **Cannot do at all** **Do you/does <NAME> have difficulty hearing, even if using a hearing aid?** **No difficulty** **Some difficulty** **A lot of difficulty** **Cannot do at all**	**The next questions ask about difficulties you/<NAME> may have doing certain activities.** **Do you/does <NAME> have difficulty seeing, even if wearing glasses?** **No difficulty** **Some difficulty** **A lot of difficulty** **Cannot do at all** **Do you/does <NAME> have difficulty hearing, even if using a hearing aid?** **No difficulty** **Some difficulty** **A lot of difficulty** **Cannot do at all**

2022 ACS Content Test – Cognitive Testing
TOPIC – Disability
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For people 5 and over… **Because of a physical, mental, or emotional condition, does this person have serious difficulty concentrating, remembering, or making decisions?** -+ ❑ Yes ❑ No **Does this person have serious difficulty walking or climbing stairs?** ❑ Yes ❑ No **Does this person have difficulty dressing or bathing?** ❑ Yes ❑ No	**Do you/does <NAME> have difficulty walking or climbing stairs?** **No difficulty** **Some difficulty** **A lot of difficulty** **Cannot do at all** **Do you/does <NAME> have difficulty remembering or concentrating?** **No difficulty** **Some difficulty** **A lot of difficulty** **Cannot do at all** **Do you/does <NAME> have difficulty bathing or dressing?** **No difficulty** **Some difficulty** **A lot of difficulty** **Cannot do at all** **Using your/<his/her> usual language, do you/does <NAME> have difficulty communicating, for example understanding or being understood?** **No difficulty** **Some difficulty** **A lot of difficulty** **Cannot do at all**	**Do you/does <NAME> have difficulty walking or climbing steps?** **No difficulty** **Some difficulty** **A lot of difficulty** **Cannot do at all** **Do you/does <NAME> have difficulty remembering or concentrating?** **No difficulty** **Some difficulty** **A lot of difficulty** **Cannot do at all** **Do you/does <NAME> have difficulty washing all over or dressing?** **No difficulty** **Some difficulty** **A lot of difficulty** **Cannot do at all** **Using your/<his/her> usual language, do you/does <NAME> have difficulty communicating, for example understanding or being understood?** **No difficulty** **Some difficulty** **A lot of difficulty** **Cannot do at all**

For people 15 and over… **Because of a physical, mental, or emotional condition, does [NAME] have difficulty doing errands alone such as visiting a doctor's office or shopping?** ❑ Yes ❑ No	**Do you/does <NAME> have difficulty doing errands alone such as visiting a doctor's office or shopping?** **No difficulty** **Some difficulty** **A lot of difficulty** **Cannot do at all**	**Because of a physical, mental, or emotional condition, do you/does <NAME> have difficulty doing errands alone such as visiting a doctor's office or shopping?** **No difficulty** **Some difficulty** **A lot of difficulty** **Cannot do at all**

2022 ACS Content Test – Cognitive Testing
TOPIC – Means of Transportation to Work
Wednesday, February 19, 2020

Subcommittee Lead:

Brian McKenzie, U.S. Census Bureau

Subcommittee Team Members:

Dorothy Barth, U.S. Census Bureau
Charlynn Burd, U.S. Census Bureau
Michael Burrows, U.S. Census Bureau
Ken Cervenka, Bureau of Transportation Statistics
Slagan Locklear, U.S. Census Bureau
Jasmy Methipara, Bureau of Transportation Statistics
Clara Reschovsky, Bureau of Transportation Statistics

Objective:

The prevalence of and usage of ride-hailing services has increased considerably in recent years, and these services are expected to become more prevalent in the coming years. Our objective is to capture these services in our ACS means of transportation question in a direct and unambiguous way. The current ACS travel mode question includes several categories ("taxicab," "carpooling," and "other") that may potentially accommodate this mode of transportation, but none of these categories explicitly reference ride hailing. We would like to concentrate ride-hailing responses into one category, combining it with traditional taxi services.

We also would like to take the opportunity to probe respondents and gain information that could be useful in helping improve the transportation to work question in the future. The question currently only allows for one response; however, respondents may use multiple modes and we may want to capture them. Additionally, in a rapidly changing transportation landscape, we may be missing some modes that we could consider adding (for example, electric scooters).

Cognitive Testing Research Goals:

- For all respondents, is the meaning of the "taxi or ride-hailing services" category clear? If not, what descriptive words would have made the meaning clearer? Are there descriptive words missing?
- Among those who chose ride-hailing as their primary means of transportation to work, what is their second most common mode of work travel?
- Among those who did not choose ride-hailing as their primary means of transportation to work, do they ever use ride-hailing services to travel to or from work? How often? In what context?
- Do respondents have any travel modes they use to get to work that are not represented in the ACS travel mode question? What are they?

2022 ACS Content Test – Cognitive Testing
TOPIC – Means of Transportation to Work
Wednesday, February 19, 2020

Cognitive Testing Recruiting Requirements:

Our recruiting requirement goal is to target workers who are likely to either use a ride-hailing service or consider using one. Respondents should satisfy the following criteria:

- Individuals who use Lyft or Uber to get to work
- Individuals who rely on alternative means of transportation to get to work, but do not use public transportation, such as rides from other individuals (i.e., people who do not typically work at home, but use a carpool, vanpool, slug line, etc.)

2022 ACS Content Test – Cognitive Testing
TOPIC – Means of Transportation to Work
Wednesday, February 19, 2020

Paper

CURRENT PRODUCTION VERSION	TEST VERSION 1	TEST VERSION 2
How did this person usually get to work LAST WEEK? *Mark (X) ONE box for the method of transportation used for most of the distance.* ☐ Car, truck, or van ☐ Bus ☐ Subway or elevated rail ☐ Long-distance train or commuter rail ☐ Light rail, streetcar, or trolley ☐ Ferryboat ☐ Taxicab ☐ Motorcycle ☐ Bicycle ☐ Walked ☐ Worked from home → *SKIP to question 40a* ☐ Other method	**How did this person usually get to work LAST WEEK?** *Mark (X) ONE box for the method of transportation used for most of the distance.* ☐ Car, truck, or van ☐ Bus ☐ Subway or elevated rail ☐ Long-distance train or commuter rail ☐ Light rail, streetcar, or trolley ☐ Ferryboat ☐ Taxi or ride-hailing services ☐ Motorcycle ☐ Bicycle ☐ Walked ☐ Worked from home → *SKIP to question 39b* ☐ Other method	**How did this person usually get to work LAST WEEK?** *Mark (X) ONE box for the method of transportation used for most of the distance.* ☐ Car, truck, or van ☐ Bus ☐ Subway or elevated rail ☐ Long-distance train or commuter rail ☐ Light rail, streetcar, or trolley ☐ Ferryboat ☐ Ride-hailing services (including taxi) ☐ Motorcycle ☐ Bicycle ☐ Walked ☐ Worked from home → *SKIP to question 39b* ☐ Other method

2022 ACS Content Test – Cognitive Testing
TOPIC – Means of Transportation to Work
Wednesday, February 19, 2020

Computer Assisted Interview Script

CURRENT PRODUCTION VERSION	TEST VERSION 1	TEST VERSION 2	NOTES OR COMMENTS
"{Fill 2: Using this list,} LAST WEEK, how did {Fill 3: <Name>/you} USUALLY get to work? **(If {Fill 4: he/she/<Name>)/you} usually used more than one method of transportation during the trip, report the one used for most of the distance.)** **(1) Car, truck, or van** **(2) Bus** **(3) Subway or elevated rail** **(4) Long-distance train or commuter rail** **(5) Light rail, streetcar, or trolley** **(6) Ferryboat** **(7) Taxicab** **(8) Motorcycle** **(9) Bicycle** **(10) Walked** **(11) Worked from home** **(12) Other Method**	**Using this list, LAST WEEK, how did you/<NAME> USUALLY get to work?** **(If ^you/<NAME>^ usually used more than one method of transportation during the trip, report the one used for most of the distance.)** Car, truck, or van Bus Subway or elevated rail Long-distance train or commuter rail Light rail, streetcar, or trolley Ferryboat Taxi or ride-hailing services Motorcycle Bicycle Walked Worked from home Other Method	**Using this list, LAST WEEK, how did you/<NAME> USUALLY get to work?** **(If ^you/<NAME>^ usually used more than one method of transportation during the trip, report the one used for most of the distance.)** Car, truck, or van Bus Subway or elevated rail Long-distance train or commuter rail Light rail, streetcar, or trolley Ferryboat Ride-hailing services (including taxi) Motorcycle Bicycle Walked Worked from home Other Method	1. Flashcards will be used.

2022 ACS Content Test – Cognitive Testing
TOPIC – Income
Wednesday, February 19, 2020

Subcommittee Lead:

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Subcommittee Team Members:

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Gloria Guzman, U.S. Census Bureau
Tamara Lee, National Center for Veterans Analysis and Statistics
Carey Patrick, Bureau of Labor Statistics
Kirby Posey, U.S. Census Bureau
Mark Prell, Economic Research Service
Dave Shoffner, Social Security Administration
Adam Smith, U.S. Census Bureau

Objective:

The Census Bureau has been investigating the use of administrative records to reduce respondent burden and improve data quality in the American Community Survey (ACS) (see https://www.census.gov/programs-surveys/acs/operations-and-administration/agility-in-action.html). As a part of using administrative records, potential changes to the ACS income section have been evaluated with cognitive testing. We believe this process should continue, with additional changes evaluated in the 2022 ACS Content Test.

What we are testing in this study is a continuation of prior testing that was done with Westat (see the report at: https://www.census.gov/content/dam/Census/library/working-papers/2017/acs/2017_Westat_01.pdf). We will build off the findings from the Westat study, and test an alternative form that incorporates Westat's recommendations and aims to address their concerns. To align better with administrative data, we will also test changing the reference period from the last 12 months to the previous calendar year.

In addition to changes to the income question, we also would like to test changing the reference period for the SNAP benefit question to last year (from "last 12 months"). Because the questions near the SNAP question have a different reference period than last year, we propose testing the question in two different places – its current location (version 1) and at the end of the housing section (version 2).

Finally, we want to test some changes to the questions in the weeks worked series. The version we will test, like income, builds off findings from the Westat test, and includes the same change to the reference period.

Cognitive Testing Research Goals:

2022 ACS Content Test – Cognitive Testing
TOPIC – Income
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Income

- Do the respondents report income for the appropriate reference period (prior year)?
- Are the respondents reporting income accurately, especially keeping in mind the following changes being made to question or instructional wording:
  - Total Income Amount - Adding "include all sources"
    - Does the respondent report "all sources" or do they leave out some?
  - Self-Employment Income - Adding "including work paid for in cash"
    - Does the respondent report all self-employment income (including side jobs that they may not report as income for tax purposes)?
  - Net Rental Income – splitting up category as its own question (paper)
    - Does splitting up the categories make it easier for the respondent to recall the amounts and report accurately?
    - Does having Net Rental Income as its own category (on Paper) make respondents who are reading quickly misreport their monthly rent to a landlord (instead of rental income)?
    - If a respondent indicates that they did not make any rental income, we want to learn more.
    - How would respondents who did make rental income answer if they had lost money or broke even on a rental property?
  - Public Assistance Income - new wording and instructions
    - Does the new wording (and additional instructions) help the respondent to report the amounts and the type of income that we intend to be reported with this question, or do they include or exclude certain types?

Weeks Worked

- Do the changes to the WEEKS WORKED series (in addition to the year change) obtain the appropriate information for that year?
- Does question 39 set up the universe for the WEEKS WORKED questions properly? (Or conversely, do respondents get confused by the additional question (39b) and SKIP patterns to 39?)
- Adding "for at least one day" to 41b is supposed to let the respondent know that we consider a week being worked even if they just worked one day in that week. Does the respondent seem to understand this concept?

SNAP

- Which placement of the SNAP question was better for respondents (current location in version 1, or end of housing section in version 2)?
- Is one better than the other at getting respondents to understand the reference period and how it differs from other questions?
- Does the placement of the question at the end of the housing section result in it getting overlooked?

Cognitive Testing Recruiting Requirements:

- Individuals who were irregular workers (such as partial year workers, irregular schedules, multiple jobs) in the prior year
- Individuals with regular work schedules in the prior year
- Individuals who did not work in the prior year
- Individuals who earned retirement income, self-employment income, net rental income, or a commission/bonus/tips in the prior year
- Individuals who received SNAP benefits or public assistance in the prior year

2022 ACS Content Test – Cognitive Testing
TOPIC – Income
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Paper → Income

CURRENT PRODUCTION VERSION	TEST VERSION 1	TEST VERSION 2	NOTES OR COMMENTS
IN THE PAST 12 MONTHS, did you or any member of this household receive benefits from the Food Stamp Program or SNAP (the Supplemental Nutrition Assistance Program)? *Do NOT include WIC, the School Lunch Program, or assistance from food banks.* ☐ Yes ☐ No	**In 2018, did you or any member of this household receive benefits from the Food Stamp Program or SNAP (the Supplemental Nutrition Assistance Program)?** *Do NOT include WIC, the School Lunch Program, or assistance from food banks.* ☐ Yes ☐ No	**In 2018, did you or any member of this household receive benefits from the Food Stamp Program or SNAP (the Supplemental Nutrition Assistance Program)?** *Do NOT include WIC, the School Lunch Program, or assistance from food banks.* ☐ Yes ☐ No	**Note:** The reference period for SNAP Test V1 + V2 is "2019" in the final paper questionnaires, not "2018." **Re: SNAP questions:** 1. Test V1 = Keep SNAP question where it currently is in the survey. It corresponds to question 18 in the V1 of the paper questionnaire. 2. Test V2 = Move SNAP question to end of housing section to reduce impact of change in reference period for the respondent. It corresponds to question 27 in the V2 of the paper questionnaire.

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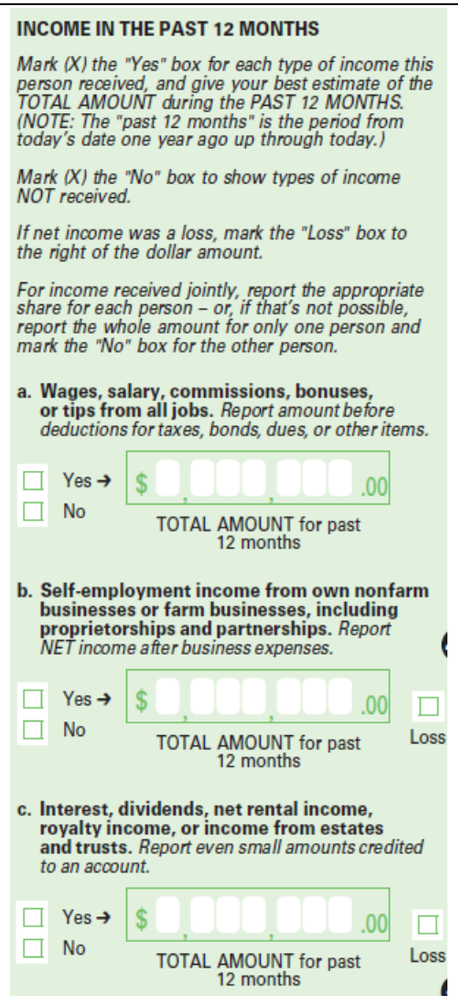


INCOME IN THE PAST 12 MONTHS

Mark (X) the "Yes" box for each type of income this person received, and give your best estimate of the TOTAL AMOUNT during the PAST 12 MONTHS. (NOTE: The "past 12 months" is the period from today's date one year ago up through today.)

Mark (X) the "No" box to show types of income NOT received.

If net income was a loss, mark the "Loss" box to the right of the dollar amount.

For income received jointly, report the appropriate share for each person – or, if that's not possible, report the whole amount for only one person and mark the "No" box for the other person.

a. Wages, salary, commissions, bonuses, or tips from all jobs. *Report amount before deductions for taxes, bonds, dues, or other items.*

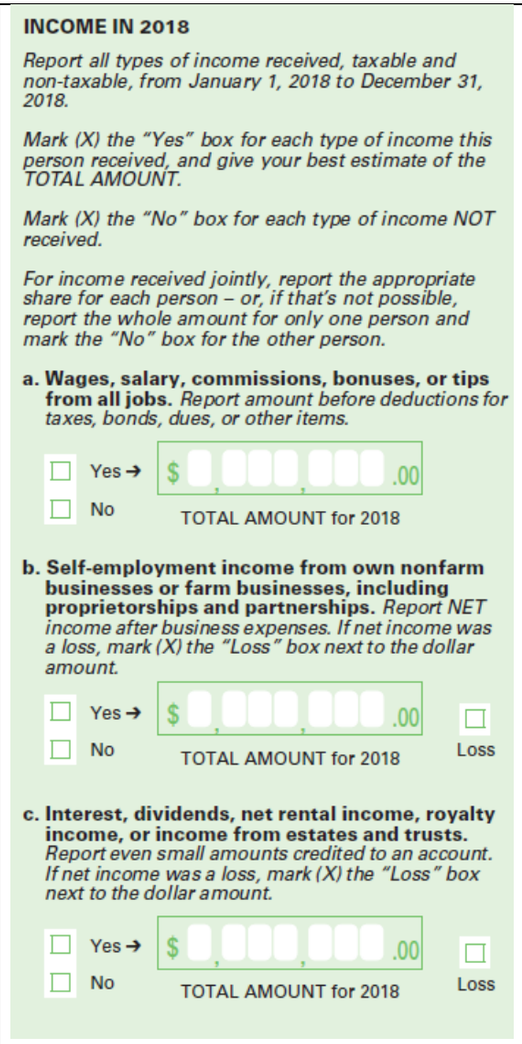
☐ Yes → $ .00
☐ No
TOTAL AMOUNT for past 12 months

b. Self-employment income from own nonfarm businesses or farm businesses, including proprietorships and partnerships. *Report NET income after business expenses.*

☐ Yes → $ .00 ☐ Loss
☐ No
TOTAL AMOUNT for past 12 months

c. Interest, dividends, net rental income, royalty income, or income from estates and trusts. *Report even small amounts credited to an account.*

☐ Yes → $ .00 ☐ Loss
☐ No
TOTAL AMOUNT for past 12 months



INCOME IN 2018

Report all types of income received, taxable and non-taxable, from January 1, 2018 to December 31, 2018.

Mark (X) the "Yes" box for each type of income this person received, and give your best estimate of the TOTAL AMOUNT.

Mark (X) the "No" box for each type of income NOT received.

For income received jointly, report the appropriate share for each person – or, if that's not possible, report the whole amount for only one person and mark the "No" box for the other person.

a. Wages, salary, commissions, bonuses, or tips from all jobs. *Report amount before deductions for taxes, bonds, dues, or other items.*

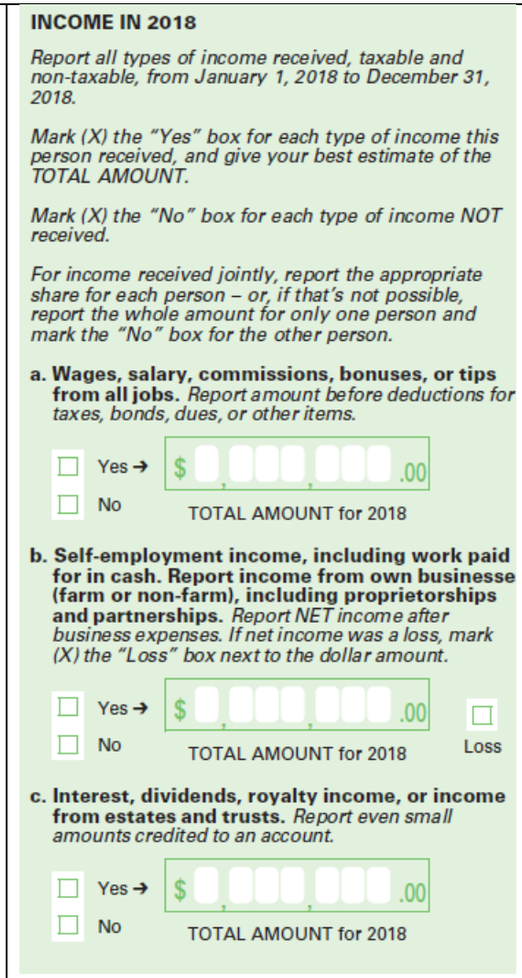
☐ Yes → $ .00
☐ No
TOTAL AMOUNT for 2018

b. Self-employment income from own nonfarm businesses or farm businesses, including proprietorships and partnerships. *Report NET income after business expenses. If net income was a loss, mark (X) the "Loss" box next to the dollar amount.*

☐ Yes → $ .00 ☐ Loss
☐ No
TOTAL AMOUNT for 2018

c. Interest, dividends, net rental income, royalty income, or income from estates and trusts. *Report even small amounts credited to an account. If net income was a loss, mark (X) the "Loss" box next to the dollar amount.*

☐ Yes → $ .00 ☐ Loss
☐ No
TOTAL AMOUNT for 2018



INCOME IN 2018

Report all types of income received, taxable and non-taxable, from January 1, 2018 to December 31, 2018.

Mark (X) the "Yes" box for each type of income this person received, and give your best estimate of the TOTAL AMOUNT.

Mark (X) the "No" box for each type of income NOT received.

For income received jointly, report the appropriate share for each person – or, if that's not possible, report the whole amount for only one person and mark the "No" box for the other person.

a. Wages, salary, commissions, bonuses, or tips from all jobs. *Report amount before deductions for taxes, bonds, dues, or other items.*

☐ Yes → $ .00
☐ No
TOTAL AMOUNT for 2018

b. Self-employment income, including work paid for in cash. Report income from own businesse (farm or non-farm), including proprietorships and partnerships. *Report NET income after business expenses. If net income was a loss, mark (X) the "Loss" box next to the dollar amount.*

☐ Yes → $ .00 ☐ Loss
☐ No
TOTAL AMOUNT for 2018

c. Interest, dividends, royalty income, or income from estates and trusts. *Report even small amounts credited to an account.*

☐ Yes → $ .00
☐ No
TOTAL AMOUNT for 2018

Note: The reference periods for INCOME Test V1 + V2 is "2019" in the final paper questionnaires, not "2018."

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d. Social Security or Railroad Retirement.

☐ Yes → $ .00
☐ No

TOTAL AMOUNT for past 12 months

e. Supplemental Security Income (SSI).

☐ Yes → $ .00
☐ No

TOTAL AMOUNT for past 12 months

f. Any public assistance or welfare payments from the state or local welfare office.

☐ Yes → $ .00
☐ No

TOTAL AMOUNT for past 12 months

g. Retirement income, pensions, survivor or disability income. *Include income from a previous employer or union, or any regular withdrawals or distributions from IRA, Roth IRA, 401(k), 403(b), or other accounts specifically designed for retirement. Do not include Social Security.*

☐ Yes → $ .00
☐ No

TOTAL AMOUNT for past 12 months

h. Any other sources of income received regularly such as Veterans' (VA) payments, unemployment compensation, child support or alimony. *Do NOT include lump sum payments such as money from an inheritance or the sale of a home.*

☐ Yes → $ .00
☐ No

TOTAL AMOUNT for past 12 months

d. Social Security or Railroad Retirement.

☐ Yes → $ .00
☐ No

TOTAL AMOUNT for 2018

e. Supplemental Security Income (SSI).

☐ Yes → $ .00
☐ No

TOTAL AMOUNT for 2018

f. Any public assistance or welfare payments from the state or local welfare office.

☐ Yes → $ .00
☐ No

TOTAL AMOUNT for 2018

g. Retirement income, pensions, survivor or disability income. *Include income from a previous employer or union, or any regular withdrawals or distributions from IRA, Roth IRA, 401(k), 403(b), or other accounts specifically designed for retirement. Do NOT include Social Security.*

☐ Yes → $ .00
☐ No

TOTAL AMOUNT for 2018

h. Any other sources of income received regularly such as Veterans' (VA) payments, unemployment compensation, child support or alimony. *Do NOT include lump sum payments such as money from an inheritance or the sale of a home.*

☐ Yes → $ .00
☐ No

TOTAL AMOUNT for 2018

d. Net rental income. *Report income after expenses. If net rental income was a loss, mark (X) the "Loss" box next to the dollar amount.*

☐ Yes → $ .00 ☐ Loss
☐ No

TOTAL AMOUNT for 2018

e. Social Security or Railroad Retirement.

☐ Yes → $ .00
☐ No

TOTAL AMOUNT for 2018

f. Supplemental Security Income (SSI).

☐ Yes → $ .00
☐ No

TOTAL AMOUNT for 2018

g. Any financial assistance from the state or local welfare office. *Do NOT include non-cash benefits, such as energy or housing assistance, the Food Stamp Program, or SNAP.*

☐ Yes → $ .00
☐ No

TOTAL AMOUNT for 2018

h. Retirement income, pensions, survivor or disability income. *Include income from a previous employer or union, or any regular withdrawals or distributions from IRA, Roth IRA, 401(k), 403(b), or other accounts specifically designed for retirement. Do NOT include Social Security.*

☐ Yes → $ .00
☐ No

TOTAL AMOUNT for 2018

i. Any other sources of income received regularly such as Veterans' (VA) payments, unemployment compensation, child support or alimony. *Do NOT include lump sum payments such as money from an inheritance or the sale of a home.*

☐ Yes → $ .00
☐ No

TOTAL AMOUNT for 2018

What was this person's total income during the PAST 12 MONTHS? *Add entries in questions 43a to 43h; subtract any losses. If net income was a loss, enter the amount and mark (X) the "Loss" box next to the dollar amount.* ☐ None OR $ .00 TOTAL AMOUNT for past 12 months ☐ Loss	**What was this person's total income in 2018?** *Add entries in questions 43a to 43h; subtract any losses. If net income was a loss, enter the amount and mark (X) the "Loss" box next to the dollar amount.* ☐ None OR $ .00 TOTAL AMOUNT for 2018 ☐ Loss	**Including all types of income, what was this person's total income in 2018?** *Add entries in questions 43a to 43i; subtract any losses. If net income was a loss, enter the amount and mark (X) the "Loss" box next to the dollar amount.* ☐ None OR $ .00 TOTAL AMOUNT for 2018 ☐ Loss	

2022 ACS Content Test – Cognitive Testing
TOPIC – Income
Wednesday, February 19, 2020

Computer Assisted Interview Script → Income

CURRENT PRODUCTION VERSION	TEST VERSION 1	TEST VERSION 2	NOTES OR COMMENTS
IN THE PAST 12 MONTHS, did you or any member of this household receive benefits from the Food Stamp Program or SNAP (the Supplemental Nutrition Assistance Program)? *Do NOT include WIC, the School Lunch Program, or assistance from food banks.* [Instruction to be read] The next few questions are about income DURING THE PAST 12 MONTHS, that is from <current month, year- 1> to <month -1, current year>… 1. Did [<Name>/you] receive any wages or salary? <1> Yes <2> No If yes:	**IN THE PAST 12 MONTHS, did you or any member of this household receive benefits from the Food Stamp Program or SNAP, the Supplemental Nutrition Assistance Program? Do NOT include WIC, the School Lunch Program, or assistance from food banks.** **Yes** **No** ❖ Complete Questions A – M for each person before moving onto the next person. **The next few question are about all types of income, taxable and non-taxable, received in 2018 (from January 1, 2018 to December 31, 2018).** **For income received jointly, report the appropriate share for each person – or, if that's not possible, report the whole amount for only one person and do not report the income for the other person.**	**IN THE PAST 12 MONTHS, did you or any member of this household receive benefits from the Food Stamp Program or SNAP, the Supplemental Nutrition Assistance Program? Do NOT include WIC, the School Lunch Program, or assistance from food banks.** **Yes** **No** ❖ Complete Questions A – M for each person before moving onto the next person. **The next few question are about all types of income, taxable and non-taxable, received in 2018 (from January 1, 2018 to December 31, 2018).** **For income received jointly, report the appropriate share for each person – or, if that's not possible, report the whole amount for only one person and do not report the income for the other person.**	**Note:** The reference period for SNAP and INCOME Test V1 + V2 is "2019" in the final CAI scripts, not "2018." **Re: SNAP questions:** 1. Test V1 = Keep SNAP question where it currently is in the survey. It corresponds to question 18 in the V1 of the paper questionnaire. 2. Test V2 = Move SNAP question to end of housing section to reduce impact of change in reference period for the respondent. It corresponds to question 27 in the V2 of the paper questionnaire.

How much did [<Name>/you] receive in wages and salary from all jobs before taxes and other deductions? 2. Did you receive any tips, bonuses or commissions DURING THE PAST 12 MONTHS? <1> Yes <2> No If yes: How much did [<Name>/you] receive in tips, bonuses, or commissions from all jobs before taxes and other deductions? 3. Did [<Name>/you] receive any self-employment income DURING THE PAST 12 MONTHS? Report income from own businesses (farm or non-farm) including proprietorships and partnerships. <1> Yes <2> No If yes: What was the amount? Report net income after operating expenses. Include earnings as a tenant farmer or sharecropper. 4. Did [<Name>/you] receive any interest or dividends DURING THE PAST 12 MONTHS? Report even small amounts credited to an account. <1> Yes <2> No	**A. Did you/<NAME> receive any wages or salary in 2018?** **If yes: How much did you/<NAME> receive in wages and salary from all jobs before deductions for taxes, bonds, dues or other items?** **B. Did you/<NAME> receive any commissions, bonuses, or tips in 2018?** **If yes: How much did you/<NAME> receive in tips, bonuses, or commissions from all jobs before deductions for taxes, bonds, dues, or other items?** **C. Did you/<NAME> receive any self-employment income in 2018? Report income from own businesses (farm or non-farm) including proprietorships and partnerships.** **If yes: What was the amount? Report NET income after business expenses.** **D. Did you/<NAME> receive any interest or dividends in 2018? Report even small amounts credited to an account.** **If yes: What was the amount?**	**A. Did you/<NAME> receive any wages or salary in 2018?** **If yes: How much did you receive in wages and salary from all jobs before deductions for taxes, bonds, dues or other items?** **B. Did you/<NAME> receive any commissions, bonuses, or tips in 2018?** **If yes: How much did you/<NAME> receive in tips, bonuses, or commissions from all jobs before deductions for taxes, bonds, dues or other items?** **C. Did you/<NAME> regularly receive any self-employment income in 2018, including work paid for in cash? Report income from own businesses (farm or non-farm) including proprietorships and partnerships.** **If yes: What was the amount? Report NET income after business expenses.** **D. Did you/<NAME> receive any interest or dividends in 2018? Report even small amounts credited to an account.** **If yes: What was the amount?**	

If yes: What was the amount? 5. Did [<Name>/you] receive any net rental income DURING THE PAST 12 MONTHS? Net rental income is the total amount after expenses. <1> Yes <2> No If yes: What was the net amount? 6. Did [<Name>/you] receive any royalty income or income from estates and trusts DURING THE PAST 12 MONTHS? <1> Yes <2> No If yes: What was the amount? 7. Did [<Name>/you] receive any Social Security or Railroad Retirement benefits DURING THE PAST 12 MONTHS? <1> Yes <2> No If yes: What was the amount? 8. Did [<Name>/you] receive any Supplemental Security Income (SSI) payments DURING THE PAST 12 MONTHS?	**E. Did you/<NAME> receive any net rental income in 2018? Net rental income is the total amount after expenses.** **If yes: What was the net amount?** **F. Did you/<NAME> receive any royalty income or income from estates and trusts in 2018?** **If yes: What was the amount?** **G. Did you/<NAME> receive any Social Security or Railroad Retirement benefits in 2018?** **If yes: What was the amount?** **H. Did you/<NAME> receive any Supplemental Security Income (SSI) payments in 2018?** **If yes: What was the amount?** **I. Did you/<NAME> receive public assistance or public welfare payments from the state or local welfare office in 2018?**	**E. Did you/<NAME> receive any net rental income in 2018? Net rental income is the total amount after expenses.** **If yes: What was the net amount?** **F. Did you/<NAME> receive any royalty income or income from estates and trusts in 2018?** **If yes: What was the amount?** **G. Did you/<NAME> receive any Social Security or Railroad Retirement benefits in 2018?** **If yes: What was the amount?** **H. Did you/<NAME> receive any Supplemental Security Income (SSI) payments in 2018?** **If yes: What was the amount?** **I. Did you/<NAME> receive any financial assistance from the state or local welfare office in 2018?**	

<1> Yes <2> No If yes: What was the amount? 9. Did [<Name>/you] receive public assistance or public welfare payments from the state or local welfare office DURING THE PAST 12 MONTHS? <1> Yes <2> No If yes: What was the amount? (Do not include SSI.) 10. Did [<Name>/you] receive any survivor or disability income DURING THE PAST 12 MONTHS? <1> Yes <2> No If yes: What was the amount? (Do not include Social Security.) 11. Did [<Name>/you] receive a pension or any retirement income from a previous employer or union, or any regular withdrawals or distributions from retirement accounts such as 401(k), 403(b), IRA, Roth IRA, or other accounts designed specifically for retirement DURING THE PAST 12 MONTHS? <1> Yes <2> No	**If yes: What was the amount? Do not include SSI.** **J. Did you/<NAME> receive any survivor or disability income in 2018?** **If yes: What was the amount? Do not include Social Security.** **K. Did you/<NAME> receive a pension or any retirement income from a previous employer or union, or any regular withdrawals or distributions from retirement accounts such as 401(k), 403(b), IRA, Roth IRA, or other accounts designed specifically for retirement in 2018?** **If yes: What was the amount? Do not include Social Security.** **L. Did you/<NAME> receive income on a REGULAR basis from any other sources such as Department of Veterans Affairs (VA) payments, unemployment compensation, child support, or alimony in 2018?**	**If yes: What was the amount? Do NOT include non-cash benefits, such as energy or housing assistance, The Food Stamp Program, or SNAP.** **J. Did you/<NAME> receive any survivor or disability income in 2018?** **If yes: What was the amount? Do not include Social Security.** **K. Did you/<NAME> receive a pension or any retirement income from a previous employer or union, or any regular withdrawals or distributions from retirement accounts such as 401(k), 403(b), IRA, Roth IRA, or other accounts designed specifically for retirement in 2018?** **If yes: What was the amount? Do not include Social Security.** **L. Did you/<NAME> receive income on a REGULAR basis from any other sources such as Department of Veterans Affairs (VA) payments, unemployment compensation, child support, or alimony in 2018?**	

If yes: What was the amount? (Do not include Social Security.) 12. Did [<Name>/you] receive income on a REGULAR basis from any other sources such as Department of Veterans Affairs (VA) payments, unemployment compensation, child support or alimony DURING THE PAST 12 MONTHS? <1> Yes <2> No If yes: What was the amount from all sources? (Do not include lump sum payments such as money from an inheritance or sale of a home.) 13. What is your best estimate of the TOTAL income [FILL1: <Name>'s/your] received from all sources DURING THE PAST 12 MONTHS?	**If yes: What was the amount from all sources? Do not include lump sum payments such as money from an inheritance or sale of a home.** **M. What is the best estimate of the TOTAL income you/<NAME> received from all sources in 2018?**	**If yes: What was the amount from all sources? Do not include lump sum payments such as money from an inheritance or sale of a home.** **M. What is your best estimate of the TOTAL income you/<NAME> received from all sources in 2018?**	

Paper → Weeks Worked

CURRENT PRODUCTION VERSION	TEST VERSIONS 1 + 2	NOTES OR COMMENTS
When did this person last work, even for a few days? ☐ Within the past 12 months ☐ 1 to 5 years ago → *SKIP to* **M** ☐ Over 5 years ago or never worked → *SKIP to question 43* **a. During the PAST 12 MONTHS (52 weeks), did this person work EVERY week? Count paid vacation, paid sick leave, and military service as work.** ☐ Yes → *SKIP to question 41* ☐ No **b. During the PAST 12 MONTHS (52 weeks), how many WEEKS did this person work? Include paid time off and include weeks when the person only worked for a few hours.** Weeks ☐☐ **During the PAST 12 MONTHS, in the WEEKS WORKED, how many hours did this person usually work each WEEK?** Usual hours worked each WEEK ☐☐☐	**During the weeks that this person WORKED in 2018, how many HOURS did this person usually work each WEEK?** Usual hours worked each WEEK ☐☐☐ **a. In 2018, did this person work EVERY week?** *Include all jobs and count paid vacation, paid sick leave, and military service as work.* ☐ Yes → *SKIP to question 42* ☐ No **b. Of the 52 weeks in 2018, how many WEEKS did this person work for at least one day?** *Include all jobs, paid time off, and weeks when this person only worked for a few hours.* Weeks ☐☐	**Note:** The reference period for WEEKS WORKED Test V1 + V2 is "2019" in the final paper questionnaires, not "2018."

2022 ACS Content Test – Cognitive Testing
TOPIC – Income
Wednesday, February 19, 2020

Computer Assisted Interview Script → Weeks Worked

CURRENT PRODUCTION VERSION	TEST VERSIONS 1 + 2	NOTES OR COMMENTS
When did {Fill 1: <Name>/ you} last work, even for a few days? **___ Within the past 12 months [goto WKWX]** **___ Between 1 to 5 years ago [goto COWCP]** **___ Over 5 years ago or never worked -> [goto INTRX]** **During the PAST 12 MONTHS or 52 weeks, did {Fill 1: <Name>/ you} work EVERY week? Count paid vacation, paid sick leave, and military service as work.** **____ Yes [goto WKH]** **____ No [goto WKWN]** **During the PAST 12 MONTHS or 52 weeks, how many WEEKS did {Fill 1: <Name>/ you} work? Include paid time off and include weeks when {Fill 1: <Name>/ you} only worked for a few hours.** **During the weeks worked IN THE PAST 12 MONTHS, how many hours did {Fill 1: <Name>/ you} usually work each week?**	**A. When did you/<NAME> last work, even for a few days?** **Within the past 12 months** **1 to 5 years ago** **Over 5 years ago or never worked** ❖ If response is "Over 5 years ago or never worked," SKIP to INCOME. ❖ Otherwise, go to B. **B. In 2018, did you/<NAME> work at a job or business at any time, even for a few days?** **Yes** **No** ❖ If response is "No," SKIP C – E. ❖ Otherwise, go to C. **C. During the weeks that you/<NAME> WORKED in 2018, how many hours did you/<NAME> usually work each week?**	**Note:** The reference period for Weeks Worked Test V1 + V2 is "2019" in the final CAI scripts, not "2018."

	D. In 2018, did you/<NAME> work EVERY week? Include all jobs and count paid vacation, paid sick leave, and military service as work. **Yes** **No** ❖ If response is "Yes," SKIP E. ❖ Otherwise, go to E. **E. Of the 52 weeks in 2018, how many WEEKS did you/<NAME> work for at least one day? Include all jobs, paid time off, and weeks when you/<NAME> only worked for a few hours.** ❖ If person worked in the past 5 years, go to TYPE OF EMPLOYMENT. ❖ Otherwise, SKIP to INCOME.	

2022 ACS Content Test – Cognitive Testing
TOPIC – Sewer
Wednesday, February 19, 2020

Subcommittee Lead:

Evan Brassell, U.S. Census Bureau

Subcommittee Team Members:

Shawn Bucholtz, Department of Housing and Urban Development
Molly Cromwell, U.S. Census Bureau
Alexander Daily, Energy Information Administration
Zach Lowenstein, Environmental Protection Agency
Gaida Mahgoub, Environmental Protection Agency
Broderick Oliver, U.S. Census Bureau
Mark Prell, Economic Research Service
Barry Ramsey, U.S. Department of Agriculture
Max Zarate-Bermudez, Centers for Disease Control and Prevention

Objective:

Consistent data on the decentralized wastewater infrastructure status in rural and other communities is needed to protect public health, water quality, and to understand and meet the country's growing infrastructure needs.

Regular data updates are required to address changes in housing development and to support regular planning and funding cycles at the local, state, and national level. An annual survey such as the ACS would accurately capture new construction rates of septic systems.

Existing data sources do not provide current, reliable, location-specific data on the use of septic systems. The ACS is the only available survey that can provide this data in a timely, consistent, standardized, and a location-specific manner.

When testing the questions, recruiting from areas known to not have public sewer, such as small towns, may give insight into reporting error. Recruiting in dense urban areas, not likely to have septic systems, would provide similar insight.

Cognitive Testing Research Goals:

- Do people know the difference between a septic system or cesspool versus one connected to public sewer?
- Do people have more than one type of disposal system? If so, how do they decide to answer?
- What type of system do those who choose “Other type of sewage disposal” (version 1) or “No, use other type of system” (version 2) have?

Cognitive Testing Recruiting Requirements:

- Individuals living in housing units with septic tanks only
- Individuals with homes connected to public sewer

2022 ACS Content Test – Cognitive Testing
TOPIC – Sewer
Wednesday, February 19, 2020

Paper

TEST VERSION 1	TEST VERSION 2	NOTES OR COMMENTS
What is the MAIN type of sewage disposal for this house, apartment, or mobile home? ☐ Public sewer ☐ Septic system or cesspool ☐ Other type of sewage disposal	**Is this house, apartment, or mobile home connected to a public sewer?** ☐ Yes, connected to public sewer ☐ No, connected to septic system or cesspool ☐ No, use other type of system	1. The word “cesspool” will not be translated in Spanish version (Rounds 2 and 3).

2022 ACS Content Test – Cognitive Testing
TOPIC – Sewer
Wednesday, February 19, 2020

Computer Assisted Interview Script

TEST VERSION 1	TEST VERSION 2	NOTES OR COMMENTS
What is the MAIN type of sewage disposal for this <FILL BUILDING TYPE>? **Public sewer** **Septic system or cesspool, or** **Another type of sewage disposal**	**A. Is this <FILL BUILDING TYPE> connected to a public sewer?** **Yes** **No** ❖ If response is "Yes," SKIP B. ❖ Otherwise, go to B. **B. Is it connected to a septic system or cesspool?** **Yes** **No**	1. The word "cesspool" will not be translated in Spanish version (Rounds 2 and 3).

2022 ACS Content Test – Cognitive Testing
TOPIC – Electric Vehicles
Wednesday, February 19, 2020

Subcommittee Lead:

Evan Brassell, U. S. Census Bureau

Subcommittee Team Members:

Molly Cromwell, U.S. Census Bureau
Carolyn Hronis, Energy Information Administration
Kristin Kerns, U.S. Census Bureau
Larry Locklear, U.S. Census Bureau
Lindsay Longsine, U.S. Census Bureau
Danni Mayclin, Energy Information Administration
Brian McKenzie, U.S. Census Bureau
Clara Reschovsky, Bureau of Transportation Statistics

Objective:

The U.S. Energy Information Administration (EIA) is singularly tasked under PL93-275 and PL95-91 with carrying out independent analysis of energy supply, demand, and technology relevant to the adequacy of energy resources to meet demands in the near and long term for the Nation's social and economic needs. Energy technology, sources, and uses are projected to change as much in the next 10-20 years as they have in the last 100.

A diverging and growing number of state and local governments' energy and tax policies, and energy sector and other incentives to meet renewable energy and other goals, influence the quality of EIA's energy projections. EIA can observe the result of policies and programs in the aggregate but lacks sufficient information to understand drivers and impact from consuming units, e.g., households, buildings, and industry.

The technology change and capital necessary to modernize the interconnected U.S. electric power grid is poorly observed at the local level through the energy consumer. In particular, the differential adoption of energy *producing* technologies such as rooftop solar (i.e., photovoltaic generating capacity, PV) as well as energy *consuming* technologies such as electric or hybrid-electric plug-in vehicles (EVs) creates new, more variable demands and more potential (e.g., mobile storage provided by battery-enabled vehicles) for energy infrastructure for and in U.S. households.

The American Community Survey would be the only data source at the level of granularity necessary for EIA to adequately project future energy sources, infrastructure, and consumer needs during this era of rapid change.

2022 ACS Content Test – Cognitive Testing
TOPIC – Electric Vehicles
Wednesday, February 19, 2020

Cognitive Testing Research Goals:

- Are respondents reporting hybrid vehicles that do not require connecting to an electrical source for charging?
- Are respondents going to consider every household member that might own an eligible vehicle?
- Are respondents reporting vehicles that they are currently leasing?
- (Version1) What other type of electric vehicles do people have when they respond "Yes" to 14b?

Cognitive Testing Recruiting Requirements:

- Individuals who have purchased vehicles in the last 10 years
- Owners/leasers of electric vehicles that require plugging in to an electrical source for charging
- Owners/leasers of any other type of electric vehicles (including hybrid) that do not require plugging in to an electric source for charging

2022 ACS Content Test – Cognitive Testing
TOPIC – Electric Vehicles
Wednesday, February 19, 2020

Paper

TEST VERSION 1	TEST VERSION 2
Are any of the following types of electric vehicles kept at home for use by members of this household? **a. A plug-in electric vehicle?** ☐ Yes ☐ No **b. Another type of electric vehicle?** ☐ Yes ☐ No	**At this house, apartment, or mobile home, do you or any member of this household own or lease any of the following types of electric vehicles?** **a. A plug-in electric vehicle?** ☐ Yes ☐ No **b. A hybrid electric vehicle?** ☐ Yes ☐ No

2022 ACS Content Test – Cognitive Testing
TOPIC – Electric Vehicles
Wednesday, February 19, 2020

Computer Assisted Interview Script

TEST VERSION 1	TEST VERSION 2
Are any of the following types of electric vehicles kept at home for use by members of this household? ❖ Read one at a time: **A plug-in electric vehicle?** **Yes** **No** **Another type of electric vehicle?** **Yes** **No**	**At this <FILL BUILDING TYPE>, do you or any member of this household own or lease any of the following types of electric vehicles?** ❖ Read one at a time: **A plug-in electric vehicle?** **Yes** **No** **A hybrid electric vehicle?** **Yes** **No**

2022 ACS Content Test – Cognitive Testing
TOPIC – Home Heating Fuel
Wednesday, February 19, 2020

Subcommittee Lead:

Evan Brassell, U.S. Census Bureau

Subcommittee Team Members:

William Chapin, U.S. Census Bureau
Cha-Chi Fan, Federal Communications Commission
Carolyn Hronis, Energy Information Administration
Lindsay Longsine, U.S. Census Bureau
Danni Mayclin, Energy Information Administration

Objective:

We are trying to make responding easier by amending two of the response options in the "gas" categories. In the first response option, we change "gas" to "natural gas" since the term natural gas is commonly used. In the second response option, we add "butane" to the list of other gas examples. We think this will help respondents be more accurate in listing their main heating fuel type for gas.

Cognitive Testing Research Goals:

- Do respondents understand what "natural gas" (response category 1) is as opposed to "gas" (response category 2)?
- Do the words "butane" or "propane" help respondents find the correct heating fuel category?
- (Version 1) What is the impact of removing "bottled or tank" from the second response option?
- Are respondents only reporting the fuel they use the "MOST"?

Cognitive Testing Recruiting Requirements:

- People living in occupied housing units using natural gas as fuel MOST used
- People living in occupied housing units using butane/propane as fuel MOST used
- People who use some other type of heating fuel

2022 ACS Content Test – Cognitive Testing
TOPIC – Home Heating Fuel
Wednesday, February 19, 2020

Paper

CURRENT VERSION	TEST VERSION 1	TEST VERSION 2
Which FUEL is used MOST for heating this house, apartment, or mobile home? ☐ Gas: from underground pipes serving the neighborhood ☐ Gas: bottled, tank, or LP ☐ Electricity ☐ Fuel oil, kerosene, etc. ☐ Coal or coke ☐ Wood ☐ Solar energy ☐ Other fuel ☐ No fuel used	**Which fuel is used MOST for heating this house, apartment, or mobile home?** ☐ Natural gas: from underground pipes serving the neighborhood ☐ Gas: propane, butane, etc. ☐ Electricity ☐ Fuel oil, kerosene, etc. ☐ Coal or coke ☐ Wood ☐ Solar energy ☐ Other fuel ☐ No fuel used	**Which fuel is used MOST for heating this house, apartment, or mobile home?** ☐ Gas: Natural gas from underground pipes serving the neighborhood ☐ Gas: Bottled or tank (propane, butane, etc.) ☐ Electricity ☐ Fuel oil, kerosene, etc. ☐ Coal or coke ☐ Wood ☐ Solar energy ☐ Other fuel ☐ No fuel used

2022 ACS Content Test – Cognitive Testing
TOPIC – Home Heating Fuel
Wednesday, February 19, 2020

Computer Assisted Interview Script

CURRENT PRODUCTION VERSION	TEST VERSION 1	TEST VERSION 2
HFLA: To heat this [FILL BUILDING TYPE] which fuel do you use MOST— Gas, electricity, fuel oil or kerosene, coal or coke, wood, solar energy or some other fuel? <1> Gas (go to HFLB) <2> Electricity <3> Fuel oil or kerosene <4> Coal or coke <5> Wood <6> Solar energy <7> Some other fuel <8> No fuel used HFLB: Is the gas used from underground pipes serving the neighborhood? <1> Yes <2> No (go to HFLC) HFLC: Is it bottled, tank, or LP gas? <1> Yes <2> No	**HFLA. To heat this <FILL BUILDING TYPE>, which fuel do you use MOST—** **Gas,** **Electricity,** **Fuel oil or kerosene,** **Coal or coke,** **Wood,** **Solar energy,** **or Some other fuel?** ❖ If response to HFLA is "Gas," go to HFLB. ❖ Otherwise, SKIP to Question HFLC. **HFLB. Is it natural gas from underground pipes serving the neighborhood?** **Yes** **No** ❖ If response to HFLB is "Yes," SKIP HFLC. ❖ Otherwise, go to HFLC. **HFLC. Is it a gas such as propane or butane?** **Yes** **No**	**HFLA. To heat this <FILL BUILDING TYPE>, which fuel do you use MOST—** **Gas,** **Electricity,** **Fuel oil or kerosene,** **Coal or coke,** **Wood,** **Solar energy,** **or Some other fuel?** ❖ If response to HFLA is "Gas," go to HFLB. ❖ Otherwise, SKIP HFLB and HFLC. **HFLB. Is it natural gas used from underground pipes serving the neighborhood?** **Yes** **No** ❖ If response to HFLB is "Yes," SKIP HFLC. ❖ Otherwise, go to HFLC. **HFLC. Is it bottled or tank gas, such as propane or butane?** **Yes** **No**

2022 ACS Content Test – Cognitive Testing
TOPIC – Solar Panels
Wednesday, February 19, 2020

Subcommittee Lead:

Evan Brassell, U.S. Census Bureau

Subcommittee Team Members:

Chip Berry, Energy Information Administration
William Chapin, U.S. Census Bureau
Jeremy Engelberg, U.S. Census Bureau
Carolyn Hronis, Energy Information Administration
Michael Risley, U.S. Census Bureau

Objective:

Renewable energy as a source for home heating fuel is a growing industry. Currently the only way to track it is through limited data on solar panel sales. By asking this question, we will be able to obtain data for operational solar panels on a housing unit level across the country. This information will help the Energy Information Administration match energy consumption to energy production across the United States.

The technology change and capital necessary to modernize the U.S. electrical power grid is poorly observed at the local level and through the energy consumer. The differential adaptation of energy *producing* technologies such as rooftop solar (i.e. photovoltaic generating capacity, PV) creates new, more variable demands and new potential for energy infrastructure for and in U.S. households.

Cognitive Testing Research Goals:

- How do people understand the terms, “solar panel” (version 1) and “solar power” (version 2)? Do they view them as meaning the same thing or something different? How do they decide if they have solar power/panels?
- Do people understand the term “photovoltaic”?

Cognitive Testing Recruiting Requirements:

- Individuals in housing units with solar/photovoltaic panels
- Individuals in single family home without solar panels

2022 ACS Content Test – Cognitive Testing
TOPIC – Solar Panels
Wednesday, February 19, 2020

Paper

TEST VERSION 1	TEST VERSION 2
Does this house, apartment, or mobile home use solar panels that generate electricity? ☐ Yes ☐ No	**Does this house, apartment, or mobile home use solar power or photovoltaic panels that generate electricity?** ☐ Yes ☐ No

2022 ACS Content Test – Cognitive Testing
TOPIC – Solar Panels
Wednesday, February 19, 2020

Computer Assisted Interview Script

TEST VERSION 1	TEST VERSION 2
Does this <FILL BUILDING TYPE> use solar panels that generate electricity? **Yes** **No**	**Does this <FILL BUILDING TYPE> use solar power or photovoltaic panels that generate electricity?** **Yes** **No**