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2017 AMERICAN COMMUNITY SURVEY RESEARCH AND EVALUATION REPORT  
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MEMORANDUM FOR ACS Research and Evaluation Workgroup

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Subject: Cognitive Testing of the American Community Survey  
Respondent Burden: Weeks Worked and Income

Attached is the final American Community Survey Research and Evaluation report, “American Community Survey Respondent Burden Testing: Weeks Worked and Income Final Briefing Report”. This report summarizes the cognitive testing results for questions that have been determined to have high burden scores—questions for likely sources of difficulty, sensitivity, and burden. The Census Bureau and a broader set of federal data users, including the OMB Interagency Committee for the ACS, developed potential question revisions that may reduce this burden. To evaluate these modifications, the Census Bureau contracted with Westat to conduct two sets of cognitive testing. Set one was collected between December 6 and December 21, 2016. Set two was collected between January 30 and February 10, 2017. This report covers the following two topics:

- Weeks Worked
- Income

If you have any questions about this report, please contact Agnes Kee at 301-763-1516 or Elizabeth Poehler at 301-763-9305.

Attachment

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# **OY1 American Community Survey Respondent Burden Testing:**

## **Weeks Worked and Income**

### **Final Briefing Report**

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# 1. Overview

The American Community Survey (ACS) continuously collects demographic, economic, housing, and social data from households. These data are invaluable to Federal, state, and local governments, researchers, and businesses. Given the importance of the data and the need to ensure continuity with previous data collections, changes to the ACS generally require rigorous testing.

According to the Census Bureau, it takes an average of 40 minutes per household to respond to the 71 questions included on the ACS. The Census Bureau is aware that respondents find some of these questions sensitive, personal, or difficult to answer, and that it is unclear to ACS respondents why the Census Bureau needs to collect information on some topics. Response to the ACS is required by law, and the multiple contact attempts by mail, telephone and personal visit can be perceived by some respondents as harassment. To help address these concerns, the Census Bureau conducted a survey of 1,000 ACS interviewers to identify questions that were perceived as difficult or intrusive for respondents. Based on the results of that survey and after working closely with stakeholders from other Federal agencies to understand their needs, Census has developed a variety of strategies for reducing respondent burden related to certain ACS items. (See: <http://www.census.gov/programs-surveys/acs/operations-and-administration/2015-16-survey-enhancements.html>)

For each survey question determined to have high burden from the scoring done in the 2014 ACS Content Review<sup>1</sup>, the Census Bureau examined the questions for likely sources of difficulty, sensitivity and burden. The Census Bureau then determined potential question revisions that may reduce this burden, and engaged a broader set of Federal data users, including the OMB Interagency Committee for the ACS, to develop recommendations for question modifications. To evaluate these modifications, the Census Bureau contracted with Westat to conduct cognitive testing of changes to ACS items that collect data on the following topics:

- Number of weeks worked last year; and
- Income last year.

Westat's Instrument Design, Evaluation, and Analysis (IDEA) Services conducted two sets of 24 cognitive interviews each (48 total interviews). The timing of the sets was designed to explore

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<sup>1</sup> See "Final Report: American Community Survey (ACS) Fiscal Year 2014 Content Review Results" for a discussion of the burden scores, available at: [https://www2.census.gov/programs-surveys/acs/operations\\_admin/2014\\_content\\_review/methods\\_results\\_report/Final\\_Report\\_American\\_Community\\_Survey\\_FY14\\_Content\\_Review\\_Results.pdf](https://www2.census.gov/programs-surveys/acs/operations_admin/2014_content_review/methods_results_report/Final_Report_American_Community_Survey_FY14_Content_Review_Results.pdf)

different challenges in collecting accurate income data for the proposed reference period of the previous calendar year. Set 1 was collected at the end of 2016, between December 6 and December 21, 2016, and had a reference period of calendar year 2015. Set 2 was collected early in 2017, between January 30 and February 10, and had a reference period of calendar year 2016. Additionally, the timing of the Set 2 interviews helped assess respondent burden in answering the income questions before W2s and other tax information for 2016 had been distributed. This report summarizes the data collection methods and presents the findings and recommendations from the 48 cognitive interviews, all of which were conducted in English.



## 2. Methods

Westat's IDEA Services unit developed the cognitive interview protocols, conducted intensive recruiting to meet the complex requirements for respondent characteristics, and conducted and analyzed the 48 interviews.

### 2.1 Protocol Development

Protocol development consisted of crafting language for the introduction and informed consent; detailed interviewer instructions; selection criteria for Persons 2 and 3; the research questions for each tested item; and scripted probes for each tested item. The Census Bureau provided the relevant portions of the American Community Survey (ACS) instrument to be used in testing. These consisted of one or more versions of the tested items plus contextual items appearing before and after the tested items.

All respondents were exposed to both topics of weeks worked and income. Half were assigned to the interviewer administered mode (CAI) and half were assigned to the Paper mode. A total of 24 interviews were conducted in each mode.

Probing was entirely retrospective, with probes asked only after all items had been administered for up to three individuals in the household. One limitation of this approach is that respondents may have difficulty recalling what they were thinking about when answering a particular survey item. However, because there were only a handful of tested items in each protocol, concurrent probing may have led to respondent reactivity and contamination of subsequent items. Retrospective probing was thus determined to be the most appropriate approach.

Based on findings from an interviewer debriefing conducted shortly after the Set 1 interviews, some adjustments were made to both protocols, including:

- Limiting the rostering to only those ages 15+,
- Modifying the weeks worked question in CAI to simplify the collection of the response in months,
- Adjusting the wording of income types to be more consistent across the CAI and Paper modes,

- Eliminating probes for person 3 (P3) on weeks worked in order to reduce the length of the interview, and
- Making minor adjustments to probes to correspond with changes to survey items mentioned above.

The wording of Set 1 and Set 2 items are presented in the Executive Summary Tables in section 3.

## 2.2 Recruitment

Over the periods spanning from December 5 to December 19, 2016 and January 23 to February 9, 2017, Westat recruiters screened 186 English-speaking adults to determine their eligibility for participation. Potential respondents were first screened to ensure they did not live in group quarters and had not participated in any research focus group or interview in the past 12 months. A total of 80 callers were determined to be ineligible based on these criteria (43%). Eligible callers (n=106) were asked a series of additional screening questions to capture overall demographics and specific characteristics of interest for each tested topic. So as not to contaminate the cognitive interview results, we designed new questions (or borrowed questions from existing sources other than the ACS) to screen for the desired characteristics rather than screening with any of the tested ACS questions. A total of 61 individuals were selected to participate in the interviews; interviews were scheduled with 50 of them; and 48 interviews (96%) were ultimately completed.

The targeted demographic characteristics for the overall recruitment included a mix of categories for sex, age, education level, and Hispanic origin and race (see Appendix A). In addition, topic-specific recruitment targets were set in order to ensure that the Census Bureau could hear how different types of people think about the questions of interest. Examples of such targeted characteristics included individuals who:

- Worked regular jobs with regular schedules in the prior year (for weeks worked);
- Were irregular workers in the prior year (for weeks worked);
- Had no work in the prior year (for income);
- Earned retirement income, self-employment income, net rental income, or a commission/bonus/tips in the prior year (for income);
- Received public assistance or supplemental security income (SSI) in the prior year (for income).

Westat recruiters used the IDEA Services database to identify potential respondents, along with recruiting methods such as advertising on social media, including Craigslist and advertising in a local retirement community newsletter. Westat monitored the recruiting results on a daily basis, reviewing all screened individuals to determine whether they met any of the criteria for any of the targeted characteristics. Mode assignments were made based on recruitment criteria, and the Westat recruiter then contacted them to schedule an interview. When it appeared that we were falling short on any of the targeted characteristics, we re-posted advertisements and enhanced outreach efforts designed to specifically find respondents with those characteristics. We regularly communicated with the Census Bureau throughout the screening process to keep them up-to-date on our progress. Based on screening results, we met or exceeded the recruiting goal for all but one of the targeted characteristics, in which we were unable to recruit any individuals for Set 1 who had worked in 2016, but not in 2015.

## **2.3 Cognitive Interview Administration**

On November 29, 2016, Westat held a half-day interviewer training with seven interviewers. The training provided background information about the overall project; presented the items for testing and associated probes along with all other interview materials and procedures; allowed interviewers the opportunity to conduct one practice interview; and provided detailed instructions for using the interview summary template to write up the findings for each interview. On January 26, 2017, Westat conducted a one-hour refresher training with the same team to review protocol changes for Set 2.

Each interview lasted approximately 40 minutes and respondents were given \$40 to offset any costs of participation, such as transportation or childcare expenses. All interview materials were reviewed and approved by the Office of Management and Budget and Westat's Institutional Review Board.

## **2.4 Analytic Approach**

Analysis of the interviews was based on interviewer summaries that included respondents' verbatim answers to the ACS questions and brief but accurate descriptions of responses to the cognitive probes. These summaries were imported into NVivo, a text-based relational database for managing and analyzing large amounts of qualitative data. Westat team members then coded the summaries using a scheme that incorporated survey response process issues (e.g., comprehension, recall, burden) and the item-specific research questions that appeared in the protocols. Once all summaries

were coded, numerous queries were run in NVivo to review the data and conduct a comprehensive analysis of responses to each tested ACS item.

Analysis focused primarily on those respondents whose descriptions in the follow-up probes suggested they had incorrectly answered an ACS item. This approach allowed us to pinpoint the number of respondents who had problems with each item and determine if those respondents shared any salient characteristics. The analysis that follows is based on responses to the ACS questions, rather than the screener responses. However, tables throughout the report show, for each of the item topics and by mode, the number of respondents with targeted characteristics based on how they answered screening questions. Nearly all respondents fit more than one targeted characteristic.

## **2.5 About This Report**

The report presents key findings from the research questions and scripted probes as well as unanticipated issues that arose spontaneously during the interviews. Because not all respondents received all tested questions, nor did all respondents receive all the probes, denominators throughout the report shift. Three-digit numbers are provided next to all summary excerpts to identify the particular respondent associated with the remark, along with the administration mode for the respondent. Those portions of the excerpts that occur within quotation marks represent respondents' verbatim statements.

### 3. Executive Summary Tables

The Executive Summary Tables that follow show the wording of all tested items in each set and mode, with recommendations highlighted in yellow. Because of slight changes in the wording of some items between Set 1 and Set 2, the language from each set is presented, with recommendations presented in the Set 2 version.

### 3.1 Number of Weeks Worked

TESTED ITEM WORDING (PROPOSED REVISIONS HIGHLIGHTED IN SET 2)	KEY FINDINGS AND JUSTIFICATION FOR REVISIONS
<p><b>CAI Set 1</b></p> <p>39. During the 52 weeks covering 2015, that is from January 1, 2015 to December 31, 2015, in the weeks you worked, how many hours did you usually work each week?</p> <p>40a. During the 52 weeks covering 2015, did you work EVERY week? Count paid vacation, paid sick leave, and military service as work.</p> <p>40b. During the 52 weeks covering 2015, how many WEEKS did you work? Include paid time off and include weeks when you only worked for a few hours. If you would rather give your answer in months, please say so.</p> <p>40c. How many months did you work in 2015?</p> <p><b>CAI Set 2</b></p> <p>39. During the 52 weeks covering 2016, that is from January 1, 2016 to December 31, 2016, in the weeks you worked, how many hours did you usually work each week?</p> <p>40a. During the 52 weeks covering 2016, did you work EVERY week? <b>Include all jobs, and</b> count paid vacation, paid sick leave, and military service as work.</p> <p>40b. During the 52 weeks covering 2016, how many WEEKS did you work? Include <b>all jobs</b>, paid time off, and weeks when you only worked for a few hours. If you would rather give your answer in months, you may do so.</p> <p>(Is that weeks or months?)</p>	<p><b>Use the prior year timeframe, rather than the past 52 weeks.</b></p> <ul style="list-style-type: none"> <li>■ In the 2016 Content Test, fully half of respondents misinterpreted the timeframe.</li> <li>■ In the current testing, only 3 out of 48 misinterpreted the timeframe. All were in Set 1, reporting at the end of the year about the prior calendar year.</li> </ul> <p><b>Continue to offer an option to respond in months for CAI.</b></p> <ul style="list-style-type: none"> <li>■ Those who work only a few weeks out of the year, or work nearly all the weeks of the year prefer answering in weeks. Others, who work a good portion of the year but not the entire year, prefer to respond in months in order to reduce the burden of adding up the weeks or multiplying months by four to arrive at weeks.</li> </ul> <p><b>Add instruction to both items to “Include all jobs”.</b></p> <ul style="list-style-type: none"> <li>■ Out of 18 respondents who reported having more than one job in the prior year, three failed to include a job in their calculation of weeks worked. Those who work at more than one job may forget to think about weeks in which they worked at a job they did not consider to be their main job. This is particularly an issue with self-employment.</li> </ul> <p><b>Maintain the order of items, asking first about hours worked, then weeks worked.</b></p> <ul style="list-style-type: none"> <li>■ Most respondents had no preference for the order and had no comments as to whether the current order helped them. Prior testing showed a slight preference for asking hours worked first, and these two sets of testing demonstrate that this order works without any problems.</li> </ul>

TESTED ITEM WORDING (PROPOSED REVISIONS HIGHLIGHTED IN SET 2)	KEY FINDINGS AND JUSTIFICATION FOR REVISIONS
<p><b>Paper Set 1</b></p> <p>39. During the 52 weeks covering 2015, that is from January 1, 2015 to December 31, 2015, in the WEEKS WORKED, how many hours did this person usually work each WEEK?</p> <p>40a. During the 52 weeks covering 2015, did this person work EVERY week? Count paid vacation, paid sick leave, and military service as work.</p> <p>40b. During the 52 weeks covering 2015, how many WEEKS did this person work? Include paid time off and include weeks when this person only worked a few hours.</p> <p><b>Paper Set 2</b></p> <p>39. During the 52 weeks covering 2016, that is from January 1, 2016 to December 31,2016, in the WEEKS WORKED, how many hours did this person usually work each WEEK?</p> <p>40a. During the 52 weeks covering 2016, did this person work EVERY week? <b>Include all jobs and</b> count paid vacation, paid sick leave, and military service as work.</p> <p>40b. During the 52 weeks covering 2016, how many WEEKS did this person work? Include <b>all jobs</b>, paid time off, and <b>include</b> weeks when this person only worked for a few hours.</p>	<p>See CAI recommendations.</p>

## 3.2 Sources of Income

TESTED ITEM WORDING (PROPOSED REVISIONS HIGHLIGHTED IN SET 2)	KEY FINDINGS AND JUSTIFICATION FOR REVISIONS
<p><b>CAI Set 1</b> The next few questions are about income received in 2015, that is from January 1, 2015 to December 31, 2015...</p> <p>47a. Did you receive any wages or salary?</p> <p>IF “Yes” TO 47a, READ: 47b. Did you receive any additional tips, bonuses or commissions in 2015?</p> <p>IF “No” TO 47a, READ: 47b. Did you receive any tips, bonuses or commissions in 2015?</p> <p>47c. Did you receive any self-employment income in 2015? Consider income from own businesses (farm or non-farm) including proprietorships and partnerships.</p> <p>47d. Was this income a loss?</p> <p>47e. IF “OVER 5 YEARS AGO OR NEVER WORKED” TO 38 READ: The next few questions are about income received in 2015, that is from January 1, 2015 to December 31, 2015...</p> <p>Did you receive any interest or dividends? Consider even small amounts credited to an account.</p> <p>OTHERWISE, READ: Did you receive any interest or dividends in 2015? Consider even small amounts credited to an account.</p> <p>47f. Did you receive any net rental income in 2015?</p> <p>47g. Was this income a loss?</p> <p>47h. Did you receive any royalty income or income from estates and trusts in 2015?</p>	<p>While the research objectives for testing the income series were not specifically about item wording, analysis of the interview data revealed that respondents repeatedly interpreted items in ways that significantly affected the income amount they reported. We therefore offer suggestions to consider should there be an opportunity to revise wording of the income types in Q47. We also point out wording inconsistencies between CAI and Paper. Any revisions that are implemented would benefit from further testing.</p> <ul style="list-style-type: none"> <li>■ Nearly half (22 out of 48) respondents mentioned W2s, 1099s, or something about their tax forms when answering these questions, suggesting that they may have been overlooking non-taxable income when reporting their total income in Q48. In fact, 10 of these 22 respondents missed reporting a source of income. Consider including an instruction in the introduction to the income series that these items refer to both taxable and non-taxable income.</li> <li>■ Five respondents were confused by the self-employment income item and one Paper respondent failed to report this source of income because she was confused by the “farm” language. As well, several respondents were unsure how to report income they received “under the table” or income received sporadically. Consider adding an instruction that self-employment income can be received in cash. Note that the existing language used for this item is inconsistent between CAI and Paper.</li> <li>■ Several respondents had difficulty with the question about net rental income, with one Paper respondent who had a loss initially missing the instruction. Regarding net rental income, because there is some space available on the Paper instrument (after Q48), it may reduce error to separate net rental income into its own item, as it is on CAI.</li> </ul>



TESTED ITEM WORDING (PROPOSED REVISIONS HIGHLIGHTED IN SET 2)	KEY FINDINGS AND JUSTIFICATION FOR REVISIONS
<p>47i. Did you receive any Social Security or Railroad Retirement benefits in 2015?</p> <p>47j. Did you receive any Supplemental Security Income (SSI) payments in 2015?</p> <p>47k. Did you receive any public assistance or public welfare payments from the state or local welfare office in 2015?</p> <p>47l. Did you receive any retirement, survivor, or disability pensions in 2015?</p> <p>47m. Did you receive income on a <b>REGULAR</b> basis from any other sources such as Department of Veterans Affairs (VA) payments, unemployment compensation, child support or alimony in 2015?</p> <p><b>CAI Set 2</b></p> <p>The next few questions are about <b>all sources of</b> income received in 2016, that is from January 1, 2016 to December 31, 2016, <b>both taxable and non-taxable</b> ...</p> <p>47a. Did you receive any wages or salary?</p> <p>IF “Yes” TO 47a, READ:</p> <p>47b. Did you receive any additional tips, bonuses or commissions in 2016?</p> <p>IF “No” TO 47a, READ:</p> <p>47b. Did you receive any tips, bonuses or commissions in 2016?</p> <p>47c. Did you receive any self-employment income in 2016, <b>including work that was paid for in cash?</b> Consider income from own businesses (farm or non-farm) including proprietorships and partnerships.</p> <p>47d. Was this income a loss?</p> <p>47e. IF “OVER 5 YEARS AGO OR NEVER WORKED” TO 38 READ: The next few questions are about <b>all sources of</b> income received in 2016, that is from January 1, 2016 to December 31, 2016, <b>both taxable and nontaxable...</b></p>	<ul style="list-style-type: none"> <li>■ Six of seven respondents who said “yes” to receiving public assistance were actually thinking of non-monetary benefits, such as food assistance. To reduce false reporting of public assistance that is a non-monetary benefit, clarify that the item is only referring to cash or payments.</li> <li>■ Respondents with joint income had little difficulty with the Q47 item series. However, because income itself is no longer being reported at Q47, the instruction regarding joint income may not be needed. One option would be to replace it with a simple instruction at Q48 for P2 and others in the household that says “Do not double-count joint income.”</li> </ul>

TESTED ITEM WORDING (PROPOSED REVISIONS HIGHLIGHTED IN SET 2)	KEY FINDINGS AND JUSTIFICATION FOR REVISIONS
<p>Did you receive any interest or dividends? Consider even small amounts credited to an account.</p> <p><b>OTHERWISE, READ:</b> Did you receive any interest or dividends in 2016? Consider even small amounts credited to an account.</p> <p>47f. Did you receive any net rental income in 2016?</p> <p>47g. Was this income a loss?</p> <p>47h. Did you receive any royalty income or income from estates and trusts in 2016?</p> <p>47i. Did you receive any Social Security or Railroad Retirement benefits in 2016?</p> <p>47j. Did you receive any Supplemental Security Income (SSI) payments in 2016?</p> <p>47k. Did you receive any <b>cash or payments through public assistance or the state or local welfare office</b> <del>public welfare payments from the state or local welfare office</del> in 2016?</p> <p>47l. Did you receive any retirement, survivor, or disability pensions in 2016? (Do not include Social Security.)</p> <p>47m. Did you receive income on a <b>REGULAR</b> basis from any other sources such as Department of Veterans Affairs (VA) payments, unemployment compensation, child support or alimony in 2016? (Do not include lump sum payments such as money from an inheritance or sale of a home.)</p>	

TESTED ITEM WORDING (PROPOSED REVISIONS HIGHLIGHTED IN SET 2)	KEY FINDINGS AND JUSTIFICATION FOR REVISIONS
<p><b>Paper Set 1</b></p> <p>47. Consider income received from January 1, 2015 to December 31, 2015. For income received jointly, if you know the appropriate amount for each person, mark (X) “Yes” for each person. If not, mark (X) “Yes” for only one person and mark (X) “No” for the other person.</p> <ul style="list-style-type: none"> <li>a. In 2015, did this person receive wages, salary, commissions, bonuses, or tips?</li> <li>b. In 2015, did this person receive self-employment income from own nonfarm businesses or farm businesses, including proprietorships and partnerships? If the net income was a loss, mark (X) the “Loss” box.</li> <li>c. In 2015, did this person receive interest, dividends, net rental income, royalty income, or income from estates and trusts? Consider even small amounts credited to an account. If the net income was a loss, mark (X) the “Loss” box.</li> <li>d. In 2015, did this person receive Social Security or Railroad Retirement?</li> <li>e. In 2015, did this person receive Supplemental Security Income (SSI)?</li> <li>f. In 2015, did this person receive any public assistance or welfare payments from the state or local welfare office?</li> <li>g. In 2015, did this person receive retirement, survivor, or disability pensions? This does NOT include Social Security.</li> <li>h. In 2015, did this person receive any other sources of income regularly such as Veterans’ (VA) payments, unemployment, compensation, child support or alimony? This does NOT include lump sum payments such as money from an inheritance or the sale of a home.</li> </ul>	<p>See CAI findings.</p>

TESTED ITEM WORDING (PROPOSED REVISIONS HIGHLIGHTED IN SET 2)	KEY FINDINGS AND JUSTIFICATION FOR REVISIONS
<p><b>Paper Set 2</b></p> <p>Consider <b>all sources of</b> income received from January 1, 2016 to December 31, 2016, <b>both taxable and non-taxable.</b></p> <p><b>For income received jointly, if you know the appropriate amount for each person, mark (X) "Yes" for each person. If not, mark (X) "Yes" for only one person and mark (X) "No" for the other person.</b></p> <ol style="list-style-type: none"> <li>a. In 2016, did this person receive any wages, salary, commissions, bonuses, or tips?</li> <li>b. In 2016, did this person receive any self-employment income, <b>including work that was paid for in cash? Consider income from own businesses (farm or non-farm) including proprietorships and partnerships. from own nonfarm businesses or farm businesses, including proprietorships and partnerships?</b> If the net income was a loss, mark (X) the "Loss" box.</li> <li>c. In 2016, did this person receive any interest, dividends, <b>net rental income,</b> royalty income, or income from estates and trusts? Consider even small amounts credited to an account. <b>If the net income was a loss, mark (X) the "Loss" box.</b></li> <li><b>d. In 2016, did this person receive any net rental income? If the net income was a loss, mark (X) the "Loss" box.</b></li> <li>e. In 2016, did this person receive any Social Security or Railroad Retirement benefits?</li> <li>f. In 2016, did this person receive any Supplemental Security Income (SSI) payments?</li> <li>g. In 2016, did this person receive any <b>cash or payments through</b> public assistance or the state or local welfare office?</li> <li>h. In 2016, did this person receive any retirement, survivor, or disability pensions? <i>This does NOT include Social Security.</i></li> <li>i. In 2016, did this person receive any other sources of income regularly such as Veterans' (VA) payments, unemployment, compensation, child support or alimony? <i>This does NOT include lump sum payments such as money from an inheritance or the sale of a home.</i></li> </ol>	

### 3.3 Total Income Amount

TESTED ITEM WORDING (PROPOSED REVISIONS HIGHLIGHTED IN SET 2)	KEY FINDINGS AND JUSTIFICATION FOR REVISIONS
<p><b>CAI Set 1</b> 48. IF “YES” TO 47A OR 47B, READ: What was your <b>TOTAL</b> income in 2015 from all sources? Include amount from all jobs before taxes and other deductions.</p> <p>IF “YES” TO 47C, READ: What was your <b>TOTAL</b> income in 2015 from all sources? For self-employment income, include net income after operating expenses. Report earnings as a tenant farmer or sharecropper.</p> <p>IF “YES” TO (47A OR 47B) AND 47C, READ: What was your <b>TOTAL</b> income in 2015 from all sources? Include amount from all jobs before taxes and other deductions. For self-employment income, include net income after operating expenses. Report earnings as a tenant farmer or sharecropper.</p> <p>OTHERWISE, READ: What was your <b>TOTAL</b> income in 2015 from all sources?</p> <p><b>CAI Set 2</b> 48. IF “YES” TO 47A OR 47B, READ: What was your <b>TOTAL</b> income in 2016 from all sources? Include amount from all jobs <u>before</u> taxes and other deductions.</p> <p>IF “YES” TO 47C, READ: What was your <b>TOTAL</b> <b>self-employment</b> income in 2016, <b>including income received in cash</b> from all sources? <b>For self-employment income, include Report net</b> income after operating expenses. Report earnings as a tenant farmer or sharecropper.</p> <p>IF “YES” TO (47A OR 47B) AND 47C, READ: What was your <b>TOTAL</b> income in 2016 from all sources? Include amount from all jobs <u>before</u> taxes and other deductions. For self-employment income, include <b>income received in cash, and report net</b> income after operating expenses. Report earnings as a tenant farmer or sharecropper.</p> <p>OTHERWISE, READ: What was your <b>TOTAL</b> income in 2016 from all <b>of the</b> sources <b>you just mentioned</b>?</p>	<p>Use a prior calendar year reference period, rather than the past 12 months from the date of the interview.</p> <ul style="list-style-type: none"> <li>■ Only two respondents in Set 1 and one respondent in Set 2 misinterpreted the timeframe.</li> <li>■ The longer recall period in Set 1 potentially led to a wider margin of error in the dollar amount, but even with a short recall period in Set 2, respondents still made errors in reporting their total income.</li> </ul> <p><b>To reduce perceived burden, only ask for the total income amount, rather than income for each source.</b></p> <ul style="list-style-type: none"> <li>■ Most respondents indicated that it would be “easier” for them to provide the total income amount, and preferred this approach to providing individual income amounts. Some respondents volunteered that their total income amounts would be less accurate with this approach. The previously suggested item revisions may help improve accuracy, particularly for those with more than one source of income, by making it clearer that the total amount should reflect all sources of income.</li> </ul> <p><b>Revise income series instructions to reinforce intention that respondents should report all sources of income.</b></p> <ul style="list-style-type: none"> <li>■ Out of 48 respondents, 18 failed to include all sources of income when reporting their total income. There were three main reasons for the misreporting. <ul style="list-style-type: none"> <li>○ Half of the 18 respondents thought question 48 was only asking about job related income.</li> <li>○ Seven of the 18 left out small sources of income, like interest and dividends.</li> <li>○ Five out of the 18 failed to report under-the-table income.</li> </ul> </li> <li>■ Revise CAI instructions to more clearly remind respondents to add up all of the sources they just mentioned. <ul style="list-style-type: none"> <li>○ Consider tailored text for each income type to be consistent with instructions provided in the Paper version.</li> </ul> </li> </ul>

TESTED ITEM WORDING (PROPOSED REVISIONS HIGHLIGHTED IN SET 2)	KEY FINDINGS AND JUSTIFICATION FOR REVISIONS
<p><b>Paper Set 1</b></p> <p><b>48. What was this person’s total income in 2015 from all sources?</b></p> <p><i>Include income amounts for questions 47a to 47b that were marked (X) “Yes.”</i>  <i>If “Yes” for 47a, include amount from all jobs before deductions for taxes, bonds, dues, or other items.</i>  <i>If “Yes” for 47b, include NET income after business expenses.</i>  <i>If “Loss” for 47b or 47c, subtract amount from total income.</i>  <i>For income received jointly, include the appropriate share for this person in the total.</i>  <i>If net income was a loss, enter the amount and mark (X) the “Loss” box next to the dollar amount.</i></p> <p><b>Paper Set 2</b></p> <p><b>48. Including all of the sources marked ‘Yes’ in Q47a-h, what was this person’s total income in 2016 from all sources?</b></p> <p><i>Include income amounts for questions 47a to 47b that were marked (X) “Yes.”</i>  <i>If “Yes” for 47a, include amount from all jobs before taxes and other deductions. deductions for taxes, bonds, dues, or other items.</i>  <i>If “Yes” for 47b, include income received in cash. Report income after operating expenses. Report earnings as a tenant farmer or sharecropper. If the amount was a loss, subtract from total income.</i>  <i>If “Yes” for 47c, include rental income after operating expenses. If the amount was a loss, subtract from total income.</i>  <i>If “Yes” for 47b or 47c, include NET income after business operating expenses.</i>  <i>If “Loss” for 47b or 47c, subtract amount from total income.</i>  <i>For income received jointly, include the appropriate share for this person in the total.</i>  <i>If net income was a loss, enter the amount and mark (X) the “Loss” box next to the dollar amount.</i></p>	<ul style="list-style-type: none"> <li>○ Consider adding to this instruction a reminder that income received in cash should be included in the total amount reported.</li> <li>■ Some instructions on the Paper questionnaire can also be revised to help respondents include all sources of income in their answers at Q48.             <ul style="list-style-type: none"> <li>○ Move the language to “include all sources” from the instruction to the question stem, to increase the chances respondents will notice it.</li> <li>○ In the instructions at Q47, mention the types of income that should be considered (for example, income received on a regular basis, even if it is paid in cash). This may be more important than the joint income instruction if space is at a premium.</li> </ul> </li> </ul> <p><b>Clarify in instructions whether the total income amount should reflect net or gross income.</b></p> <ul style="list-style-type: none"> <li>■ Three respondents underestimated their income amount because they thought the question was asking about their after-tax income. Indeed, instructions in both CAI and Paper instruments refer to “net” income for self-employment and rental income, which could easily have confused respondents to be thinking that all income reported should be net.</li> <li>■ One respondent with net rental income noted that the instructions for Q48 did not indicate whether the rental income reported should be net or gross. As a result, she over-reported her rental income.</li> <li>■ Some small changes to both CAI and Paper instructions may help resolve respondent confusion without changing the meaning or intent of those instructions.             <ul style="list-style-type: none"> <li>○ Consider removing the word “net” from the CAI instruction if Q47c=Yes (self-employment income).</li> <li>○ Remove the word “net” from the two places it appears in the Paper instructions.</li> <li>○ There should be an instruction on Paper to include income after expenses for rental income in order to ensure that rental expenses are deducted.</li> </ul> </li> </ul>

TESTED ITEM WORDING (PROPOSED REVISIONS HIGHLIGHTED IN SET 2)	KEY FINDINGS AND JUSTIFICATION FOR REVISIONS
	<p>There are a number of inconsistent instructions between the CAI and Paper modes, and they are listed below. Many would be resolved with implementation of other recommendations for the income series; we suggest resolving the others as well.</p> <ul style="list-style-type: none"> <li>■ Wages and salary:                             <ul style="list-style-type: none"> <li>○ CAI: Include amount from all jobs before taxes and other deductions.</li> <li>○ Paper: Include amount from all jobs before deductions for taxes, bonds, dues, or other items.</li> </ul> </li> <li>■ Self-employment income:                             <ul style="list-style-type: none"> <li>○ CAI: For self-employment income, include net income after operating expenses. Report earnings as a tenant farmer or sharecropper.</li> <li>○ Paper: Include NET income after business expenses.</li> </ul> </li> <li>■ Loss:                             <ul style="list-style-type: none"> <li>○ CAI: (Not addressed at question 48)</li> <li>○ Paper: If “Loss” for 47b or 47c, subtract amount from total income... If net income was a loss, enter the amount and mark (X) the “Loss” box next to the dollar amount.</li> </ul> </li> <li>■ Joint income:                             <ul style="list-style-type: none"> <li>○ CAI: (Not addressed)</li> <li>○ Paper: For income received jointly, include the appropriate share for this person in the total.</li> </ul> </li> </ul>

## 4. Detailed Findings

### 4.1 Weeks Worked

#### 4.1.1 Background

Previous testing in the ACS Content Test and earlier rounds of burden testing found that respondents had challenges with calculating the specific number of weeks worked and understanding the reference period. Respondents with multiple jobs or irregular schedules experienced more difficulty answering weeks worked when it came before hours worked. For the current testing effort, hours worked was asked before weeks worked. The research objective related to this revision was to test whether asking hours worked first provided helpful context for accurate reporting by all respondents, including those with multiple jobs or irregular schedules.

The current round of testing changed the reference period from the “past 52 weeks” to the 52 weeks covering the prior calendar year. The study was designed to test the maximum recall period (in December of the subsequent calendar year), and the minimum recall period (in January of the subsequent year). The research objective was to determine if respondents can report accurately both at the very end and the very beginning of the subsequent year.

Finally, the current testing continued to explore preferences for answering in months or weeks. Prior testing showed a potential interest in answering in months, and that respondents were doing calculations in their head to convert months to weeks. The CAI mode was designed to evaluate the explicit option to respond to weeks worked in months. Research objectives were to determine (1) if respondents choose this option, (2) if this option lessens burden, and (3) if respondents report accurately when reporting this way.

#### 4.1.2 Respondent Characteristics

The items were tested with 48 respondents. Table 4-1 shows the number of respondents with the targeted characteristics sought for this question topic based on their responses to the recruitment screener. Note that irregular workers were primarily allocated to the CAI mode in order to explore mode-specific issues.



**Table 4-1. Number of respondents with targeted characteristics for the Weeks Worked questions by set and mode**

	Total*	Set 1		Set 2	
		CAI	Paper	CAI	Paper
Regular job with regular schedule	17	4	4	2	7
Irregular worker: partial year worker or irregular schedule	28	9	5	10	4

\* Three respondents in Set 1 and two respondents in Set 2 did not meet any of the targeted characteristics for the Weeks Worked questions but were still asked the questions.

### 4.1.3 Key Findings

***Most respondents correctly answered weeks worked; those who answered incorrectly did so for a variety of reasons.***

Thirty-three of the 48 respondents answered the weeks worked items correctly. The other 15 incorrectly answered one or both items about the number of weeks they worked. (Note this is roughly the same rate of errors made in the 2016 ACS Content Test.) Of these, six incorrectly said they had worked all 52 weeks when they had not. Three said they had not worked all 52 weeks, when in probing, revealed that they actually had. And six provided an inaccurate response to the number of weeks they worked. The reasons for inaccurate reporting generally fell into the categories described below.

- **Wrong year reported:** Three respondents in Set 1 erroneously answered about the number of weeks they worked in 2016, rather than 2015 (104, 127, 130). This included two Paper respondents and one CAI respondent. None of the Set 2 respondents reported on the wrong year.
- **Confusion about paid/unpaid vacation or sick time:** Four CAI respondents in both sets of interviewing had difficulty deciding whether to include paid vacation or paid sick time, or conversely, whether to count unpaid leave in their responses. In all four of these cases, the respondent provided the wrong answer to whether they had worked all weeks during the prior calendar year (120, 138, 140, 181). This issue did not arise with any Paper respondents.
  - One respondent stated he did not include paid time off in his answer of 46 weeks. When probed, R stated if he had included his paid time off, he would have answered 52 weeks. (120, CAI)
  - Another respondent answered yes to working all 52 weeks, although he is self-employed so when he took one week off for vacation, he did not make any

money. He stated it was “easier to answer” that he worked every week than to think about whether he should include the week he took off. (138, CAI)

- A third respondent decided she had answered this question incorrectly, and should have answered no. She stated she worked for 50 weeks during the year, and received public assistance for two weeks while she was in between jobs. R stated she had answered yes because she had worked for most of the year. (140, CAI)
- The fourth respondent was in the hospital with the flu for a week, but was employed throughout his hospital stay. Probing revealed he was not paid sick leave for it, so he should have said no to working all 52 weeks. (181, CAI)
- **Overlooked a job:** Three respondents across both sets of interviews neglected to think about all of the jobs they had over the course of the year, which led them to underreport the number of weeks they had worked. Two respondents were only thinking about their “main” job, and one was only thinking about the job in which she had an employer and did not count any of the weeks she spent on paid self-employment work. (128, 182, 197) This included two CAI respondents and one Paper respondent.
- **Recall/Burden:** Two respondents experienced recall difficulties or did not take the time to answer accurately. One acknowledged that she answered the question too quickly and forgot that she did not work for two months of the year (103, Paper). The other provided an estimated response of 40 weeks and did not want to take the time to compute the actual response. (148, Paper)
- **Other errors:** Each of the remaining three problems were unique to the respondent.
  - One respondent only worked one month of 2015 yet responded that she had worked all 52 weeks in the prior calendar year. She did not provide a reason for her misunderstanding. (176, CAI)
  - One respondent worked for five days throughout the year, and reported it as one week of work, rather than working during five weeks of the year. (108, Paper)
  - One respondent misinterpreted the question and answered the number of weeks he did not work in the prior calendar, rather than the number of weeks he did work. (201, Paper)

***While only three respondents in Set 1 gave an answer for the wrong year, several in both Sets misinterpreted the timeframe.***

In Set 1, respondents were asked in December of 2016 to recall the number of weeks they worked in all of 2015. In Set 2, respondents were asked in January or February of 2017 to recall the number of weeks they worked in all of 2016. Nine respondents misinterpreted the timeframe (six in Set 1, three in Set 2).

Three respondents from Set 1, as noted earlier, answered with the number of weeks they worked in 2016, rather than 2015. Three additional respondents were thinking of a timeframe other than the calendar year, generally one that corresponded with the months they were working, such as the school year or the span of their employment at a particular job (one in Set 1, two in Set 2). An additional Set 2 respondent was thinking initially about the job where she worked the most hours, which covered April 2016 to the beginning of January 2017, but quickly realized she also had other employment earlier in the year. All of these respondents did, however, seem to answer with the correct number of weeks worked, though one acknowledged her answer was an estimate. Two additional respondents in Set 1 were unable to articulate what timeframe they were thinking about as they answered the question but seemed to suggest they had been working the full year for several years, so their answers were likely an accurate reflection of the number of weeks they had worked. Note that the questions immediately preceding the hours worked and weeks worked items refer to employment “last week.”

***Among CAI respondents, those working nearly all of the year tended to answer in weeks, whereas those working less tended towards months.***

Out of the 48 respondents, 25 answered yes to having worked all weeks in the prior calendar year so were not asked for the specific number of weeks. The remaining 23 answered “No,” that they had not worked all 52 weeks in the prior year. Two of these Paper respondents accidentally skipped the question asking how many weeks they worked, and 21 respondents provided a numerical response to the question in weeks (or months for some CAI respondents).

When answering the number of weeks worked, Paper respondents (n=12) were only given the option of respondent in weeks, whereas CAI respondents (n=9) were provided with an option of answering in months if they so preferred. Out of the nine CAI respondents, four answered in weeks and five answered in months. None of the CAI respondents offered a response in both months and weeks (such as 6 months and 1 week), although one respondent initially answered in months and changed his answer to weeks based on what he thought the interviewer wanted to hear (110, CAI).

The CAI respondents who answered in weeks tended to work all, or nearly all weeks in the prior calendar year (46-52 weeks), whereas the CAI respondents answering in months tended to work for much less of the calendar year (1 to 6 months, with one respondent reporting 10 months).

Those answering in months all had partial-year work or worked multiple jobs, and indicated that it was easier for them to report this way.

- One respondent wanted to answer in months because “I remember the month I was hired and the month I was let go.” (130, CAI)
- One respondent explained that she was paid for one month of work, so that is how she answered. (110, CAI)

Among the 16 respondents who answered in weeks (12 Paper, 4 CAI), respondents used a variety of strategies to come up with their responses. Those with full-year, or nearly full-year employment (n=5) tended to subtract out from 52 the number of weeks they were on unpaid vacation or were unemployed to arrive at their answer.

- One respondent who answered 50 weeks explained that she worked every week of the year other than the two weeks of vacation that she took off unpaid. (116, CAI)
- Similarly, another respondent who answered 47 weeks said she knows there were 3 or 4 weeks when she did not work, which is how she decided on her answer. (121, Paper)

Six of the 16 respondents who answered in weeks (all Paper) acknowledged that their response was an estimate or even a “stab in the dark,” as one respondent put it. All of these respondents worked for only part of the year, with responses ranging from 20 to 40 weeks. Four of the six respondents, however, did say they were confident in the answer they provided, and two were not at all confident.

The remaining five respondents who answered in weeks tended to have no problems coming up with their answers. Two were full-year workers (52 weeks) who should have skipped the question, and the other three had worked a smaller number of weeks and knew the actual answer with little difficulty.

### ***Respondents are split in preference for answering in weeks vs. months***

Regardless of whether they actually answered in weeks or months, the 21 respondents who provided the number of weeks or months they worked in the prior calendar year were asked whether they would prefer to answer in weeks or months (12 Paper, 9 CAI). Results were split, with nine preferring to answer in months, seven in weeks, and five expressing no preference. Preferences were also split within modes, with six Paper respondents preferring months and five preferring weeks; likewise, three CAI respondents preferred months and two preferred weeks.

**Prefer months:** Those who prefer months tended to cite an added burden of answering in weeks, explaining that this requires “math skills.”

- One respondent said it would have been easier to answer in months because she first had to remember how many weeks were in a year, then she felt her calculation was off because she wasn’t sure exactly how long the school year is. She further explained that since she knew she started in October and ended in May, “I could just count off easier that way.” (111, *Paper*)
- A CAI respondent who answered in months noted that it would have been more difficult to answer in weeks because “I don’t know math” and “it’s easier for me to know how many months than how many weeks, because of breaks and weekends.” (128, *CAI*)
- Another CAI respondent said it was “a lot easier” to answer in months “because I’m bad at math.” Answering in months gives “a better estimate” of the time she’d worked. (182, *CAI*)

Two respondents raise additional benefits of being able to answer in months:

- A Paper respondent suggested months would be easier, saying he “thinks in months financially” because he pays for things monthly. He also receives his main income monthly. (131, *Paper*)
- A Paper respondent who worked multiple jobs for part of the year thought that months would be easier “because you really have to think back to every week you worked. With the economy like it is, months would be easier.” (201, *Paper*)

Finally, one respondent who preferred months for answering about himself decided to answer in weeks for P2, who had worked a small amount during the year.

- The respondent answered in months for himself, but in weeks for P2. He explained that “you usually end up thinking about it in months anyway and then if you have to answer it in weeks, you have to multiply each month by four to get the answer.” He did mention, however, that answering in weeks would be easier if someone only worked for a short time. In fact, this respondent answered in weeks for P2, who had worked less than a month. (130, *CAI*)

**Prefer weeks:** Those who prefer to answer in weeks explained that their answers would be more accurate and in better alignment with how they think about work and vacations, which is generally in terms of weeks rather than months.

- One Paper respondent explained that answering in months would be less accurate, because she worked every month, but not every week. (121, *Paper*)

- Another Paper respondent stated that answering in weeks is “more appropriate” because “working is a weekly thing, it’s not a monthly thing.” He stated most people are paid weekly or biweekly, and “I think weeks is the way we measure work.” (132, *Paper*)
- A CAI respondent stated it was easier to answer in weeks because “it’s easier for me to remember vacations or how many days I’ve taken off”. (192, *CAI*)

***Respondents say the question asking if they worked all weeks in the prior calendar year is easy.***

Out of the 43 respondents who answered the probe asking how easy or difficult it was to answer whether they had worked all of the weeks in the prior calendar year, 39 respondents said it was easy. Three noted it was difficult because of irregular work schedules (108, *Paper*; 128, *CAI*; 197, *Paper*). Additionally, one CAI respondent was confused by the instruction to count paid vacation as work, wondering if the question was asking him if he thought of paid vacation and sick leave as work, rather than whether he worked the entire year. (120, *CAI*)

***Most are confident in their number of weeks response, even in spite of wrong or estimated answers.***

Among the 21 respondents who provided a numerical response to weeks worked, 16 were confident in their answer, and five were not confident. Even some respondents who answered the question wrong, still exhibited confidence in their answer.

- One respondent who answered in terms of the weeks he did not work, rather than the number of weeks he did work, indicated that he still felt confident in this answer, even though it was not what the question was asking for. (201, *Paper*)
- Another respondent who added up five days of work throughout the year and reported this as one week of work indicated that she is confident because “it’s the truth.” (108, *Paper*)
- Another respondent who estimated that he worked 40 weeks during the year acknowledged that his response was “not accurate”, but later indicated he was confident “because that is what I did.”

***Most respondents say that asking for hours worked before weeks worked did not matter to them and express no preference for the order of these items.***

Paper respondents were asked whether it was helpful to ask first about Hours Worked and then Weeks Worked, and if they preferred to answer the questions with Hours Worked or Weeks Worked being asked first. Of the 20 respondents who were asked about this, 12 expressed no opinion, saying it did not make any difference to them. The eight who expressed an opinion were evenly split, with four saying the order was helpful, and four saying it was not helpful.

- One respondent thought that answering about hours worked first “made it more specific.” (102, *CAI*)
- Another respondent said the order helped “because it put me in the frame of mind to answer the next question”. (121, *Paper*)
- In contrast, one respondent said she wasn’t thinking of her hours while answering for weeks, which in turn meant that answering for her hours didn’t really make it any easier to answer for the number of weeks she’d worked. (111, *Paper*)
- Another respondent similarly stated the order is “not really relevant to me.” She said, “I don’t know if knowing how many hours I worked would tell me how many months I had worked, or weeks.” (128, *CAI*)

Likewise, of the 21 respondents who were asked for their preference on the order of the items, 13 expressed no preference. Those who had a preference were evenly split between asking Hours Worked first (n=4) and Weeks Worked first (n=4). Comments were in alignment with responses to the probe about helpfulness of the hours worked item coming first.

***Most respondents were able to answer about other household members, though it was more difficult than answering about themselves.***

Thirty-seven respondents answered for other household members and were asked about the burden of the questions. Twenty-one said the questions were easy to answer and 29 were confident that they gave the correct answer for weeks worked for another household member.

Fourteen respondents said it was difficult to answer. Ten of the 14 commented that P2 does not have a regular work schedule, and thus they are not fully knowledgeable about the number of weeks worked. Three expressed general uneasiness toward providing a proxy response, and one respondent

reported that P2 is a new roommate and he simply does not know enough about the person to be able to answer about his work patterns, especially the work he did before he moved in.

#### **4.1.4 Recommendations**

**Use the prior year timeframe, rather than the past 52 weeks.**

- In the 2016 Content Test, fully half of respondents misinterpreted the timeframe when it asked about the number of weeks worked in the 52 weeks prior to the interview date. In the current testing, only three out of 48 misinterpreted the timeframe when asking about the prior calendar year. All three of these respondents were in Set 1, reporting at the end of the year about the prior calendar year.

**Continue to offer an option to respond in months for CAI.**

- Those who work only a few weeks out of the year, or work nearly all the weeks of the year prefer answering in weeks. Others, who work a good portion of the year but not the entire year, prefer to respond in months in order to reduce the burden of adding up the weeks or multiplying months by four to arrive at weeks.

**Add instruction to both items to “Include all jobs”.**

- Out of 18 respondents who reported having more than one job in the prior year, three failed to include a job in their calculation of weeks worked. Those who work at more than one job may forget to think about weeks in which they worked at a job they did not consider to be their main job. This is particularly an issue with self-employment.

**Maintain the order of items, asking first about hours worked, then weeks worked.**

- Most respondents had no preference for the order and had no comments as to whether the current order helped them. Prior testing showed a slight preference for asking hours worked first, and these two sets of testing demonstrate that this order works without any problems.



Proposed revisions:

**CAI**

\*40a. During the 52 weeks covering 2016, did you work EVERY week? **Include all jobs, and** count paid vacation, paid sick leave, and military service as work.

\*40b. During the 52 weeks covering 2016, how many WEEKS did you work? **Include all jobs, paid time off, and include** weeks when you only worked for a few hours. If you would rather give your answer in months, you may do so.

(Is that weeks or months?)

**Paper**

40a. During the 52 weeks covering 2016, did this person work EVERY week? **Include all jobs and** count paid vacation, paid sick leave, and military service as work.

40b. During the 52 weeks covering 2016, how many WEEKS did this person work? **Include all jobs, paid time off, and include** weeks when this person only worked for a few hours.

## 4.2 Income

### 4.2.1 Background

In order to explore ways to reduce the burden associated with the income series on the ACS, the current testing effort had five main research objectives.

1. **Reference Period:** Rather than asking about the past 52 weeks, the reference period was changed to ask about the prior calendar year in an effort to align better with how respondents might think about their income. Key questions were to determine (1) if respondents can comprehend the reference period, (2) if respondents who report at the end of the year can accurately report income for the previous calendar year, (3) if respondents reporting at the beginning of the year before they do their taxes can report for the previous calendar year, and (4) if the revised reference period affects respondent burden.
2. **Including all income amounts in total:** As another way to potentially decrease burden, the current testing effort only asks about the individual's total income earned in the prior calendar year, rather than asking for dollar amounts for each type of income reported, and then asking for the total. Thus, the main research question was to evaluate whether respondents include all of the income types that they replied "Yes" to in their calculation of total income.
3. **Being able to report specific amounts for the income types:** Although respondents were not asked to provide specific amounts for each type of income they earned, another research question was to determine whether they could have provided specific amounts if the survey had asked for them. Cognitive probes also sought to determine if respondents would have referred to tax forms, pay stubs or other resources to look up their income information if they were completing the survey at home.
4. **Instructions:** In the current testing effort, a detailed set of instructions clarifies what types of income to include in the total income amount. These instructions contain significantly more text than in the current ACS. Key research questions were to examine whether respondents listened closely to the CAI instructions or took the time to read the Paper instructions and, if so, whether they understood and heeded them.
5. **Respondent burden:** Finally, the current testing effort sought a general understanding of the effects of this revised question format on respondent burden. Specifically, does omitting the requirement to report income amounts for each income type in question 47 reduce respondent burden, or does it makes it more difficult to calculate total income? If the revised instructions are more cumbersome, then the main goal of this research would not have been met.

## 4.2.2 Respondent Characteristics

The income items were tested with 48 respondents. Table 4-2 shows the number of respondents with the targeted characteristics sought for this question topic based on their responses to the recruitment screener. Note that self-employed workers and those with net rental income were primarily allocated to the Paper mode, and those receiving commission, bonuses, or tips were primarily assigned to the CAI mode in order to explore mode-specific issues.

**Table 4-2. Number of respondents with targeted characteristics for the Income questions by set and mode**

	Total*	Set 1		Set 2	
		CAI	Paper	CAI	Paper
No work past 5 years	4	0	2	0	2
Retirement income in 2015/2016	16	4	7	1	4
Self-employment income in 2015/2016	16	3	6	0	7
Net rental income 2015/2016	9	2	4	0	3
Savings account with interest in 2015/2016	26	7	5	7	7
Commission, bonus or tips in 2015/2016	19	6	2	7	4
Public assistance in 2015/2016	6	2	2	0	2
SSI in 2015/2016	4	0	2	0	2

\* Four respondents in Set 2 did not meet any of the targeted characteristics for the Income questions but were still asked the questions.

## 4.2.3 Key Findings

**Research objective #1: Reference Period.**

***Respondents generally process the reference period correctly.***

Respondents in Set 1 were asked to recall their income types and total income amount from 2015, and respondents in Set 2 were asked to recall from 2016. As stated earlier, a key research objective was to determine whether respondents correctly understood the timeframe. Indeed, 22 out of 24 respondents in Set 1, who were answering the questions in December 2016, understood that the income series was asking them about 2015. The two respondents who misinterpreted the timeframe were both answering about 2016, rather than 2015, and had also previously misinterpreted the reference period for Weeks

Worked (127, Paper; 130, CAI). In Set 2, conducted in late January/early February of 2017, only one respondent misinterpreted the timeframe, thinking about a time period spanning 52 weeks after she began her job in June 2015, rather than the calendar year of 2016 (178, CAI).

***Set 1 respondents are less confident in their total income amount than are respondents in Set 2. However, Set 2 respondents' reported income amounts are not necessarily correct.***

While respondents did seem to generally understand the timeframe they were being asked about, Set 1 respondents expressed lower confidence in their numerical response to the total income question than did Set 2 respondents. Of the 19 respondents in Set 1 who commented on their perceived accuracy of the income dollar amount, only 10 felt reasonably confident in their answer. (Three of those 10 who felt confident actually provided the wrong answer to their income by failing to report part of their income earned, but felt confident in what they had reported.) The other nine noted that their answers may have been off by as much as 10 percent, or indicated that their answer is only 80 or 85 percent accurate. Some examples of responses to probes about accuracy are provided below.

- One respondent said that the total was not accurate, but a “ballpark.” (116, CAI)
- One respondent said that the total was rounded up. He remembered that it was in the \$9,000’s on his tax return, but couldn’t remember the exact number and rounded up to \$10,000. (131, Paper)
- Another respondent stated his answer is “a rounded figure, but it’s pretty close.” When probed how accurate this figure is, R stated it is “within 10%”. (132, Paper)
- One respondent stated, “I don’t think very accurate.” He had stated earlier during probing that his answer of \$100,000 could be \$10k high or low. (138, CAI)

In contrast, 19 out of 23 respondents in Set 2 who commented on the accuracy of their responses believed their total income amount was accurate. Respondents did acknowledge that their answers were not exactly correct, but the magnitude of error was more often on the order of being off by hundreds of dollars rather than thousands. Interestingly, eight of the 19 respondents who thought they were accurate actually provided an inaccurate answer to the income question, having failed to report a particular type of income in the total amount, such as interest, bonuses, child support, or rental income. Further discussion of this is presented in analysis #2 below.

***Respondents across both Sets would use a range of strategies if answering the income items at home. Paper respondents are more likely to access documentation, whereas CAI respondents are more likely to use recall strategies.***

As a gauge of their accuracy in reporting in a lab-based environment, 22 respondents in each Set were asked how they might respond if they were answering the questionnaire at home.

As shown in Table 4-3, the most common strategy mentioned by respondents would be to look up the information on paystubs, bank statements, tax statements, or financial records on a computer. Eight out of 22 respondents in Set 1 and 11 out of 22 respondents in Set 2 mentioned one of these look-up strategies. Paper respondents were more likely to say they would use this strategy (n=15) than CAI respondents (n=4).

**Table 4-3. Strategies for determining total income if responding to ACS at home**

<b>Strategy</b>	<b>Set 1</b>	<b>Set 2</b>	<b>CAI</b>	<b>Paper</b>
<b>Look up the number</b>	<b>8</b>	<b>11</b>	<b>4</b>	<b>15</b>
<b>Same strategy as in interview/know the number already</b>	<b>7</b>	<b>9</b>	<b>10</b>	<b>6</b>
<b>Calculator</b>	<b>4</b>	<b>1</b>	<b>4</b>	<b>1</b>
<b>Ask someone else</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>1</b>
<b>Guesstimate</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>

The next most common strategy in both Sets would be to use the same strategy used in the interview, namely “calculating in my head,” or because “I just know,” meaning that no additional strategies would be employed. This was mentioned by seven respondents in Set 1 and nine respondents in Set 2. This strategy tended to be mentioned more often by CAI respondents (n=10) than Paper respondents (n=6).

Four respondents in Set 1 and one respondent in Set 2 said they would likely “pull out a calculator” to do the math to more accurately add up their different sources of income.

Two respondents in Set 1 said they would ask someone else (e.g., their “husband” or their “accountant”) to help them come up with the answer.

Finally, one CAI respondent indicated he likely would not put the work into coming up with an exact response if on the phone with an interviewer, and would probably provide an estimate or a range of response.

## Research objective #2: Including all income amounts in total.

### ***Nearly half misreported total income, based on responses to income types.***

A key question in the assessment of this burden reduction approach is whether respondents include all income sources in their total income response. Prior to being asked for their total income, respondents are asked to report all of the different types of income they earned in the prior calendar year (and unlike the current ACS, are not asked to provide dollar amounts for each type of income).

Fully 22 out of 48 respondents across Set 1 and Set 2 provided an income response that was determined to be incorrect because respondents did one or more of the following: failed to include one or more sources of income (n=18), under-reported the amount based on a misinterpretation of the question (n=3), or over-estimated an amount for a type of income that they had reported in the prior set of questions (n=4). These errors were found in both Set 1 (n=11) and Set 2 interviews (n=11) and in both Paper (n=10) and CAI (n=12) modes of interviewing. Each of these types of errors is explored in depth below.

### ***More than one-third of respondents excluded one or more types of income from their total income response.***

There were three main reasons why the 18 respondents failed to include particular income types when reporting their overall income figure, including overlooking categories that only produced small amounts of income (n=7), neglecting to report under-the-table income (n=5), and misinterpreting what the total income question was asking for (n=9). Some respondents provided more than one of these reasons, and a few additional did not provide a reason for excluding an income amount.

#### **1. Overlooking categories that only produced small amounts of income**

The most common error was a failure to include categories that only produced small amounts of income such as interest and dividend amounts in the total income figure (n=7). Most respondents who answered yes to having interest income indicated that this amount was too small to have a significant impact on the total income amount they reported. Nevertheless, their responses to probes indicated they were not thinking about this type of income when they were asked for total income.

- One respondent who did not include this in his income amount said that he did have some money in the bank and thus accrued some “small, miniscule amount of interest” but didn’t feel like that constituted enough to count as income. (130, CAI)

- Another respondent explained that she received such a small amount in her checking and savings that she did not think about it. (106, CAI)
- Likewise, another respondent noted his dividends were only about \$50 and would not have made much of a difference in the total. He explained that on his tax forms, “If I made \$175,000 and the dividends were \$50, it wouldn’t make a difference if I reported that.” (142, CAI)
- A fourth respondent acknowledged that her total income amount excluded the few hundred she earned from various part time jobs. She later said, “I’m not going to sit here and tell the IRS... I mean, I’ll tell them, but I’m not really adding that as money. That’s not money to me.” (184, CAI)

## 2. Neglecting to report under-the-table income

Five respondents failed to report self-employment income, including side jobs that paid them cash.

- For example, when one respondent was asked how he decided not to include the money he makes delivering letters for a bank, he stated his work as a musician is “on the books” but the money he makes working for the bank is not. He also stated the amount of money he receives from the bank “is really low.” He later indicated that he would have reported this amount if the survey had asked him to report income for each source. (191, Paper)
- Another respondent noted she did some under the table work taking care of a woman with Alzheimer’s, starting in late 2015 and continuing through August 2016. R said she would not report this income on the questionnaire because “it was under the table.” (104, Paper)

## 3. Misinterpreting that the question was only referring to employment income

Of the nine respondents who misinterpreted what the total income question was referring to, eight said that they thought the total income question was only asking about income from a job, rather than from all sources of income. This primarily happened with CAI respondents (n=6).

- One of these respondents failed to report Social Security income because he thought that the total income was only asking about income related to employment. He explained that he didn’t realize he was supposed to include it in his total, because he thought it would have been covered in the yes/no question that asked specifically about social security. He thought the total income question was only asking about his job income and that the questions about income types were separate questions not related to the question asking for total income. (153, CAI)
- Another respondent was answering based on the amount of her paychecks. When asked why she did not include unemployment in her total, she responded that unemployment is not income that you receive from working. (110, CAI)

- Another respondent who did not include her bonus in her total income amount explained that her “natural reaction” to this question is to only think of her salary and not factor in the bonus. She does not think of the bonus as job income, rather, she thinks of the bonus as “extra money,” and the salary is what she makes at her job. (106, CAI)

The ninth respondent generally misinterpreted what was meant by income, and as a result, failed to include his rental income in the total amount.

- The respondent explained he loses about \$80 per month, which is the difference between the mortgage and the amount he’s able to collect from the renters. R stated “That’s what I’m assuming you mean by income, are you making a profit, are you in the black ink instead of the red ink.” (189, Paper)

***Three respondents under-reported their wages and salary, mainly due to misinterpretation that the question was asking about net, rather than gross salary.***

All three respondents who under-reported their income within a particular income type under-reported their wages and salary, because they thought the question was asking for their net salary rather than gross. Indeed, both the CAI and Paper instruments instruct those with self-employment income to “include net income after operating expenses,” which may have led some to think that all income should be reported as net income. Further, the last instruction on the Paper instrument also mentions the term “net income.” (If net income was a loss, enter the amount and mark (X) the “Loss” box next to the dollar amount.)

- One CAI respondent thought that this was asking about his net salary. He thought about his paystub and what he sees on it. He knew it was around \$50,000. He said it is most likely more because it is “before taxes.” He thought it may be about \$5K more than this. (107, CAI)
- A respondent who works two hourly part-time jobs reported her net salary for both jobs as her total income amount. She commented that it would be more difficult to know before taxes and she explains that this would be a larger figure than after taxes and since it is not a set salary she does not know for sure. (116, CAI)
- A third respondent who worked at a several jobs, as well as being an independent contractor in 2015, seems to have reported her net income after expenses. She explained, “after all my deductions, I was shocked myself. I was like, what, that’s it?” She stated she had not realized how many “expenses” she had. She states she remembers this number, because she was surprised when she calculated it in doing her taxes. (121, Paper)



***Four respondents over-reported their income, each for different reasons.***

Four respondents over-reported their income, each for a different reason.

- One respondent shared that 50% of the income amount he reported at Q48 was actually “in-kind” income. His salary package includes many benefits (such as healthcare), which add up to his total income of \$110k, but he only actually receives about half of that in wages. This same respondent realized during probing that he had included the disability payment he received for his son both in his answers for P1 (himself) and for P3 (his son). So this payment was double-reported. This confusion arose because the respondent actually receives the money, but the money was for his son (so that the respondent could provide for his son). (120, CAI)
- A second respondent also double counted her son’s salary of \$300 (which she also reported as P2’s total income). (177, CAI)
- The third respondent over-reported her rental income, failing to deduct \$6,000 of expenses. She indicated she had not added up all of her expenses from the rental income yet, so she reported the gross income from the rental, not the net rental. She looked at the instructions and commented that it did not indicate whether the rental income reported in Q48 should be net or gross. (199, Paper)
- The fourth respondent said he included food stamps in his total income amount, but did not provide an explanation for why he decided to include that, or how he came up with the figure. (130, CAI)

***Many are thinking about taxable income when answering income questions, sometimes resulting in errors.***

Beyond the errors made by respondents in reporting total income, nearly half of respondents (22 out of 48) mentioned something about W2s, 1099s, or tax forms when describing how they came up with their total income, suggesting that non-taxable income sources may have been overlooked in the reporting of income. In fact, 10 out of the 22 are the same respondents who were mentioned earlier as having missed a source of income in their total income response.

- One respondent in Set 2 who had already completed her 2016 taxes at the time of the interview noted that she based her answer on her tax form. However, she acknowledged that child support was NOT included in the income amount because she does not need to claim it on her taxes. She indicated this amount was \$12,000 that was not included in her total answer of \$24,000. She also said that the word “loss” made her think about taxable income, and assumed that because the word “loss” was there, they were referring to taxable income only. (197, Paper)

- A Set 1 respondent provided his total income amount by remembering that it was in the \$9,000's on his tax return, but he couldn't remember the exact number and rounded up to \$10,000. (131, Paper)

**Research objectives #3 and #5: Being able to report specific amount for the income types, and respondent burden.**

***Many would not be able to provide amounts for specific income types; others say at best they could estimate or would need to reference paperwork.***

Twenty-nine of the 48 respondents were probed to understand whether they would have been able to provide specific amounts for each income type, and the results were mixed. Twelve said that they could provide the specific amounts, with many citing that they would need to reference documents such as paystubs or IRS statements to be able to accurately do so. An additional eight respondents said that, at best, they could provide estimates of each of the amounts. And nine respondents said outright that they would not be able to provide individual amounts. If burden reduction is the goal, this is a strong indication that asking for individual income types adds burden – either by having to access paperwork, needing to produce valid estimates, or thinking and realizing these responses cannot be obtained. Although note respondents will have to go through the mental math anyhow to get to the total amount.

***Respondents, especially those with more than one source of income and those responding by CAI, express a preference to provide income data in a total amount rather than individual amounts for each type of income. Results suggest a tradeoff between burden and accuracy.***

Respondents were asked if they would have preferred to provide income amounts for the individual income types, or if they preferred providing the data in one lump sum. Forty-one of the 48 respondents provided a response to this probe. As shown in Table 4-4, more than twice as many said they would prefer to provide it all in one lump sum (n=25) than in separate individual amounts (n=12), and four had no preference for the approach. Those with only one source of income were evenly split between lump sum (n=3) and separate amounts (n=3), while those with two or more sources of income were more than twice as likely to prefer the lump sum approach (n=22 vs. n=9). Paper respondents were roughly split between preferring the lump sum approach (n=10) and the

individual approach (n=9). CAI respondents, however, had a strong preference for the lump sum approach (n=15) over the individual approach (n=3).

**Table 4-4. Preference for providing income data**

	<b>Prefer lump sum</b>	<b>Prefer individual amounts</b>
<b>Total</b>	<b>25</b>	<b>12</b>
<b>Number of sources of income:</b>		
<b>One source of income</b>	<b>3</b>	<b>3</b>
<b>More than one source of income</b>	<b>22</b>	<b>9</b>
<b>Mode:</b>		
<b>Paper</b>	<b>10</b>	<b>9</b>
<b>CAI</b>	<b>15</b>	<b>3</b>

Those who said they would prefer to provide income as just a total amount explained several reasons for their preference as shown in Tables 4-5a and 4-5b. Most reasons centered around being easier and less burdensome to provide the total amount rather than the individual amounts.

**Table 4-5a. Reasons for preferring to report a total income amount**

<b>Reason for preferring a total amount</b>	<b>Count</b>
<b>Easier</b>	<b>18</b>
<b>Less burdensome</b>	<b>9</b>
<b>Don't know individual amounts/less certainty about individual sources</b>	<b>4</b>
<b>Less math/hard to answer about tips or small frequent amounts of income</b>	<b>3</b>
<b>Can refer to taxes for total amount</b>	<b>1</b>
<b>Easier, but might be less accurate</b>	<b>1</b>
<b>Reluctance to provide details on specific types of income</b>	<b>2</b>
<b>Only have one source of income, so total would be same as individual amounts</b>	<b>3</b>
<b>No explanation</b>	<b>3</b>

In contrast, nearly all who said they would prefer to provide the individual amounts cited some aspect of improved accuracy as the reason for their preference.

**Table 4-5b. Reasons for preferring to report individual income amounts**

Reason for preferring individual income amounts	Count
More accurate	11
Generally more accurate	5
Eliminates confusion over what types of income to include in total	3
Easier to determine amounts for multiple jobs	2
Allows for more detail	1
Already need to do the math to get to the total amount/no added burden	1

If the goal is to reduce burden, then this is a clear sign that the total approach would result in less burden, perhaps at the cost of accuracy, but as stated earlier, responses to individual income amounts are not necessarily accurate.

#### Research objective #4: Instructions.

##### ***Many Paper respondents did not notice the instructions for total income.***

Paper respondents were asked if they noticed the instructions and paid attention to them. Twenty-three of the 24 Paper respondents commented, with 14 saying they did notice the instructions, and nine saying they did not. Among the nine who did not notice the instructions, five of them made an error in reporting their total income (all were Paper respondents in Set 2).

- One respondent who failed to report \$12,000 in child support income said she did not notice the instruction. She just saw “total income from all sources.” (197, Paper)
- Another respondent who failed to report the income he earns in cash assumed, “No, I kind of knew what it was asking here. Total amount for 2016.” (191, Paper)

Among the 12 respondents who were asked to describe what the instructions were telling them to do, 10 respondents seemed to understand the instructions correctly, while two respondents seemed to misunderstand.

- One respondent thought the instructions were telling him to provide “what I ended up with after expenses.” R was thinking “tax-wise,” the number you report after expenses. R was taking out mileage, equipment, and some meals. (131, Paper)

- The other respondent read the instructions at the time of the probe and misinterpreted it as asking him to add up “a and h” rather than “a through h”. He also thought the terminology about joint income was confusing. He thought it was providing “a false premise that you are including my wife.” He thought it meant “her salary and my salary together.” He further explained that their rental income goes straight to paying the mortgage. This income did not get reported anywhere on the questionnaire because it is “house income” and does not belong to either one of them. R thought of it as rental income but he did not think of it as part of their salaries. The respondent concluded by saying he thought the question wanted to know only about work income and not the rental income. (201, Paper)

Finally, one respondent who had a loss from net rental income noted that the instruction might need to be changed. She initially missed the instruction about rental income. She suggested that the instruction might need to say “If yes for Q47b OR 47c, include NET income after expenses.” (199, Paper)

***Respondents tend to know the types of income other household members earn, but have difficulty reporting their total income.***

Forty-seven respondents provided income data for a second person (P2) in their household, and 14 respondents also provided income responses for a third person (P3) in their household (one respondent ended up not having any other adults ages 15+ in her household, even though she had indicated 3 adults at the time of recruitment). Of the 47 respondents, only one was unable to provide sources of income for P2, explaining that the person was only staying with them temporarily. All others, for both P2 and P3, were able to provide information about the income sources in question 47.

In contrast, respondents had a more difficult time providing the total income amount for others in their household, particularly when the relationship was not a spouse. For P2, 14 out of 47 indicated they did not know the person’s income amount and did not venture to guess. Nine additional respondents indicated their response was, at best, an estimate. Likewise for P3, nine out of the 14 respondents could not provide a total income amount, and one additional respondent could only provide an estimate.

**Joint income did not seem to pose much of a problem for respondents, though again, some reveal that they did not think joint interest/dividends were being asked about in the total income question.**

Nine respondents reported having some type of joint income, primarily through interest, dividends, or rental income. For most, it was clear that they should report the income for one person or the other, but not both. At the same time, analysis revealed that some respondents with joint income did not report the income for either person, since they thought the total income amount was only asking about employment income, and not the joint income earned through investments.

- One respondent said she would consider the investment money she and her spouse earn as joint income, but she did not report it because she was not asked for it specifically. The total income she gave for both people was income only. She explained, “I don’t recall it being worded that way. I thought it was just about wages and tips [...] I don’t remember it saying investments or that kind of thing.” (116, CAI)
- Another respondent commented that there was no question asking how much was received in interest or dividends, only a yes/no question asking if he received interest or dividends. (148, Paper)
- A third respondent said he does receive joint interest on their savings account, but he did not interpret the total income question as asking about anything other than job income. (153, CAI)

#### 4.2.4 Other Findings of Interest

While there were not explicit research questions for the individual sources of income in this round of testing, respondents raised a number of additional concerns when answering some of the income items. These issues suggest that additional testing may be needed on the sources of income series to ensure they are being consistently understood by a range of respondents.

***Wording of self-employment income and loss items lead to some confusion.***

Item	Mode	Wording
47c	CAI	Did you receive any self-employment income in 2016? Consider income from own businesses (farm or non-farm) including proprietorships and partnerships.
47d	CAI	Was this income a loss?
47b	Paper	In 2016, did this person receive any self-employment income from own nonfarm businesses or farm businesses, including proprietorships and partnerships? <i>If the net income was a loss, mark (X) the “Loss” box.</i>

Out of 13 respondents who answered yes to the self-employment question, five respondents made some type of error in their response. This includes two respondents who double reported their

income sources as both wages/salary and self-employment income; one respondent who answered yes because of occasional income types that the Census Bureau may not be interested in; and two respondents who failed to report self-employment income because they were confused by the language about farms.

- One CAI respondent reported the same income source for 47a (wages and salary), 47b (tips, bonus and commissions), and 47c (self-employment income). His income comes from commissions from real estate sales, so he acknowledged in probing that the income probably best fit in 47b. (138, CAI)
- A Paper respondent reported the same income for 47a (wages and salary) and 47b (self-employment income). He said he felt like they were asking the same thing, “just in different terminology.” He explained that he is self-employed and received wages and income from his self-employment. He stated, “They’re sorta the same question, in my opinion.” (191, Paper)
- One Paper respondent said “Yes” to self-employment income when he was thinking about sporadic receipt of income from things like “mystery shopping” and “hobbies.” Census may not be interested in these types of occasional income. (112, Paper)
- A Paper respondent was confused because she works a second job in childcare at her church. She describes it as being an “independent contractor” but gets paid biweekly by the church. She thought the income should fall under 47b, but said that she wasn’t sure because the language about farms made her confused, so she answered “No.” (185, Paper)
- A Paper respondent erroneously answered “No” to the self-employment item, in spite of indicating that she just became self-employed that year as a real estate agent. She explained she said no because she has “no clue” if the question is asking about a farm literally or figuratively because in her business of real estate, they use the term “farm an area.” R stated she was not sure what the question meant so it did not make sense to say yes. (186, Paper)

One additional respondent erroneously answered no to the self-employment question even though he clearly described being self-employed. However, since he only paid himself every few months, he thought perhaps he should not mention it.

- The respondent said he felt that the survey is geared towards someone who has a “regular job” and that gets paid a “weekly check.” He said as someone who is self-employed, he gets paid irregularly, say once every couple months. (141, CAI)

Of the 13 respondents who did report being self-employed, 11 were asked for their interpretation of the term “loss” with respect to self-employment income. Respondents were split in their understanding of the term, with five correctly interpreting its meaning, and six partially or

completely misunderstanding. Those who misunderstood were both Paper and CAI respondents in both Sets.

- A CAI respondent who earned self-employment income from babysitting said “I don’t know what that means.” She thought it might mean, “Did I lose that money? Did I not really get paid for it? Like, maybe I got paid, but had to give it back, or something like that.” (128, CAI)
- Another CAI respondent wondered if it meant, “Was it a loss as far as there was some money out there that was owed to me?” (140, CAI)
- A third CAI respondent similarly wondered if it meant, “If I didn’t get paid one of the weeks.” (156, CAI)
- A Paper respondent stated, “I don’t know how somebody would lose their income.” (191, Paper)
- The respondent who partially understood the concept interpreted loss to mean, “if I make a certain amount and I spend more than what I made.” When probed, she clarified that “spend more” means if her expenses for a job are higher than what she makes. (121, Paper)

***Interest from checking and savings accounts is often overlooked; many do not consider such nominal amounts to be income.***

Item	Mode	Wording
47e	CAI	Did you receive any interest or dividends? Consider even small amounts credited to an account.
47c	Paper	In 2016, did this person receive any interest, dividends, net rental income, royalty income, or income from estates and trusts? Consider even small amounts credited to an account. If the net income was a loss, mark (X) the “Loss” box.

In the CAI mode, respondents were asked separately about interest and dividends, net rental income, and royalty income or income from estates and trusts. In the Paper mode, all of these sources of income were asked in the same item.

Interest income from savings and checking accounts was overlooked by 11 out of 24 respondents who answered this probe. Many indicated that the amount they earn in interest is so minimal that they simply do not consider it to be income.

- One respondent said he thought of this when answering, but did not include it in his total because he earns so little with the current low interest rates. (148, Paper)



- Another respondent said she decided not to include her own interest because it wasn't enough to count as "income" in her mind. While the respondent read the part of the question that said to include even small amounts, she said hers is so small she'd almost consider it a loss because "it doesn't do anything for me." (185, Paper)
- A CAI respondent noted that he did have some money in the bank and thus accrued some "small, miniscule amount of interest" but didn't feel like that constituted a "yes" for this question. (130, CAI)

One Paper respondent commented that she answered the question wrong for her husband because she was only focusing on one type of income rather than all the types mentioned in the question.

- The respondent answered no, but during probing, she realized that her husband receives income from dividends and that she should have said yes. She said the rental income "threw me off" because he no longer owns any rentals. "He gets something from stocks and bonds." The part about rentals distracted her from the beginning of the list. She says she thinks investment income should be a separate question. (119, Paper)

***Asking about public assistance and welfare payments often leads respondents to think about non-monetary benefits rather than cash assistance.***

Item	Mode	Wording
47k	CAI	Did you receive any public assistance or public welfare payments from the state or local welfare office in 2016?
47f	Paper	In 2016, did this person receive any public assistance or welfare payments from the state or local welfare office?

Out of the seven respondents who said yes to having public assistance and welfare payments, six misunderstood the question to be including non-monetary benefits, such as food stamps, Medicare prescription coverage, and Medicaid. Only one respondent reported receiving welfare payments over a two-week period in the prior year (140, CAI).

## 4.2.5 Recommendations

**Use a prior calendar year reference period, rather than the past 12 months from the date of the interview.**

- Only two respondents in Set 1 and one respondent in Set 2 misinterpreted the timeframe.
- The longer recall period in Set 1 potentially led to a wider margin of error in the dollar amount, but even with a short recall period in Set 2, respondents still made errors in reporting their total income.

**To reduce perceived burden, only ask for the total income amount, rather than income for each source.**

- Most respondents indicated that it would be “easier” for them to provide the total income amount, and preferred this approach to providing individual income amounts. Some respondents thought their total income amounts would be less accurate with this approach. The previously suggested item revisions may help improve accuracy, particularly for those with more than one source of income, by making it clearer that the total amount should reflect all sources of income.

**Revise income series instructions to reinforce intention that respondents should report all sources of income.**

- Out of 48 respondents, 18 failed to include all sources of income when reporting their total income. There were three main reasons for the misreporting.
  - Half of the 18 respondents thought question 48 was only asking about job related income.
  - Seven of the 18 left out small sources of income, like interest and dividends.
  - Five out of the 18 failed to report under-the-table income.
- Revise CAI instructions to more clearly remind respondents to add up all of the sources they just mentioned.
  - Consider tailored text for each income type to be consistent with instructions provided in the Paper version.
  - Consider adding to this instruction a reminder that income received in cash should be included in the total amount reported.

- Some instructions on the Paper questionnaire can also be revised to help respondents include all sources of income in their answers at Q48.
  - Move the language to “include all sources” from the instruction to the question stem, to increase the chances respondents will notice it.
  - In the instructions at Q47, mention the types of income that should be considered (for example, income received on a regular basis, even if it is paid in cash). This may be more important than the joint income instruction if space is at a premium.

**Clarify in instructions whether the total income amount should reflect net or gross income.**

- Three respondents underestimated their income amount because they thought the question was asking about their after-tax income. Indeed, instructions in both CAI and Paper instruments refer to “net” income for self-employment and rental income, which could easily have confused respondents to be thinking that all income reported should be net.
- One respondent with net rental income noted that the instructions for Q48 did not indicate whether the rental income reported should be net or gross. As a result, she over-reported her rental income.
- Some small changes to both CAI and Paper instructions may help resolve respondent confusion without changing the meaning or intent of those instructions.
  - Consider removing the word “net” from the CAI instruction if Q47c=Yes (self-employment income).
  - Remove the word “net” from the two places it appears in the Paper instructions.
  - There should be an instruction on Paper to include income after expenses for rental income in order to ensure that rental expenses are deducted.

**There are a number of inconsistent instructions between the CAI and Paper modes, and they are listed below. Many would be resolved with implementation of other recommendations for the income series; we suggest resolving the others as well.**

- Wages and salary:
  - CAI: Include amount from all jobs before taxes and other deductions.
  - Paper: Include amount from all jobs before deductions for taxes, bonds, dues, or other items.

- Self-employment income:
  - CAI: For self-employment income, include net income after operating expenses. Report earnings as a tenant farmer or sharecropper.
  - Paper: Include NET income after business expenses.
- Loss:
  - CAI: (Not addressed at question 48)
  - Paper: If “Loss” for 47b or 47c, subtract amount from total income... If net income was a loss, enter the amount and mark (X) the “Loss” box next to the dollar amount.
- Joint income:
  - CAI: (Not addressed)
  - Paper: For income received jointly, include the appropriate share for this person in the total.

#### Q48 revisions

##### **CAI**

IF “YES” TO 47A OR 47B, READ:

What was your **TOTAL** income in 2016 **from all sources**? Include amount from all jobs **before** taxes and other deductions.

IF “YES” TO 47C, READ:

What was your **TOTAL** **self-employment** income in 2016, **including income received in cash from all sources**?

**For self-employment income, include Report net** income after operating expenses. Report earnings as a tenant farmer or sharecropper.

IF “YES” TO (47A OR 47B) AND 47C, READ:

What was your **TOTAL** income in 2016 from all sources? Include amount from all jobs **before** taxes and other deductions. For self-employment income, include **income received in cash, and report net** income after operating expenses. Report earnings as a tenant farmer or sharecropper.

OTHERWISE, READ:

What was your **TOTAL** income in 2016 from all **of the** sources **you just mentioned**?

## Paper

Including all of the sources marked 'Yes' in Q47a-h, what was this person's total income in 2016 from all sources?

*Include income amounts for questions 47a to 47b that were marked (X) "Yes."*

*If "Yes" for 47a, include amount from all jobs before taxes and other deductions. ~~deductions for taxes, bonds, dues, or other items.~~*

*If "Yes" for 47b, include income received in cash. Report income after operating expenses. Report earnings as a tenant farmer or sharecropper. If the amount was a loss, subtract from total income.*

*If "Yes" for 47c, include rental income after operating expenses. If the amount was a loss, subtract from total income.*

*If "Yes" for 47b or 47c, include NET income after business operating expenses.*

*If "Loss" for 47b or 47c, subtract amount from total income.*

*For income received jointly, include the appropriate share for this person in the total.*

*If net income was a loss, enter the amount and mark (X) the "Loss" box next to the dollar amount.*

While the research objectives for testing the income series were not specifically about item wording, analysis of the interview data revealed that respondents repeatedly interpreted items in ways that significantly affected the income amount they reported. We therefore offer suggestions to consider should there be an opportunity to revise wording of the income types in Q47. We also point out wording inconsistencies between CAI and Paper. Any revisions that are implemented would benefit from further testing.

- Nearly half (22 out of 48) respondents mentioned W2s, 1099s, or something about their tax forms when answering these questions, suggesting that they may have been overlooking non-taxable income when reporting their total income in Q48. In fact, 10 of these 22 respondents missed reporting a source of income. Consider including an instruction in the introduction to the income series that these items refer to both taxable and non-taxable income.
- Five respondents were confused by the self-employment income item and one Paper respondent failed to report this source of income because she was confused by the “farm” language. As well, several respondents were unsure how to report income they received “under the table” or income received sporadically, such as occasional dog walking or being a mystery shopper. Consider adding an instruction that self-employment income refers to income “regularly” received and that self-employment income can be received in cash. Note that the existing language used for this item is inconsistent between CAI and Paper.
- Several respondents had difficulty with the question about net rental income, with one Paper respondent who had a loss initially missing the instruction. Regarding net rental income, because there is some space available on the Paper instrument (after Q48), it may reduce error to separate net rental income into its own item, as it is on CAI.
- Six of seven respondents who said “yes” to receiving public assistance were actually thinking of non-monetary benefits, such as food assistance. To reduce false reporting of public assistance that is a non-monetary benefit, clarify that the item is only referring to cash or payments.
- Respondents with joint income had little difficulty with the Q47 item series. However, because income itself is no longer being reported at Q47, the instruction regarding joint income may not be needed. One option would be to replace it with a simple instruction at Q48 for P2 and others in the household that says “Do not double-count joint income.”

## CAI

The next few questions are about **all sources of** income received in 2016, that is from January 1, 2016 to December 31, 2016, **both taxable and non-taxable** ...

47a. Did you receive any wages or salary?

IF "Yes" TO 47a, READ:

47b. Did you receive any additional tips, bonuses or commissions in 2016?

IF "No" TO 47a, READ:

47b. Did you receive any tips, bonuses or commissions in 2016?

47c. Did you **regularly** receive any self-employment income in 2016, **including work that was paid for in cash**? Consider income from own businesses (farm or non-farm) including proprietorships and partnerships.

47d. Was this income a loss?

47e. IF "OVER 5 YEARS AGO OR NEVER WORKED" TO 38 READ:

The next few questions are about income received in 2016, that is from January 1, 2016 to December 31, 2016...

Did you receive any interest or dividends? Consider even small amounts credited to an account.

OTHERWISE, READ:

Did you receive any interest or dividends in 2016? Consider even small amounts credited to an account.

47f. Did you receive any net rental income in 2016?

47g. Was this income a loss?

47h. Did you receive any royalty income or income from estates and trusts in 2016

47i. Did you receive any Social Security or Railroad Retirement benefits in 2016?

47j. Did you receive any Supplemental Security Income (SSI) payments in 2016?

47k. Did you receive any **cash or payments through public assistance or the state or local welfare office** ~~public welfare payments from the state or local welfare office~~ in 2016?

47l. Did you receive any retirement, survivor, or disability pensions in 2016?  
(Do not include Social Security.)

47m. Did you receive income on a **REGULAR** basis from any other sources **in 2016? such as** **For example, payments from** Department of Veterans Affairs (VA) **payments**, unemployment compensation, child support or alimony. **in 2016**  
(Do not include lump sum payments such as money from an inheritance or sale of a home.)

## Paper

### 47. INCOME RECEIVED IN 2016

Consider all sources of income received from January 1, 2016 to December 31, 2016, both taxable and non-taxable. For income received jointly, if you know the appropriate amount for each person, mark (X) "Yes" for each person. If not, mark (X) "Yes" for only one person and mark (X) "No" for the other person.

- a. In 2016, did this person receive any wages, salary, commissions, bonuses, or tips?
- b. In 2016, did this person regularly receive any self-employment income, including work that was paid for in cash? Consider income from own businesses (farm or non-farm) including proprietorships and partnerships. ~~from own nonfarm businesses or farm businesses, including proprietorships and partnerships?~~ If the net income was a loss, mark (X) the "Loss" box.
- c. In 2016, did this person receive any interest, dividends, net rental income, royalty income, or income from estates and trusts? Consider even small amounts credited to an account. If the net income was a loss, mark (X) the "Loss" box.
- d. In 2016, did this person receive any net rental income? If the net income was a loss, mark (X) the "Loss" box.
- e. In 2016, did this person receive any Social Security or Railroad Retirement benefits?
- f. In 2016, did this person receive any Supplemental Security Income (SSI) payments?
- g. In 2016, did this person receive any cash or payments through public assistance or the state or local welfare office?
- h. In 2016, did this person receive any retirement, survivor, or disability pensions? This does NOT include Social Security.
- i. In 2016, did this person receive income on a regular basis from any other sources? such as For example: payments from the Department of Veterans Affairs (VA) payments, unemployment compensation, child support or alimony. This does NOT include lump sum payments such as money from an inheritance or the sale of a home.



**Appendix A**  
**Respondent Demographics**

## Appendix A Respondent Demographics

Demographics	Totals	Set 1	Set 2
<b>Sex</b>			
Male	20	11	9
Female	28	13	15
Other	0		
<b>Education</b>			
Less than High School	0	0	0
High school or GED	4	3	1
Some college	18	10	8
College	12	5	7
Graduate/Professional Degree	14	6	8
<b>Age</b>			
18-29	11	5	6
30-39	7	3	4
40-49	9	4	5
50-64	14	7	7
65+	7	5	2
<b>Race/Ethnicity</b>			
Hispanic no other race	0	0	0
Hispanic Black (Afro-Latinos)	1	0	1
Hispanic White	1	1	0
Hispanic Other	1	0	1
White	22	12	10
Black	17	8	9
Asian	4	2	2
Other	2	1	1
Multiracial	0	0	0
<b>TOTAL</b>	<b>48</b>	<b>24</b>	<b>24</b>