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MEMORANDUM FOR ACS Research and Evaluation Advisory Group

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Subject: "Why We Ask" Mail Package Insert Test

Attached is the American Community Survey (ACS) Research and Evaluation report entitled, *"Why We Ask" Mail Package Insert Test*. This report provides results of an experiment that the U.S. Census Bureau conducted to assess the impact on response and cost of proposed design changes to the ACS mail materials, using the November 2015 ACS panel.

Please contact Elizabeth Poehler at 301-763-9305 or Sarah Heimel at (202) 384-8548 if you have questions about this report.

Attachment

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June 16, 2016

"Why We Ask" Mail Package Insert Test

FINAL REPORT

United States™ Census Bureau

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Executive Summary

The American Community Survey (ACS) data provide a wealth of information. However, the information are only as good as the data we collect from sampled housing units. The current design of the ACS, with an annual sample of roughly 3.5 million housing unit addresses, allows the Census Bureau to collect and update demographic, social, economic, and housing data for the United States every year.

While the total self-response rate (mail and Internet combined) for the ACS is typically over 60 percent (Baumgardner, 2014), and most housing unit addresses that are sampled for the ACS ultimately respond to the survey[1] (U.S. Census Bureau, 2016), that does not mean that respondents answered every question that was asked. Respondents do not answer questions if they do not know the answer, do not have the information available to them to answer the question, do not understand the question, or are unwilling to answer the question, perhaps because they think the question is too intrusive or sensitive (Raglin, 2014, American Community Survey Office, 2015). Additionally, any of these reasons could lead someone to not respond at all to the survey.

While we may not be able to eliminate questions that are sensitive to respondents, we can inform respondents about why this information is needed. Having a better understanding of why we ask the questions and how the data from their responses are used to benefit their community has shown to be an effective means of addressing respondent concerns with the sensitive nature of some questions (American Community Survey Office, 2015). In the past, we provided respondents with an Instruction Guide that offered help on how to answer questions in specific situations and also asked respondents to estimate or do their best to answer a question they were not sure about. Based on iterative research, a new insert was developed that combines the 'Why do we ask these questions?' section of the Instruction Guide with information from other materials; this was called the 'Why We Ask' insert.

At the time of this test, the ACS was still including the Instruction Guide as part of its production mailing materials. Due to results of an experiment done in 2015 (Clark, Roberts, Tancreto, and Raglin, 2015), the Instruction Guide would be omitted from the ACS mailing materials at a future point. Since the timing of that removal was not established at the time of this test, we wanted to test the new 'Why We Ask' insert both with and without the Instruction Guide to evaluate any interactions the new insert would have when mailed with the complete package.

Respondents who choose to complete the survey via Internet have access to help screens that provide information about why we ask each question, via help links on the screen. This

[1] In 2014, 96.7 percent of all sampled housing units eventually responded to the ACS.

information, however, is currently not available to respondents using the paper questionnaire. To provide respondents, especially those who choose to answer the ACS using the paper questionnaire, with more information about why we ask the questions in the ACS and how the data are used to benefit their communities, we tested the inclusion of the 'Why We Ask' insert in the mail package that contains the paper questionnaire.

Thus, this report assessed the impact of two experimental treatments (including the "Why We Ask" insert with the Instruction Guide (Treatment 1) or without the Instruction Guide (Treatment 2) in the paper questionnaire package) as compared to a control (including the Instruction Guide but not including the "Why We Ask" insert). We assessed unit self-response, form completeness (the number of questions on the form that were answered among those that should have been answered), and item nonresponse. The relative cost impact of the experimental treatments was also assessed.

No significant differences were seen in the self-response return rates between any of the treatments after sending the paper questionnaire package. Both Control and Treatment 1 cases had an 18.1 percent (0.3) self-response return rate in the period after the paper questionnaire package was sent; Treatment 2 cases had a 19.0 (0.3) percent self-response return rate. There is no evidence that the modified mail packages had an impact on unit self-response.

No significant differences were seen in the form completeness metrics between any of the treatments. When comparing item nonresponse rates, the only significant difference found was for the person-level question of Occupation when comparing Control cases to Treatment 1 cases. Occupation was left blank 9.5 percent of the time on person records in Treatment 1, compared with 7.7 percent on person records in the Control.

The paper questionnaire package used in Treatment 1 would cost more money to implement than the current package (the control), due to the additional "Why We Ask" insert. We project that Treatment 1 would result in an additional cost of $97,643 or 0.04 percent of the FY2016 ACS budget of $232.6M. The addition of the "Why We Ask" insert to Treatment 2 would add some cost, but the removal of the Instruction Guide has a larger impact, resulting in a less expensive package compared to the control. Based on the cost of printing and postage, we project that Treatment 2 would result in a total cost savings of $825,109 or around 0.35 percent of the FY2016 ACS budget.

1. Introduction

The American Community Survey (ACS) data provide a wealth of information. Government officials rely on the data to make informed decisions on matters of public interest such as access to emergency services, public transportation, education, medical needs, and much more. Moreover, businesses in the private sector use the data to determine business risks and opportunities. However, the information are only as good as the data we collect from sampled housing units.

The current design of the ACS, with a sample of roughly 3.5 million housing unit addresses, allows the Census Bureau to collect and update demographic, social, economic, and housing data for the United States every year. These data are essentially the same as the "long-form" data that the Census Bureau traditionally collected once a decade from a sample of housing units as part of the decennial census and ended with the 2000 Census. Response to the ACS is mandatory because it is part of the decennial census program.

While the total self-response rate (mail and Internet combined) for the ACS is typically over 60 percent (Baumgardner, 2014), and most housing unit addresses that are sampled for the ACS ultimately respond to the survey[2] (U.S. Census Bureau, 2016), that does not mean that respondents answered every question that was asked. Respondents do not answer questions if they do not know the answer, do not have the information available to them to answer the question, do not understand the question, or are unwilling to answer the question, perhaps because they think the question is too intrusive or sensitive (Raglin, 2014, American Community Survey Office, 2015). Additionally, any of these reasons could lead someone to not respond at all to the survey.

Low rates of item response can lead to bias in the data, so it is important to collect as much data from the respondent as we can. The Census Bureau conducts extensive testing of questions before fielding them to minimize situations where a respondent does not understand a question being asked. We also provide respondents with guidance about how to answer questions in specific situations and ask respondents to estimate or do their best to answer a question they are not sure about. Some of the questions asked in the ACS are seen as sensitive by some respondents. The ACS program makes sure that every question being asked on the questionnaire is necessary by law.[3]

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[2] In 2014, 96.7 percent of all sampled housing units eventually responded to the ACS.

[3] An in-depth review of the justification for asking each ACS question was most recently conducted in 2014. See Chappell and Obenski, 2014, for more discussion.

While we may not be able to eliminate questions that are sensitive to respondents, we can inform respondents about why this information is needed. Respondents sometimes ask why the Census Bureau needs to ask the specific questions on the ACS questionnaire. Having a better understanding of why we ask the questions and how the data from their responses are used to benefit their community has shown to be an effective means of addressing respondent concerns with the sensitive nature of some questions (American Community Survey Office, 2015).

During data collection operations that involve a Census Bureau interviewer, the interviewer can provide information to address respondent concerns about why we ask certain questions and how the data are used. However, when responding to the survey by Internet or by mail, the respondent has fewer tools available to obtain information about why we ask the survey questions (American Community Survey Office, 2015). In the Internet instrument, we provide help text about how to answer some of the survey questions as well as brief descriptions of why we ask them. Respondents who answer using a paper form are provided limited information about why we ask certain questions in the Instruction Guide (see Attachment B). Additional information about the uses of the data is available on the Census Bureau's website to respondents who are willing to search for it (U.S. Census Bureau, 2014).

In 2014, the Census Bureau collaborated with Reingold, Inc. to conduct a comprehensive assessment of the ACS mail materials aimed at improving the way we communicate the importance and benefits of the ACS, while updating the look and feel of the materials. This research included several iterative rounds of qualitative and quantitative testing, during which the Instruction Guide was found to be "unhelpful, and contributed to a sense of 'clutter' in the survey mailing (Reingold, 2014)." This led to the recommendation of removing it from the paper questionnaire package and replacing it with a new insert that combines the "useful 'Why do we ask these questions?' section of the guide" with information from other materials (Reingold, 2014). The removal of the Instruction Guide was initially tested in the March 2015 Replacement Mail Questionnaire Package Test (Clark, Roberts, Tancreto, and Raglin, 2015); results led to a decision to remove the Instriction Guide from the paper questionnaire package beginning in the spring of 2016.

To provide respondents, especially those who choose to answer the ACS using the paper questionnaire, with more information about why we ask the questions in the ACS, we tested the inclusion of an insert in the mail package that accompanies the paper questionnaire. We developed an additional mail piece (called the "Why We Ask" insert in this document; see Attachment A) that was included in this package to draw the respondent's attention to information about why we ask some of the survey questions that frequently are of interest to respondents, and examples of how the data are used to benefit their communities. Additional future testing is planned to provide more information to Internet respondents, but that research is outside of the scope of this test.

2. Methodology

This report addresses the following research questions to assess the impact of the experimental treatments (including the "Why We Ask" inserts with or without the Instruction Guide in the paper questionnaire package). See Section 2.4 for the details of the analysis planned for each research question including the definitions and formulas for key metrics:

1. What was the impact of the experimental treatments on unit self-response?
2. What was the impact of the experimental treatments on form completeness, item nonresponse, and response distributions?
3. What was the relative cost impact of the experimental treatments?

2.1. Experimental Design

This study included a control and two experimental treatment groups, consisting of 24,000 addresses each. The control treatment mirrored production with one modification (discussed below). The first treatment (Treatment 1) included the "Why We Ask" insert in the paper questionnaire package, retaining the Instruction Guide. The second treatment (Treatment 2) included the "Why We Ask" insert but also removed the Instruction Guide. Due to limitations of the equipment used to insert materials into the questionnaire package envelopes at the National Processing Center, only six mail pieces can be included in a mail package. The production paper questionnaire package already includes six items: Introduction Letter, Paper Questionnaire, Return Envelope, Internet Instruction Card, Frequently Asked Questions (FAQ) Brochure, and Instruction Guide. In order to include the "Why We Ask" insert, one of the existing inserts had to be removed from the mailing.

Preliminary results from a test on the removal of the Internet instruction card indicated that it could be removed from the package, since the card is included in the initial mailing package and instructions for responding online are on the paper questionnaire (Clark, Roberts, Tancreto, and Raglin, 2015). Therefore, the Internet instruction card was removed from the control as well as both experimental treatments. Typically, the control would include all of the production materials. However, in this test we modified the production materials for the control to be comparable with the experimental treatments to minimize differences between the treatments.

Additionally, the paper questionnaire package currently includes an Instruction Guide to help address specific situations or questions respondents may have while filling out the paper questionnaire. We included a treatment in this test that removed that Instruction Guide to isolate the effect of just providing information about *why we ask* and excluding information about *how to answer*. We also note that the 2015 Replacement Mail Questionnaire Package Test conducted in March 2015 also tested removing the Instruction Guide; thus, including a treatment in this test that would exclude this guide may confirm the findings from that test (Clark et al., 2015). The

experimental treatment that removed the Instruction Guide also included a modified letter to remove the reference to the Instruction Guide.

Table 1: Descriptions of the Paper Questionnaire Package Control and Treatments

Control: • Exclude Internet Instruction Card • Retain Instruction Guide • No new material
Treatment 1: • Exclude Internet Instruction Card • Retain Instruction Guide • Include new "Why We Ask" insert
Treatment 2: • Exclude Internet Instruction Card • Exclude Instruction Guide (and modified the Introduction Letter to remove the reference to the Instruction Guide) • Include new "Why We Ask" insert

The Control and Treatment 1 differ only in the inclusion of the "Why We Ask" insert while Treatment 1 and Treatment 2 differ only in the exclusion of the Instruction Guide.

2.2. Sample Design

The ACS sample design consists of dividing the monthly sample panel into 24 Methods Panel groups (MPGRPs) of approximately 12,000 addresses each. Each MPGRP within a monthly sample is representative of the full monthly sample. Each monthly sample is a representative subsample of the entire annual sample and is representative of the entire country. For this test, we used the November 2015 ACS panel and assigned two randomly selected MPGRPs for the control and for each treatment. The total sample size involving six panels was approximately 72,000 addresses. The remaining eighteen groups (~216,000 addresses) received production materials.

We expected to be able to detect differences of approximately 1.25 percentage points for self-response between treatment groups (with 80 percent power and $\alpha = 0.1$; this calculation assumes a 50 percent self-response rate). All analyses were weighted using the ACS sampling weight (the inverse of the probability of selection). We used a significance level of $\alpha = 0.1$ when determining significant differences between the control and test groups. Where appropriate, we used the Hochberg method to control the family-wise error in multiple comparisons (Hochberg, 1988).

2.3. ACS Operational Schedule for the November 2015 Panel

Each monthly ACS sample panel consists of three main data collection operations: a six-week mailout period, a one-month Computer-Assisted Telephone Interview (CATI) period, and a one-month Computer-Assisted Personal Interview (CAPI) period.

The November 2015 Panel mailouts were sent between October 22, 2015 and December 3, 2015. The ACS has five mailouts associated with each sample panel. Table 2 shows the date of each mailout for the November panel and briefly describes its contents and purpose. Because the purpose of this test was to make changes to the mail materials, we focused our analysis mainly on the universe that was mailed the paper questionnaire package on November 13, 2015.

Table 2: ACS Mailings for the November 2015 Panel

Mailout	Description of Materials	Mailout Date
Initial Mailing Package	Introduction Letter, FAQ Brochure, Multi-Lingual Informational Brochure, and Internet Instruction Card. This mailing urges housing units to respond via the Internet.	10/22/2015
Reminder Letter	A reminder letter sent to all addresses that were sent the Initial Mailing Package, reiterating the request to respond.	10/29/2015
Paper Questionnaire Package	Sent to addresses that have not responded via the Internet. Introduction Letter, Paper Questionnaire, Return Envelope, Internet Instruction Card, FAQ Brochure, and Instruction Guide. *See Table 1 for control and experimental modifications for this mailing.*	11/13/2015
Reminder Postcard	A reminder postcard sent to all addresses that were also sent the Paper Questionnaire Package, reiterating the request to respond.	11/16/2015
Additional Postcard	An additional reminder postcard sent to addresses that have not yet responded and are ineligible for CATI follow-up, as a last reminder to respond.	12/3/2015

2.4. Response Analysis

To evaluate the impact of the "Why We Ask" insert on unit response, we calculated self-response return rates. To evaluate the impact of the insert on response for particular items in the survey, we calculated form completeness[4] rates and item nonresponse rates for selected items

[4] Form completeness is the number of questions on the form that were answered among those that should have been answered.

from the survey. Response distributions were to be calculated for any items with significantly different item nonresponse between treatments. For write-in questions, we were unable to compare the response distributions, since such analysis would require coded data that was unavailable.

We compared Control and Treatment 1, where the difference was the presence of the "Why We Ask" insert, and then compared Treatment 1 and Treatment 2, where the difference was the presence of the Instruction Guide. For return rate analysis, we also compared Control and Treatment 2, to ensure there was not a effect after making two changes in the experimental design. We conducted t-tests for pairwise comparisons of return rates, item nonresponse rates, and form completeness rates. We adjusted for the Type I error rate that occurs with multiple comparisons by using the Hochberg method.

2.4.1. Unit Self-Response Return Rate Analysis

We calculated self-response return rates overall and by mode. The self-response return rates included all mailable and deliverable sample addresses that had not responded to the survey prior to the mailing of the paper questionnaire package. Only these addresses would have received the paper questionnaire package with the "Why We Ask" insert. These rates were calculated prior to the start of the CATI operation. We removed addresses where the paper questionnaire package was returned by the United States Postal Service (USPS) as Undeliverable as Addressed (UAA) and a response was not received.

All self-response return rate comparisons were also broken out by mode. Mail returns were combined with the small number of self-response returns obtained from the Telephone Questionnaire Assistance (TQA) operation. Return rates were calculated using the following formulae:

$$[1]\ \text{Internet Return Rate} = \left(\frac{\begin{array}{c}\text{Number of mailable and deliverable sample}\\ \text{addresses that provided a complete or}\\ \text{sufficient partial Internet response}\end{array}}{\begin{array}{c}\text{Total number of mailable and deliverable}\\ \text{sample addresses that were sent}\\ \text{the paper questionnaire package}\end{array}} \right) \times 100$$

$$[2]\ \text{Mail Return Rate} = \left(\frac{\begin{array}{c}\text{Number of mailable and deliverable sample} \\ \text{addresses that provided a non} - \text{blank} \\ \text{return by mail or TQA}\end{array}}{\begin{array}{c}\text{Total number of mailable and deliverable} \\ \text{sample addresses that were sent} \\ \text{the paper questionnaire package}\end{array}} \right) \times 100$$

$$[3]\ \text{Self} - \text{Response Return Rate} = \left(\frac{\begin{array}{c}\text{Number of mailable and deliverable sample} \\ \text{addresses that provided a non} - \text{blank return} \\ \text{by mail, TQA, or a complete or sufficient partial} \\ \text{response by Internet}\end{array}}{\begin{array}{c}\text{Total number of mailable and deliverable} \\ \text{sample addresses that were sent} \\ \text{the paper questionnaire package}\end{array}} \right) \times 100$$

A blank return is a form in which there are no data-defined persons and the telephone number listed on the form by the respondent is blank. A response is deemed a "sufficient partial" when the respondent gets to the first question in the detailed person questions section for the first person in the household.

2.4.2. Form Completeness and Item Nonresponse Analysis

Rates in this section were calculated for all sample addresses that were sent the paper questionnaire package, as described in Section 2.4.1 and responded to the survey by either Internet or mail before the start of the CATI phase of data collection.

2.4.2.1. Form Completeness

Form completeness rates tell us how complete respondents are when they filled out the items on the survey. The rate is the number of questions on the form that were answered among those that should have been answered. The number of questions that should have been answered was determined based on questionnaire skip patterns and respondent answers. If it was not clear if a question should have been answered (because a prior question was left blank), it was excluded from the calculation. The calculations only included valid Internet or mail responses (not TQA) as described in Section 2.4.1. We calculated the rates separately for each mode. We compared the completeness rates of the Control to Treatment 1, and then compared Treatment 1 to Treatment 2. Formula 4 shows the calculation for the overall form completion rate.

$$[4]\ \text{Overall Form Completeness Rate} = \left(\frac{\sum_{i=1}^{r} \text{Number of questions answered}}{\sum_{i=1}^{r} \text{Number of questions that should have been answered}} \right) \times 100$$

where *r* is the weighted number of returns.

The ACS is organized into three main sections (basic demographic section, housing section, and detailed person section). We calculated completeness rates for each section of the questionnaire. We did this by aggregating all of the complete data (within a particular section) for each household or person in the housing unit and tabulating it as a proportion of the total items (within the particular section) that were required to be answered. Formula 5 shows the calculation for the section completeness rate.

$$[5]\ \text{Section Completeness Rate} = \left(\frac{\sum_{i=1}^{r} \text{Number of questions answered in the specific section}}{\sum_{i=1}^{r} \text{Number of questions that should have been answered in the specific section}} \right) \times 100$$

where *r* is the weighted number of returns.

2.4.2.2. Item Nonresponse

The item nonresponse rate for a particular item is the frequency in which the item was not answered when it was supposed to be answered (based on skip patterns). A housing unit or person is eligible to answer a specific question based on the questionnaire skip patterns and respondent answers. Formula [6] shows the item nonresponse rate calculation for the housing-level items and formula [7] shows the calculation for person-level items.

$$[6]\ \text{Item Nonresponse Rate for Housing Items} = \left(\frac{\text{Number of eligible housing units that did not answer the question of interest}}{\text{Number of housing units eligible to answer the question of interest}} \right) \times 100$$

$$[7]\ \text{Item Nonresponse Rate for Person Items} = \left(\frac{\text{Number of eligible people that did not answer the question of interest}}{\text{Number of people eligible to answer the question of interest}} \right) \times 100$$

We calculated item nonresponse for specific items on the questionnaire to see if the "Why We Ask" insert convinced more respondents to answer. At least one ACS question related to every "Why We Ask" section was included. The chosen items either:

- have high rates with which respondents access the "Help" information in the Internet instrument (Horwitz, 2013),
- were considered sensitive to respondents (Raglin, 2014),
- have high item allocation rates (Heimel, 2014), or
- were specifically mentioned on the "Why We Ask" insert

To assess the impact of including the "Why We Ask" insert, the following items were compared between Treatment 1 (New Insert with Guide) and the Control:

- Basic Demographic Section: *race, Hispanic origin*
- Housing Section: *mortgage amount, rent amount, property insurance, number of rooms, refrigerator, tenure, property value*
- Detailed Person Section: *citizenship, work last week, occupation, wages, educational attainment, veteran status, transportation to work, time of departure for work, health insurance, disability*

To assess the impact of removing the Instruction Guide in the presence of the "Why We Ask" insert, the above items were compared between Treatment 1 (New Insert with Guide) and Treatment 2 (New Insert without Guide). Additionally, the following items were also compared:

- Housing Section: *electricity amount, water amount, presence of a mortgage, real estate tax amount, building type, year built, and type of internet subscription*
- Detailed Person Section: *residence one year ago (geographic mobility status)*

2.4.3. Universe Eligibility and Response Criteria

For this sample, we excluded addresses in remote Alaska and in Puerto Rico. All addresses that were mailed a paper questionnaire package were included in the universe for the self-response modes (Internet and mail), except those addresses that were designated as UAA by the U.S. Post Service and for which no response was received.

2.4.3.1. Response Criteria for Internet

We counted a case as an Internet mode response if the address was in the self-response universe and one of the following conditions was satisfied:

- There was a complete Internet response.
- There was a sufficient partial Internet response. That is, the respondent viewed all basic demographic questions for all people in the household, all questions about the housing unit, and at least the first detailed question for one person and provided some data.

- Housing units that responded via the Internet before they could possibly have received the paper questionnaire were not included in this universe unless they returned to the Internet instrument and provided a more complete response after the questionnaire was mailed to them.
- The unit was suspected to be a vacant unit or a business, based on the Internet response received, but was not confirmed to be a vacant unit or a business during the mailout period of data collection, which was the period used for return rate calculations.

2.4.3.2. Response Criteria for Mail

We counted a case as a mail mode response if the address was in the self-response universe and we received either a complete mail response or, for return rate analysis, a complete response via TQA. For the self-response modes, if more than one response was received from a single address, the response that was received first was considered the mode of response for this test.

2.4.4. Calculation of Weighted Rates and Differences between Treatments

The numerator is the sum of the base weights[5] of the cases determined to have a valid response in the Internet or mail mode. The denominator is the sum of the base weights of the cases determined to be in the self-response universe.

All numerators, denominators, and rates were calculated separately for the control group and the experimental treatment groups. The difference between treatments was calculated as (1) the control group rate minus the Treatment 1 group rate, and (2) the Treatment 1 group rate minus the Treatment 2 group rate. We used two-tailed hypothesis testing to determine whether the differences between the groups were statistically significant at the $\alpha = 0.1$ level.

2.4.5. Calculation of Standard Errors

The variances were estimated using the Successive Differences Replication (SDR) method with replicate weights, the standard method used in the ACS.[6] In calculating the return rates, item nonresponse rates, and form completeness rates, we used the replicate base weights that account only for sampling probabilities. For each type of rate and treatment, we calculated the rate for the 80 half-sample replicates. Then, for each replicate, we calculated the difference between the control group rate and the Treatment 1 group rate, or between the Treatment 1 group rate and the Treatment 2 group rate.

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[5] The base weight for a sample unit is the inverse of the probability of selection for that unit.

[6] Chapter 12 of the ACS Design and Methodology document (U.S. Census Bureau, 2014) has details and references regarding the SDR method for variance estimation.

The variance for each rate and group, and each difference, was calculated using the formula:

$$Var(RR_0) = \frac{4}{80}\sum_{r=1}^{80}(RR_r - RR_0)^2$$

Where:

RR_0 = the return rate, item nonresponse rate, form completeness rate, or difference estimate calculated using the full sample base weights,

RR_r = the return rate, item nonresponse rate, form completeness rate, or difference estimate calculated for replicate r

Finally, the standard error for an estimate is the square root of the variance.

2.5. Relative Cost Analysis

We examined the relative difference in printing, assembly, and mailing costs, between the Control and Treatment 1 (New Insert with Guide) and between the Control and Treatment 2 (New Insert without Guide), based on response prior to the paper questionnaire mailing[7] and the subsequent workloads as a result of that mailing. We used an ACS cost model which uses check-in rates from the field test, past cost trends by mode, and annual workload inputs to determine relative annual cost differences between the test treatments if the associated methodology were to be fully implemented into production ACS.

For this test, the most significant cost difference came from printing. To estimate the cost of printing, we used fixed and variable costs, as specified in the Census Bureau printing contracts. However, the printing job for the "Why We Ask" insert was awarded as a one-time bid contract, so there was not a specified fixed and variable cost. We were able to estimate the annual variable cost for printing the "Why We Ask" insert by using the proportion of cost that is variable in a similar ACS mail piece. From this analysis, we were able to isolate the costs associated with adding the "Why We Ask" insert.

[7] The workloads for the 2nd mailing should be held constant for these calculations. Nothing before the paper questionnaire is experimental so need to control for (hopefully slight) variability in response rates before the paper questionnaire.

3. Assumptions and Limitations

3.1. Assumptions

1) A single ACS monthly sample panel is representative of an entire year (twelve panels) and the entire frame sample, with respect to both return rates and costs.
2) A single sample (MPGRP) group (1/24 of the full monthly sample) is representative of the full monthly sample.
3) The cost of printing the "Why We Ask" insert for one panel can be used to calculate the cost of implementation for the entire year with an estimation of the proportion of variable cost.

3.2. Limitations

1) These estimates apply only for data collection in U.S. housing units, as group quarters and Puerto Rico addresses were not included in the sample for the test.
2) We can only use the results from the test to make relative conclusions between the control and test treatments, as the control treatment does not directly match to ACS production methodology due to the removal of the Internet instruction card.
3) Results from analysis of postal tracking data have indicated that the postal sorting and mailout procedures can cause differences in delivery time and subsequently in response time. We will investigate this to the degree that we see differences between treatments. A report on this topic is forthcoming (Heimel, forthcoming).
4) The initial sample size of each treatment and the control universe was roughly 24,000 sample addresses. The universes used to calculate the estimates in this report were subsets of that sample. In some metrics, these universes were small. This affected our power when performing the hypothesis tests. Therefore, it is possible that the sample sizes may have posed a limitation when we measured differences between treatments.
5) Due to a processing glitch, the Internet instrument was not available to respondents until four days after the initial mail package was sent.
6) There was a spelling error in the Disability Section of the ACS-8(X) "Why We Ask" insert.

4. Results

The results sections align with the research questions; Section 4.1 discusses research question 1 (on self-response rates), Section 4.2 discusses research question 2 (on item nonresponse and form completeness) and Section 4.3 discusses research question 3 (on cost implications).

4.1. Unit Self-Response Return Rate Analysis

In this section, we will answer the following research question: *What was the impact of the experimental treatments on unit self-response?*

Preliminary diagnostics were compared between treatments to assess if the universes were comparable; no differences were found. For instance, we confirmed that the self-response return rate was not significantly different between treatments in advance of the paper questionnaire package being mailed on November 13th. All treatments had return rates of approximately 21.5 percent by November 13th.[8] Additional diagnostics focused on demographic distributions of responders, to ensure that populations were equally represented in each treatment and that no immediately apparent confounding factors existed. Results are included in Attachment C.

The tables in this section provide detailed information about the self-response return rates calculated for this test. The universe of interest was all sampled addresses from the November 2015 sample that were mailed the paper questionnaire package (sent on November 13th). A response was included in this analysis if it was received before November 30th, the cutoff date for sending cases to the CATI operation.

In each table, return rates are in percentages and the standard errors are in parentheses next to each rate. We performed two-tailed hypothesis testing for each return rate difference to determine whether the difference between treatments was statistically different from zero at the α=0.1 level. To control for the familywise error rate, we adjusted the raw p-values using the Hochberg method (Hochberg, 1988). In conducting the Hochberg multiple comparison test, all nine differences in Tables 3-5 were grouped together.

4.1.1. Results from Adding New Insert Without Removing Instruction Guide

Table 3 shows the difference between the Control treatment and the experimental treatment that added the "Why We Ask" insert to the paper questionnaire package without removing the Instruction Guide.

Table 3: Self-Response Return Rate Results by Mode before CATI for Addresses Mailed the Paper Questionnaire, Control vs Treatment 1 (Insert with Guide)

Mode of Response	Control	Treatment 1	Difference	Adjusted p-values
Total Self-Response	18.1 (0.3)	18.1 (0.3)	< 0.1(0.4)	0.99
Internet	7.5 (0.2)	7.4 (0.2)	0.1 (0.3)	0.99
Mail/TQA	10.6 (0.2)	10.7 (0.2)	-0.1 (0.3)	0.99

Source: U.S. Census Bureau, American Community Survey, 2015 "Why We Ask" Mail Package Insert Test

[8] Control had a 21.6% (0.4) return rate; Treatment 1 had a 21.4% (0.3) return rate; Treatment 2 had a 21.3% (0.3) return rate.

Note: Minor additive discrepancies are due to rounding. We adjusted the raw p-values to control for the familywise error rate across all return rate comparisons using the Hochberg procedure (Hochberg, 1988). Standard errors are in parentheses.

At the 0.1 level of significance, no significant differences were seen between the Control universe and Treatment 1 in the return rate after sending the paper questionnaire package. There is no evidence that the addition of the 'Why We Ask' insert either encouraged or discouraged response.

4.1.2. Results from Removing the Instruction Guide

Table 4 shows the difference between the experimental treatment that added the "Why We Ask" insert to the paper questionnaire package without removing the Instruction Guide (Treatment 1) and the experimental treatment that added the "Why We Ask" insert to the paper questionnaire package while also removing the Instruction Guide (Treatment 2).

Table 4: Self-Response Return Rate Results by Mode before CATI for Addresses Mailed the Paper Questionnaire, Treatment 1 (Insert With Guide) vs Treatment 2 (Insert Without Guide)

Mode of Response	Treatment 1	Treatment 2	Difference	Adjusted p-values
Total Self-Response	18.1 (0.3)	19.0 (0.3)	-0.8 (0.4)	0.40
Internet	7.4 (0.2)	8.1 (0.2)	-0.7 (0.3)	0.25
Mail/TQA	10.7 (0.2)	10.9 (0.3)	-0.1 (0.4)	0.99

Source: U.S. Census Bureau, American Community Survey, 2015 "Why We Ask" Mail Package Insert Test
Note: Minor additive discrepancies are due to rounding. We adjusted the raw p-values to control for the familywise error rate across all return rate comparisons using the Hochberg procedure (Hochberg, 1988). Standard errors are in parentheses.

At the 0.1 level of significance, no significant differences were seen in the return rates between Treatment 1 and Treatment 2 after sending the paper questionnaire package. There is no evidence that the presence or absence of the Instruction Guide impacted response.

4.1.3. Results from Adding New Insert and Removing the Instruction Guide

Table 5 shows the difference between the Control treatment and Treatment 2, which added the new "Why We Ask" insert to the paper questionnaire package while also removing the Instruction Guide.

Table 5: Self-Response Return Rate Results by Mode before CATI for Addresses Mailed the Paper Questionnaire, Control vs Treatment 2 (Insert Without Guide)

Mode of Response	Control	Treatment 2	Difference	Adjusted p-values
Total Self-Response	18.1 (0.3)	19.0 (0.3)	-0.8 (0.4)	0.34
Internet	7.5 (0.2)	8.1 (0.2)	-0.6 (0.3)	0.50
Mail/TQA	10.6 (0.2)	10.9 (0.3)	0.2 (0.3)	0.99

Source: U.S. Census Bureau, American Community Survey, 2015 "Why We Ask" Mail Package Insert Test
Note: Minor additive discrepancies are due to rounding. We adjusted the raw p-values to control for the familywise error rate across all return rate comparisons using the Hochberg procedure (Hochberg, 1988). Standard errors are in parentheses.

At the 0.1 level of significance, no significant differences were seen in the return rates between Control cases and Treatment 2 after sending the paper questionnaire package. There is no evidence that the modified package either encouraged or discouraged response in relation to the control package.

To determine whether specific demographic groups were affected by the "Why We Ask" insert, we calculated the self-response return rates for traditionally low response areas and high response areas, as defined by the Census Bureau's Planning Database (U.S. Census Bureau, 2015a, 2015b), at the tract level using characteristics associated with response propensity, for all of the treatments. We calculated differences between Control and Treatment 1, Control and Treatment 2, and Treatment 1 and Treatment 2. There were no significant differences between the rates for either the low response or high response areas in any of the comparisons made. Thus, there is no evidence that the experimental treatments had an impact on unit self-response.

4.2. Form Completeness and Item Nonresponse Analysis

In this section, we will answer the following research question: *What was the impact of the experimental treatments on form completeness, item nonresponse, and response distributions?*

All returns are from the universe of cases in the November 2015 sample that were sent the paper questionnaire package and responded either by mail or by Internet. TQA cases were included in return rate analysis but are not included in the analysis in this section.

We also compared response distributions for the following characteristics: type of building and tenure of the housing unit, as well as Hispanic origin, race, age, and educational attainment of enumerated persons. We compared the response distributions between Control and Treatment 1, Control and Treatment 2, and Treatment 1 and Treatment 2. There were no significant differences in any of the response distributions comparisons; there is no evidence that the

experimental treatments had an impact on any particular demographic groups. Results are in Attachment C.

4.2.1. Results from Adding New Insert Without Removing Instruction Guide

In this first section, the results compare Control cases to Treatment 1 cases. Treatment 1 added the "Why We Ask" insert to the paper questionnaire package without removing the instruction guide.

Rates are in percentages and the standard errors are in parentheses next to each rate. We performed two-tailed hypothesis testing for each rate difference to determine whether the difference was statistically different from zero at the $\alpha = 0.1$ level. We controlled for the Type I error rate from multiple comparisons using the Hochberg method. Form and section completeness results were compared separately from item nonresponse results.

4.2.1.1. Form and Section Completeness

We look first at the overall form completion rate, which is the number of questions on the form that were answered among those that should have been answered. The number of questions that should have been answered is determined based on questionnaire skip patterns and respondent answers. We also looked at completeness for each of the three sections of the questionnaire: basic demographics, housing, and detailed person sections. For the basic demographics and detailed person sections, we calculated the rate for each person record. For the housing section, we calculated the rate for each housing unit record.

In conducting the Hochberg multiple comparison test, differences were grouped by mode. Three groups were identified (all self-response, mail returns, Internet returns).

Table 6: Form and Section Completeness Rates – Control vs. Treatment 1 (Insert With Guide)

Form Completeness				
	Control	Treatment 1	Difference	Adjusted p-value
All self-response	90.2 (0.2)	89.6 (0.2)	0.6 (0.3)	0.16
Mail	90.0 (0.2)	89.5 (0.2)	0.5 (0.3)	0.35
Internet	90.4 (0.4)	89.7 (0.4)	0.7 (0.6)	0.56
Basic Person Section				
	Control	Treatment 1	Difference	Adjusted p-value
All self-response	97.9 (0.2)	97.8 (0.2)	0.1 (0.2)	0.62
Mail	96.9 (0.2)	96.9 (0.1)	< 0.1 (0.2)	0.93
Internet	98.9 (0.3)	98.7 (0.3)	0.2 (0.4)	0.98
Detailed Person Section				
	Control	Treatment 1	Difference	Adjusted p-value
All self-response	88.2 (0.3)	87.4 (0.3)	0.8 (0.5)	0.16
Mail	89.2 (0.3)	88.6 (0.3)	0.6 (0.4)	0.37
Internet	87.3 (0.5)	86.2 (0.5)	1.1 (0.8)	0.56
Housing Section				
	Control	Treatment 1	Difference	Adjusted p-value
All self-response	92.3 (0.1)	91.9 (0.2)	0.4 (0.2)	0.16
Mail	89.5 (0.2)	88.9 (0.2)	0.6 (0.3)	0.98
Internet	96.0 (0.2)	96.0 (0.2)	> -0.1 (0.3)	0.19

Source: U.S. Census Bureau, American Community Survey, 2015 "Why We Ask" Mail Package Insert Test
Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses. Significant at α=0.1.
† We adjusted the raw p-values to control for the familywise error rate across all Treatment 1/Treatment 2 comparisons in the same mode using the Hochberg procedure (Hochberg, 1988).

At the 0.1 level of significance, no significant differences were found between the Control and Treatment 1 form completeness rates or section completeness rates. However, we note that in 11 of the 12 comparisons, Treatment 1 had nominally lower completion rates.

4.2.1.2. Item Nonresponse of Select Housing Questions

The following tables show the item nonresponse for select items on the ACS. Items were selected to represent each section of the questionnaire and each section of the Why We Ask insert. Selected items have been shown to be burdensome or troublesome to respondents in some way.

The item nonresponse rate for a particular item is the frequency in which the item was not answered when it was supposed to be answered (based on skip patterns). A housing unit or person was eligible to answer a specific question based on the questionnaire skip patterns and previous respondent answers.

Within each table, items are presented in the order they appear to the respondent on the survey. Table 7 presents topics asked of the housing unit; the first row for a topic includes all self-response returns while the subsequent rows are subset by mode of return.

Rates are in percentages and the standard errors are in parentheses next to each rate. We performed two-tailed hypothesis testing for each rate difference to determine whether the difference was statistically different from zero at the $\alpha = 0.1$ level. In conducting the Hochberg multiple comparison test, differences were grouped by mode. Using the Control versus Treatment 1 tests, three groups were identified (all self-response cases, mail returns, Internet returns), across all housing unit and person level topics in Table 7 and Table 8 (for a total of 20 differences).

Table 7: Housing-Level Item Nonresponse Rates, Control versus Treatment 1 (Insert with Guide)

Topic / Mode	Control	Treatment 1	Difference	Adjusted P-value†
Number of Rooms	3.8 (0.2)	3.9 (0.3)	-0.2 (0.3)	0.90
Mail	3.8 (0.3)	4.4 (0.4)	-0.6 (0.5)	1.00
Internet	3.7 (0.3)	3.3 (0.3)	0.4 (0.5)	0.95
Refrigerator	2.9 (0.2)	3.1 (0.2)	-0.2 (0.3)	0.90
Mail	2.0 (0.2)	2.7 (0.3)	-0.7 (0.3)	0.77
Internet	4.0 (0.4)	3.5 (0.4)	0.4 (0.5)	0.95
Tenure	5.3 (0.2)	5.2 (0.2)	0.1 (0.3)	0.90
Mail	5.2 (0.3)	5.7 (0.3)	-0.5 (0.4)	1.00
Internet	5.6 (0.4)	4.5 (0.4)	1.0 (0.6)	0.95
Rent Amount	5.9 (0.7)	4.9 (0.6)	1.0 (0.9)	0.90
Mail	9.9 (1.3)	8.3 (1.1)	1.7 (1.7)	1.00
Internet	2.0 (0.5)	1.6 (0.4)	0.4 (0.6)	0.95
Property Value	7.7 (0.5)	7.9 (0.4)	-0.2 (0.6)	0.90
Mail	10.6 (0.6)	10.7 (0.6)	-0.1 (0.9)	1.00
Internet	3.6 (0.4)	3.8 (0.5)	-0.3 (0.6)	0.95
Property Insurance	12.5 (0.4)	13.5 (0.5)	-1.0 (0.7)	0.90
Mail	16.0 (0.7)	17.2 (0.7)	-1.2 (0.9)	1.00
Internet	7.6 (0.5)	8.0 (0.7)	-0.4 (0.8)	0.95
Mortgage Amount	3.6 (0.4)	4.7 (0.5)	-1.1 (0.7)	0.90
Mail	6.4 (0.8)	7.8 (0.8)	-1.4 (1.3)	1.00
Internet	1.1 (0.3)	1.8 (0.4)	-0.7 (0.5)	0.95

Source: U.S. Census Bureau, American Community Survey, 2015 "Why We Ask" Mail Package Insert Test
Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses. Significant at α=0.1.
† We adjusted the raw p-values to control for the familywise error rate across all Treatment 1/Treatment 2 comparisons in the same mode using the Hochberg procedure (Hochberg, 1988).

At the 0.1 level of significance, no significant differences were found between the Control and Treatment 1 item nonresponse for housing-level topics.

4.2.1.3. Item Nonresponse of Select Person Questions

Table 8 presents topics asked of each person. Race and Hispanic Origin are in the preliminary part of the survey that collects basic person information; they are demarcated with a double line to represent the separation in the survey. Topics appear in the table in the same order as they appear in the survey. The first row for a topic includes all self-response returns while the subsequent rows are subset by mode of return.

Table 8: Person-Level Item Nonresponse Rates, Control versus Treatment 1 (Insert with Guide)

Topic/Mode	Control	Treatment 1	Difference	Adjusted P-value[†]
Hispanic Origin	4.3 (0.3)	4.5 (0.3)	-0.3 (0.4)	0.90
Mail	6.9 (0.4)	7.0 (0.4)	-0.1 (0.5)	1.00
Internet	1.6 (0.4)	1.9 (0.4)	-0.3 (0.6)	0.95
Race	2.6 (0.3)	2.6 (0.3)	<0.1 (0.4)	0.90
Mail	3.3 (0.3)	3.1 (0.2)	0.2 (0.4)	1.00
Internet	1.9 (0.4)	2.0 (0.4)	> -0.1 (0.6)	0.95
Citizenship	11.7 (0.5)	12.0 (0.5)	-0.3 (0.7)	0.90
Mail	6.9 (0.4)	6.8 (0.5)	0.1 (0.7)	1.00
Internet	16.6 (0.9)	17.5 (0.8)	-0.8 (1.3)	0.95
Educational Attainment	11.6 (0.4)	11.8 (0.5)	-0.2 (0.7)	0.90
Mail	7.7 (0.4)	7.7 (0.5)	< -0.1 (0.6)	1.00
Internet	15.5 (0.8)	16.2 (0.7)	-0.7 (1.1)	0.95
Health Insurance	13.2 (0.5)	13.5 (0.5)	-0.3 (0.7)	0.90
Mail	7.7 (0.5)	7.7 (0.5)	<0.1 (0.7)	1.00
Internet	18.7 (0.9)	19.6 (0.8)	-0.9 (1.3)	0.95
Vision and Hearing	12.4 (0.5)	12.8 (0.5)	-0.4 (0.7)	0.90
Mail	6.7 (0.4)	6.9 (0.5)	-0.2 (0.6)	1.00
Internet	18.1 (0.9)	19.0 (0.8)	-0.9 (1.3)	0.95
Disability	12.5 (0.4)	12.8 (0.4)	-0.3 (0.7)	0.90
Mail	8.7 (0.5)	8.6 (0.5)	0.2 (0.7)	1.00
Internet	16.4 (0.8)	17.4 (0.7)	-1.0 (1.2)	0.95
Veteran Status	12.5 (0.4)	13.1 (0.4)	-0.6 (0.7)	0.90
Mail	9.5 (0.5)	9.8 (0.5)	-0.3 (0.7)	1.00
Internet	15.9 (0.8)	16.9 (0.7)	-1.0 (1.1)	0.95
Work Last Week	11.2 (0.4)	11.7 (0.4)	-0.5 (0.7)	0.90
Mail	7.3 (0.4)	7.4 (0.4)	-0.1 (0.6)	1.00
Internet	15.4 (0.8)	16.6 (0.7)	-1.2 (1.1)	0.95
Transportation To Work	2.5 (0.2)	3.0 (0.2)	-0.5 (0.3)	0.90
Mail	2.8 (0.3)	3.5 (0.4)	-0.7 (0.5)	1.00
Internet	2.2 (0.3)	2.6 (0.3)	-0.4 (0.5)	0.95
Time of Departure for Work	11.9 (0.5)	13.3 (0.5)	-1.4 (0.8)	0.90
Mail	9.7 (0.6)	10.7 (0.6)	-1.0 (0.9)	1.00
Internet	13.9 (0.8)	15.8 (0.7)	-1.9 (1.1)	0.95
Occupation	7.7 (0.4)	9.5 (0.4)	-1.7 (0.5)	0.01*
Mail	9.6 (0.5)	11.4 (0.6)	-1.8 (0.7)	0.15
Internet	6.0 (0.5)	7.6 (0.6)	-1.5 (0.8)	0.83
Wages	8.4 (0.4)	9.4 (0.4)	-1.1 (0.6)	0.90
Mail	11.8 (0.7)	12.8 (0.6)	-0.9 (0.9)	1.00
Internet	5.2 (0.4)	6.2 (0.5)	-1.0 (0.7)	0.95

Source: U.S. Census Bureau, American Community Survey, 2015 "Why We Ask" Mail Package Insert Test

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses. Significant at α=0.1; the * indicates a statistically significant result.

† We adjusted the raw p-values to control for the familywise error rate across all Treatment 1/Treatment 2 comparisons in the same mode using the Hochberg procedure (Hochberg, 1988).

At the 0.1 level of significance, one significant difference was found between the Control and Treatment 1 item nonresponse rates for person-level topics: Occupation among all self-response returns. Occupation was left completely blank 9.5 percent of the time on person records in Treatment 1, compared with 7.7 percent on person records in the Control.

Occupation is a write-in question on the survey that requires coding before the data are able to be analyzed. The coding assigns one of 539 Census occupational categories based on the North American Industry Classification System (NAICS) and the Standard Occupational Classification (SOC). The coded data were not available for analysis, so no response distributions were compared between treatments for this topic.

We also note that in 34 of the 39 comparisons in Table 8, Treatment 1 had higher item nonresponse rates. This test might not have had enough power to detect differences that exist between treatments.

4.2.2. Results from Adding New Insert and Removing the Instruction Guide

The results in this section compare Treatment 1 cases to Treatment 2 cases. Both treatments contained the "Why We Ask" insert in the paper questionnaire package; Treatment 2 also removed the Instruction Guide, which Treatment 1 retained.

Rates are in percentages and the standard errors are in parentheses next to each rate. We performed two-tailed hypothesis testing for each rate difference to determine whether the difference was statistically different from zero at the $\alpha = 0.1$ level. We controlled for the Type I error rate from multiple comparisons using the Hochberg method. Form and section completeness results were compared separately from item nonresponse results.

4.2.2.1. Form and Section Completeness

We look first at the overall form completion rate, which is the number of questions on the form that were answered among those that should have been answered. The number of questions that should have been answered is determined based on questionnaire skip patterns and respondent answers. We also looked at completeness for each of the three sections of the questionnaire: basic demographics, housing, and detailed person sections. For the basic demographics and detailed person sections, we calculated the rate for each person record. For the housing section, we calculated the rate for each housing unit record.

In conducting the Hochberg multiple comparison test, differences were grouped by mode. Three groups were identified (all self-response cases, mail returns, Internet returns).

Table 9: Section Completeness Rates – Treatment 1 (Insert with Guide) versus Treatment 2 (Insert Without Guide)

Form Completeness				
	Treatment 1	Treatment 2	Difference	Adjusted P-value
All self-response	89.6 (0.2)	89.5 (0.2)	0.2 (0.3)	0.83
Mail	89.5 (0.2)	89.5 (0.2)	< -0.1 (0.3)	1.00
Internet	89.7 (0.4)	89.4 (0.4)	0.3 (0.4)	0.93
Basic Person Section				
	Treatment 1	Treatment 2	Difference	Adjusted P-value
All self-response	97.8 (0.2)	97.8 (0.1)	> -0.1 (0.2)	0.83
Mail	96.9 (0.1)	96.7 (0.2)	0.2 (0.2)	1.00
Internet	98.7 (0.3)	98.9 (0.2)	-0.2 (0.4)	0.93
Detailed Person Section				
	Treatment 1	Treatment 2	Difference	Adjusted P-value
All self-response	87.4 (0.3)	87.1 (0.3)	0.3 (0.4)	0.83
Mail	88.6 (0.3)	88.5 (0.3)	0.1 (0.4)	1.00
Internet	86.2 (0.5)	85.8 (0.6)	0.4 (0.6)	0.93
Housing Section				
	Treatment 1	Treatment 2	Difference	Adjusted P-value
All self-response	91.9 (0.2)	92.3 (0.2)	-0.3 (0.2)	0.83
Mail	88.9 (0.2)	89.3 (0.2)	-0.3 (0.3)	0.92
Internet	96.0 (0.2)	96.0 (0.2)	> -0.1 (0.3)	0.93

Source: U.S. Census Bureau, American Community Survey, 2015 "Why We Ask" Mail Package Insert Test
Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses. Significant at α=0.1.
† We adjusted the raw p-values to control for the familywise error rate across all Treatment 1/Treatment 2 comparisons in the same mode using the Hochberg procedure (Hochberg, 1988).

At the 0.1 level of significance, no significant differences were found between Treatment 1 and Treatment 2 form completeness rates or section completeness rates. There is no evidence that the Instruction Guide had an impact on completion rates by section or overall.

4.2.2.2. Item Nonresponse of Select Housing Questions

The following tables show the item nonresponse rates from Treatment 1 cases and Treatment 2 cases for select topics on the ACS. The subsequent tables show the same topics as in Section 4.2.1.2, plus a few additional topics. The additional topics (such as Year Built and Real Estate Tax Amount) are topics that were thought to contain especially useful information in the Information Guide, which was only sent to Treatment 1 cases.

Table 10 and Table 11 present topics asked of each housing unit. Table 10 contains topics pertaining to general housing characteristics and utilities while Table 11 contains topics pertaining to housing costs and ownership. Within each table, items are presented in the order they appear to the respondent on the survey. Table 11 topics follow Table 10 topics on the survey as well as in this report. The first row for a topic includes all self-response returns while the subsequent rows are subset by mode of return.

Rates are in percentages and the standard errors are in parentheses next to each rate. We performed two-tailed hypothesis testing for each rate difference to determine whether the difference was statistically significant from zero at the $\alpha = 0.1$ level. In conducting the Hochberg multiple comparison test, differences were grouped by mode. Using the Treatment 1 versus Treatment 2 tests, three groups were identified (all self-response cases, mail returns, Internet returns), across all housing unit and person level topics in Table 10 to Table 13 (for a total of 29 differences).

Table 10: Housing-Level Item Nonresponse Rates for Housing Characteristics and Utilities, Treatment 1 (Insert with Guide) versus Treatment 2 (Insert without Guide)

Topic/Mode	Treament 1	Treatment 2	Difference	Adjusted P-value[†]
Building Type	2.3 (0.2)	2.1 (0.2)	0.2 (0.2)	0.97
Mail	2.7 (0.3)	2.4 (0.3)	0.3 (0.4)	0.99
Internet	1.9 (0.2)	1.8 (0.3)	0.1 (0.4)	0.97
Year Built	8.8 (0.4)	8.2 (0.4)	0.6 (0.5)	0.97
Mail	11.5 (0.7)	10.6 (0.6)	1.0 (0.8)	0.99
Internet	5.2 (0.4)	5.4 (0.4)	-0.1 (0.6)	0.97
Number of Rooms	3.9 (0.3)	4.1(0.3)	-0.2 (0.4)	0.97
Mail	4.4 (0.4)	4.7 (0.4)	-0.3 (0.5)	0.99
Internet	3.3 (0.3)	3.4 (0.3)	-0.1 (0.5)	0.97
Refrigerator	3.1 (0.2)	2.5 (0.2)	0.6 (0.3)	0.97
Mail	2.7 (0.3)	1.8 (0.2)	0.9 (0.4)	0.54
Internet	3.5 (0.4)	3.3 (0.3)	0.3 (0.6)	0.97
Internet Access	4.1 (0.3)	4.3 (0.2)	-0.1 (0.4)	0.97
Mail	5.1 (0.4)	5.6 (0.4)	-0.5 (0.6)	0.99
Internet	2.9 (0.3)	2.6 (0.3)	0.2 (0.5)	0.97
Type of Internet Access	19.9 (0.6)	18.0 (0.6)	2.0 (0.9)	0.59
Mail	33.8 (1.0)	30.6 (0.9)	3.2 (1.4)	0.62
Internet	6.4 (0.6)	6.4 (0.6)	> -0.1 (0.7)	0.97
Electricity Amount	8.2 (0.3)	8.9 (0.3)	-0.7 (0.4)	0.97
Mail	9.4 (0.5)	9.6 (0.5)	-0.2 (0.6)	0.99
Internet	6.6 (0.5)	8.0 (0.5)	-1.4 (0.7)	0.97
Water Amount	9.6 (0.4)	10.2 (0.4)	-0.6 (0.6)	0.97
Mail	11.6 (0.6)	11.8 (0.6)	-0.2 (0.8)	0.99
Internet	6.9 (0.5)	8.1 (0.5)	-1.2 (0.7)	0.97

Source: U.S. Census Bureau, American Community Survey, 2015 "Why We Ask" Mail Package Insert Test
Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses. Significant at α=0.1.
[†] We adjusted the raw p-values to control for the familywise error rate across all Treatment 1/Treatment 2 comparisons in the same mode using the Hochberg procedure (Hochberg, 1988).

Further housing topics pertaining to housing costs and ownership are in the following table.

Table 11: Housing-Level Item Nonresponse Rates for Housing Costs and Ownership, Treatment 1 (Insert with Guide) versus Treatment 2 (Insert without Guide)

Topic/Mode	Treatment 1	Treatment 2	Difference	Adjusted P-value[†]
Tenure	5.2 (0.2)	5.3 (0.3)	-0.1 (0.4)	0.97
Mail	5.7 (0.3)	5.6 (0.4)	0.1 (0.5)	0.99
Internet	4.5 (0.4)	5.0 (0.5)	-0.4 (0.6)	0.97
Rent Amount	4.9 (0.6)	5.5 (0.5)	-0.6 (0.9)	0.97
Mail	8.3 (1.1)	9.0 (0.9)	-0.7 (1.4)	0.99
Internet	1.6 (0.4)	2.1 (0.5)	-0.5 (0.7)	0.97
Property Value	7.9 (0.4)	7.8 (0.4)	0.1 (0.5)	0.97
Mail	10.7 (0.6)	10.6 (0.5)	0.2 (0.8)	0.99
Internet	3.8 (0.5)	4.2 (0.4)	-0.3 (0.6)	0.97
Real Estate Tax Amount	10.3 (0.5)	10.5 (0.5)	-0.2 (0.6)	0.97
Mail	13.3 (0.7)	13.5 (0.7)	-0.1 (1.0)	0.99
Internet	5.9 (0.6)	6.6 (0.6)	-0.7 (0.8)	0.97
Property Insurance	13.5 (0.5)	13.5 (0.5)	< 0.1(0.7)	0.97
Mail	17.2 (0.7)	16.1 (0.8)	1.2 (1.0)	0.99
Internet	8.0 (0.7)	10.1 (0.8)	-2.1 (1.0)	0.97
Presence of Mortgage	3.0 (0.3)	2.7 (0.2)	0.3 (0.4)	0.97
Mail	4.7 (0.5)	3.9 (0.4)	0.7 (0.6)	0.99
Internet	0.6 (0.2)	1.0 (0.2)	-0.4 (0.3)	0.97
Mortgage Amount	4.7 (0.4)	4.2 (0.4)	0.4 (0.6)	0.97
Mail	7.8 (0.8)	6.8 (0.7)	1.0 (1.0)	0.99
Internet	1.8 (0.4)	2.2 (0.5)	-0.4 (0.6)	0.97

Source: U.S. Census Bureau, American Community Survey, 2015 "Why We Ask" Mail Package Insert Test
Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses. Significant at α=0.1.
[†] We adjusted the raw p-values to control for the familywise error rate across all Treatment 1/Treatment 2 comparisons in the same mode using the Hochberg procedure (Hochberg, 1988).

At the 0.1 level of significance, no significant differences were found between the Treatment 1 and Treatment 2 item nonresponse rates for housing-level topics.

4.2.2.3. Item Nonresponse of Select Person Questions

Table 12 and Table 13 present topics asked of each person. Table 12 contains topics pertaining to general demographics, while Table 13 contains topics pertaining to employment, commuting, and income. Hispanic Origin and Race are in the preliminary part of the survey that collects basic person information; they are demarcated with a line to represent the separation in the survey. The remaining topics appear in the detailed demographic section of the survey, which follows the housing questions. The first row for a topic includes all self-response returns while the subsequent rows are subset by mode of return.

Table 12: Person-Level Item Nonresponse Rates for General Demographics, Treatment 1 (Insert with Guide) versus Treatment 2 (Insert without Guide)

Topic / Mode	Treatment 1	Treatment 2	Difference	Adjusted P-value†
Hispanic Origin	4.5 (0.3)	4.4 (0.3)	0.1 (0.4)	0.97
Mail	7.0 (0.4)	7.3 (0.5)	-0.4 (0.6)	0.99
Internet	1.9 (0.4)	1.5 (0.3)	0.4 (0.5)	0.97
Race	2.6 (0.3)	2.4 (0.2)	0.1 (0.4)	0.97
Mail	3.1 (0.2)	3.1 (0.3)	> -0.1 (0.4)	0.99
Internet	2.0 (0.4)	1.8 (0.3)	0.2 (0.5)	0.97
Citizenship	12.0 (0.5)	12.3 (0.5)	-0.3 (0.6)	0.97
Mail	6.8 (0.5)	7.2 (0.5)	-0.4 (0.6)	0.99
Internet	17.5 (0.8)	17.4 (0.8)	0.1 (0.9)	0.97
Educational Attainment	11.8 (0.5)	12.4 (0.4)	-0.6 (0.6)	0.97
Mail	7.7 (0.5)	8.3 (0.5)	-0.6 (0.7)	0.99
Internet	16.2 (0.7)	16.5 (0.8)	-0.3 (0.9)	0.97
Geographic Mobility	14.6 (0.4)	14.8 (0.5)	-0.2 (0.5)	0.97
Mail	12.3 (0.5)	12.3 (0.5)	0.1 (0.7)	0.99
Internet	17.0 (0.7)	17.3 (0.9)	-0.3 (0.9)	0.97
Health Insurance	13.5 (0.5)	14.1 (0.5)	-0.6 (0.6)	0.97
Mail	7.7 (0.5)	8.3 (0.5)	-0.6 (0.7)	0.99
Internet	19.6 (0.8)	19.8 (0.9)	-0.2 (1.0)	0.97
Vision and Hearing	12.8 (0.5)	13.3 (0.5)	-0.5 (0.6)	0.97
Mail	6.9 (0.5)	7.2 (0.4)	-0.3 (0.6)	0.99
Internet	19.0 (0.8)	19.3 (0.8)	-0.3 (1.0)	0.97
Disability	12.8 (0.5)	13.7 (0.4)	-0.9 (0.6)	0.97
Mail	8.6 (0.5)	9.2 (0.4)	-0.6 (0.7)	0.99
Internet	17.4 (0.7)	18.2 (0.8)	-0.8 (1.0)	0.97
Veteran Status	13.1 (0.4)	13.4 (0.5)	-0.4 (0.6)	0.97
Mail	9.8 (0.5)	10.2 (0.5)	-0.4 (0.7)	0.99
Internet	16.9 (0.7)	16.9 (0.8)	> -0.1 (0.9)	0.97

Source: U.S. Census Bureau, American Community Survey, 2015 "Why We Ask" Mail Package Insert Test
Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses. Significant at α=0.1.
† We adjusted the raw p-values to control for the familywise error rate across all Treatment 1/Treatment 2 comparisons in the same mode using the Hochberg procedure (Hochberg, 1988).

Further person topics pertaining to employment and wages are in the following table.

Table 13: Person-Level Item Nonresponse Rates for Employment and Income, Treatment 1 (Insert with Guide) versus Treatment 2 (Insert without Guide)

Topic / Mode	Treatment 1	Treatment 2	Difference	Adjusted P-value†
Work Last Week	11.7 (0.4)	12.0 (0.4)	-0.3 (0.6)	0.97
Mail	7.4 (0.4)	8.0 (0.5)	-0.5 (0.7)	0.99
Internet	16.6 (0.7)	16.3 (0.8)	0.3 (0.9)	0.97
Transportation To Work	3.0 (0.2)	2.9 (0.2)	0.2 (0.3)	0.97
Mail	3.5 (0.4)	2.7 (0.4)	0.7 (0.6)	0.99
Internet	2.6 (0.3)	3.0 (0.3)	-0.4 (0.4)	0.97
Time of Departure for Work	13.3 (0.5)	12.9 (0.6)	0.4 (0.8)	0.97
Mail	10.7 (0.6)	10.1 (0.8)	0.5 (1.0)	0.99
Internet	15.8 (0.7)	15.1 (0.8)	0.7 (1.1)	0.97
Occupation	9.5 (0.4)	9.4 (0.4)	0.1 (0.5)	0.97
Mail	11.4 (0.6)	10.1 (0.5)	1.3 (0.6)	0.99
Internet	7.6 (0.6)	8.8 (0.5)	-1.2 (0.8)	0.97
Wages	9.4 (0.4)	9.0 (0.4)	0.4 (0.5)	0.97
Mail	12.8 (0.6)	12.0 (0.6)	0.8 (0.9)	0.99
Internet	6.2 (0.5)	6.4 (0.4)	-0.2 (0.5)	0.97

Source: U.S. Census Bureau, American Community Survey, 2015 "Why We Ask" Mail Package Insert Test
Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses. Significant at α=0.1.
† We adjusted the raw p-values to control for the familywise error rate across all Treatment 1/Treatment 2 comparisons in the same mode using the Hochberg procedure (Hochberg, 1988).

At the 0.1 level of significance, no significant differences were found between the Treatment 1 and Treatment 2 item nonresponse rates for person-level topics.

4.3. Cost Analysis

In this section, we answer the following research question: *What was the relative cost impact of the experimental treatments?*

We compared the relative cost difference between Treatment 1 and the Control and Treatment 2 and the Control to determine if either treatment would result in meaningful cost savings for the ACS program. With equal response rates, including the "Why We Ask" insert while retaining the Instruction Guide (Treatment 1) is a more expensive method, due to the additional cost of printing the "Why We Ask" insert. The only potential cost savings that could have been expected from this treatment would be an effect of higher self-response rates, which would lessen the cost of the nonresponse follow-up activities. With equal response rates, including the "Why We Ask" insert and excluding the Instruction Guide (Treatment 2) results in less expenditures, due to savings in both printing and postage.

Neither Treatment 1 nor Treatment 2 had significantly different self-response rates from the Control. Any cost savings or increased expenditures from these treatments are a result of the mail

collection operation. Therefore, the only relevant cost factors to take into account are the printing and postage costs. This report assumes that the cost of printing and postage are static relative to the 2015 costs.

4.3.1. Printing

The Census Bureau has contracts established with printers that dictate the cost of printing all mail materials for the ACS. Each contract specifies a fixed cost for each print run as well as a variable cost for each copy printed. For the ACS, the Census Bureau typically prints materials three times per year and orders five percent extra volume to account for spoilage during assembly. Table 14 details the projected annual cost related to the "Why We Ask" insert and the Instruction Guide.

As mentioned in the assumptions section of this report, we assume that the monthly cost of printing the "Why We Ask" insert can be extrapolated to the yearly cost. However, this analysis does not take into account the per-unit cost savings that would be associated with larger quantities of printing for production, so the costs documented in Table 14 for the "Why We Ask" insert represent the most expensive annual printing costs. The per-unit cost savings associated with larger quantities of printing would result in less expenditures.

Table 14: ACS Annual Printing Costs Associated with the "Why We Ask" Insert and Instruction Guide

Enclosure	Fixed Costs	Variable Costs	Total Cost
"Why We Ask" Insert	$4,905	$92,738	$97,643
Instruction Guide	$8,600	$292,635	$301,235

Source: U.S. Census Bureau, American Community Survey, 2015 "Why We Ask" Mail Package Insert Test

4.3.2. Postage

Table 15 outlines the projected annual cost savings from postage for eliminating the Instruction Guide. While the ACS questionnaire mail package meets the USPS size restrictions to be mailed as a letter, the package does not meet the weight restrictions, and so it must be mailed as a more-expensive flat. For flats, the USPS charges an extra $0.218 for each ounce over 3.5 ounces for first-class postage. The "Why We Ask" insert does not weigh enough to impact the postage of the replacement package. The Instruction Guide, however, weighs enough that removing it reduces the package weight such that the total package moves down a weight class. This creates a savings of $0.218 per mailed package.

Table 15: ACS Annual Postage Cost Savings Associated with Removing the "Why We Ask" Insert and the Instruction Guide

Enclosure	Projected Mailed Questionnaire Packages	Cost Savings Per Package	Total Postage Savings
"Why We Ask" Insert	2,850,995	$0	$0
Instruction Guide	2,850,995	$0.218	$621,517

Source: U.S. Census Bureau, American Community Survey, 2015 "Why We Ask" Mail Package Insert Test

4.3.3. Total Cost Difference between the Control and the Test Treatments

Based on the cost of printing and postage as detailed above, we project that Treatment 1 would result in an additional cost of $97,643 or 0.04 percent of the FY2016 ACS budget of $232.6M. Treatment 2 would result in a total cost savings of $825,109 or around 0.35 percent. All of the cost savings for Treatment 2 are due to the removal of the Instruction Guide, which ACS has decided to remove based on the results of the 2015 Replacement Mail Questionnaire Package Test.

There is also a potential positive impact of the "Why We Ask" insert on the number of calls to TQA. The insert could lead to more informed respondents, which could lead to a decrease in the number of TQA calls. This would reduce costs. We looked at the number of TQA calls for each treatment in this test, but the sample was too small to make any conclusions.

5. Conclusion

The results of this analysis show no evidence that the experimental paper questionnaire package treatments had an impact, positive or negative, on unit self-response. The results also do not show conclusive evidence of a difference in form completeness or item nonresponse in the comparisons of interest. We note that this test might not have had enough power to detect differences that do exist between treatments.

The paper questionnaire package used in Treatment 1 would cost more money to implement than the current package (the control), due to the cost of printing the additional Why We Ask insert. The paper questionnaire package used in Treatment 2 would cost less money than the control package, due to the removal of the Instruction Guide and associated printing and postage savings. The addition of the Why We Ask insert to Treatment 2 would add some printing cost, but the printing and postage savings from removal of the Instruction Guide have a larger impact.

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Attachment A. New ACS-8(X) "Why We Ask" Insert

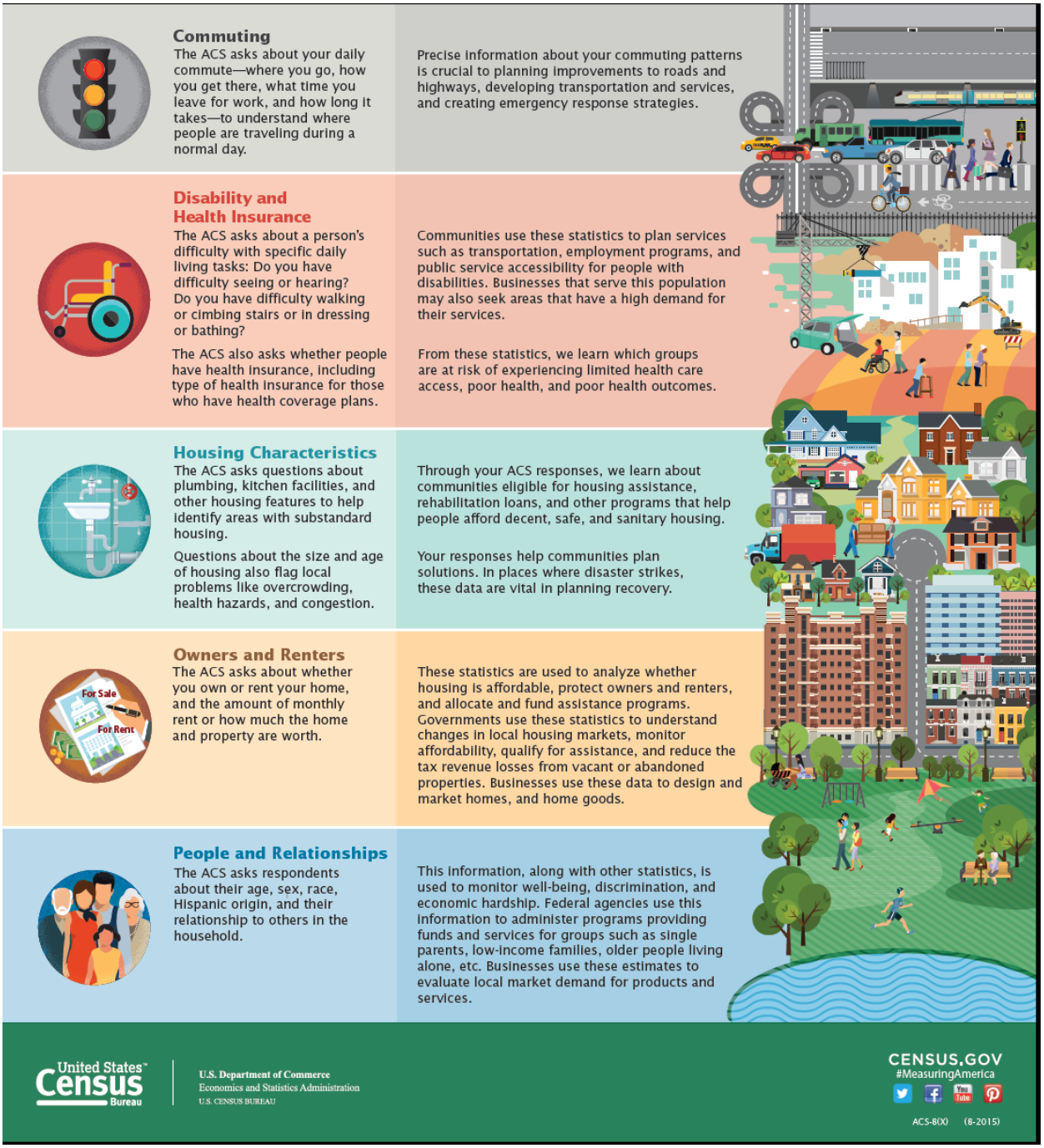
United States Census Bureau

How Your Responses Help America

The American Community Survey (ACS) provides vital information that public officials, planners, and entrepreneurs use to assess the past and plan the future. When you respond to the ACS, you are doing your part to help your community plan hospitals, support school lunch programs, improve emergency services, build bridges, and inform businesses looking to add jobs and expand to new markets, and more. Respond at **https://respond.census.gov/acs** or fill out the questionnaire today.

What we ask about...	How your responses help...
Employment The ACS asks whether respondents are employed, unemployed, and out of the labor force. It also asks about weeks and hours worked and about industry and occupation.	This information helps government at all levels better understand unemployment and the availability of workers, plan unemployment programs and services, and develop programs to boost employment. Communities learn which occupations and industries are growing in their areas and businesses can find locations with the workforce they need.
Education The ACS asks about school enrollment, gathering information on America's students from nursery school to graduate school and on whether they are in a private or public school. It also asks about educational attainment —did the respondent earn a high school diploma or the equivalent, a bachelor's degree, or higher?	These statistics help communities to measure how well educational resources are serving their populations, measure changes in education over time, evaluate the educational attainment of the workforce, and identify the educational and training needs of adults. This information also helps communities to bridge gaps between the educational attainment of potential workers and the educational requirements of potential employers.
Veterans The ACS asks about a person's military service, where veterans are moving throughout the country, their ages, and their VA service -connected disability rating status to understand veterans' needs at the community level. Though the Department of Veterans Affairs (VA) maintains veterans' records, the ACS provides additional statistics about all veterans, regardless of whether they utilize VA services.	These statistics about veterans help communities plan for future health care and nursing homes, plan and fund job training, and improve the home loan guarantee program. They also benefit businesses looking to hire or serve veterans.
Income and Housing Costs The ACS asks several questions about the money you receive from various sources and your regular living expenses such as rents, mortgages, taxes, and utilities.	The statistics that result from these questions help gauge the need for economic and housing assistance. How many people live in poverty, what are their characteristics—the ACS is the only source of these data at the community level. Income and poverty estimates factor into funding requests that address need. When combined with income, selected monthly owner costs provide an excellent measure of affordability and excessive shelter costs.

Attachment A. New ACS-8(X) "Why We Ask" Insert (continued)



Attachment B. ACS-30 Instruction Guide

United States Census Bureau

Your Guide for

THE American Community Survey

This guide gives helpful information on completing your survey form. If you need more help, call 1–800–354–7271. The telephone call is free. After you have completed your survey form, **please return it in the postage-paid envelope** we have provided.

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

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Your Answers are Confidential and Required by Law

The law, Title 13, Sections 9, 141, 193, and 221 of the U.S. Code, authorizing the American Community Survey, also provides that your answers are confidential. No one except Census Bureau employees may see your completed form and they can be fined and/or imprisoned for any disclosure of your answers.

The same law that protects the confidentiality of your answers **requires** that you provide the information asked in this survey to the best of your knowledge.

Attachment B. ACS-30 Instruction Guide (continued)

How to Fill Out the American Community Survey Form

Use blue or black ink to complete the form. Please mark the category or categories as they apply to your household. Some questions ask you to print the information. See **examples** below.

Make sure you answer questions for each person in this household. If anyone in the household, such as a roomer or boarder, does not want to give you his or her personal information, print at least the person's name and answer questions **2** and **3**. **An interviewer may telephone to get the information from that person.**

There may be a question you cannot answer exactly. For example, you may not know the age of an older person or the price for which your house would sell. Ask someone else in your household. If no one knows, give your best estimate.

Read these instructions and also follow the instructions provided throughout the questionnaire. These instructions will help you understand the questions and to answer them correctly. If you need assistance, call **1–800–354–7271**. The telephone call is free.

Examples of Printed and Marked Entries

Instructions for Completing the Survey Questions

List the name of each person who lives at this address. If you are not sure if you should list a person, see the guidelines on the front page of the form. If you are still not sure, call **1–800–354–7271** for help.

In the space labeled **Person 1**, print the name of the household member living or staying here in whose name the house or apartment is owned, being bought, or rented.

If there is no such person, any adult household member can be **Person 1.**

If there are more than 5 people in your household, please provide the name of each additional person on page 4. For each additional person listed on page 4, you should also provide this person's sex and age. Complete this form for the first five people listed on pages 2, 3, and 4, and mail it back in the enclosed envelope as soon as possible. An interviewer may telephone to obtain information for the additional persons.

If no one is living or staying at this address for more than 2 months, complete questions **1, 2, 4, 6, 7,** and **8** on page 5. If the home is for rent or rented, but not yet occupied, also complete question **18** on page 7. If the home is for sale only or sold, but not yet occupied, also complete question **19** on page 7.

Answer person questions 1 through 6 for the first five people listed on pages 2, 3, and 4 of the questionnaire.

1. Print the person's Last Name, First Name, and Middle Initial (MI) in the spaces provided.

2. If the person is related to Person 1 by birth, marriage, or adoption, but is not the **"Husband or wife," "Biological son or daughter," "Adopted son or daughter," "Stepson or stepdaughter," "Brother or sister," "Father or mother," "Grandchild," "Parent-in-law," "Son-in-law or daughter-in-law,"** of Person 1, mark the **"Other relative"** box. Therefore, a niece or nephew of Person 1 would be categorized as **"Other relative."**

   If a person **is not** related to Person 1, mark the applicable box. A **"Roomer or boarder"** is someone who occupies room(s) and makes cash or non-cash payment(s). A **"Housemate or roommate"** is someone sharing the house/apartment (but who is not romantically involved) with Person 1. A **"Housemate or roommate"** is also 15 years old or over and shares living quarters primarily to share expenses. An **"Unmarried partner,"** also known as a domestic partner, is a person who shares a close personal relationship with Person 1. A **"Foster child"** is someone under the age of 21 who is involved in the formal foster care system. For all other people who are not related to person 1, mark the **"Other nonrelative"** box.

3. Mark one box to indicate this person's biological sex.

4. For each person, print this person's age and month, day, and year of birth. Print the age at the last birthday. Do not round the age up if this person is close to having a birthday. If the exact age is not known, provide an estimate. Print "0" for babies less than 1 year old.

Please answer BOTH question 5 about Hispanic origin and question 6 about race. For this survey, Hispanic origins are not races.

5. A person is of Hispanic, Latino, or Spanish origin if the person's origin (ancestry) is Mexican, Mexican American, Chicano, Puerto Rican, Cuban, Argentinean, Colombian, Costa Rican, Dominican, Ecuadorian, Guatemalan, Honduran, Nicaraguan, Peruvian, Salvadoran, from other Spanish-speaking countries of Central or South America or from Spain.

   The term *Mexican Am.* refers to persons of Mexican-American origin or ancestry.

   If you mark the **"Yes, another Hispanic, Latino, or Spanish origin"** box, print the name of the specific origin.

   If a person is not of Hispanic, Latino, or Spanish origin, answer this question by marking the **"No, not of Hispanic, Latino, or Spanish origin"** box.

   This question should be answered for **all** persons.

6. Mark all boxes for the appropriate races.

   The concept of race, as used by the Census Bureau, reflects self-identification by individuals according to the race or races with which they identify.

   The instruction before question **5**, *For this survey, Hispanic origins are not races,* reflects the federal government's treatment of Hispanic origin and race as separate and distinct concepts. People who identify their origin as Hispanic, Latino, or Spanish may be of any race.

   People may choose to provide two or more races either by marking two or more race response boxes, by providing multiple write-in responses, or by some combination of marking boxes and writing in responses.

   If you mark the **"American Indian or Alaska Native"** box, print the name of the person's enrolled or principal tribe(s) in the space provided (for example, Navajo Nation, Blackfeet Tribe, Muscogee (Creek) Nation, Mayan, Doyon, Native Village of Barrow Inuplat Traditional Government, and so on).

Attachment B. ACS-30 Instruction Guide (continued)

If you mark the **"Other Asian"** box, print the name of the specific Asian group(s) in the space provided (for example, Pakistani, Cambodian, Hmong, Thai, Laotian, Bangladeshi, and so on).

If you mark the **"Other Pacific Islander"** box, print the name of the specific Pacific Islander group(s) in the space provided (for example, Tongan, Fijian, Marshallese, Palauan, Tahitian, Papua New Guinean, and so on).

If you mark the **"Some other race"** box, print the specific group(s) in the space provided.

This question should be answered for **all** persons.

Answer housing questions 1 through 24 for the house, apartment, or mobile home at the address on the mailing label.

1. Mark only one category.

Count both occupied and vacant apartments in the house or building. Do not count stores or office space.

Detached means there is open space on all sides, or the house is joined only to a shed or garage. *Attached* means that the house is joined to another house or building by at least one wall that goes from ground to roof. An example of **"A one-family house attached to one or more houses"** is a house in a row of houses attached to one another, sometimes referred to as a townhouse.

A mobile home that has had one or more rooms added or built onto it should be considered as **"A one-family house detached from any other house."** If only a porch or shed has been added to a mobile home, it should be considered as a mobile home.

Towable RVs, such as travel trailers or fifth-wheel trailers, should be considered as **"A mobile home."** Self-propelling RVs or motorhomes should be considered as a **"Boat, RV, van, etc."**

2. Mark the box that corresponds to the year in which the original construction was completed, not the time of any later remodeling, additions, or conversions.

If the building was first built in 2000 or later, enter the exact year it was built.

If you live on a boat or in a mobile home, enter the year corresponding to the model year in which it was manufactured.

If you do not know the year the building was first built, give your best estimate.

3. Enter the month and year that **Person 1** listed on page 2 last moved into this house, apartment, or mobile home.

4. Complete this question if you live in a one-family house or in a mobile home; include only land that you own or rent.

The number of acres is the acreage on which the house or mobile home is located; include adjoining land you rent for your use.

6. Complete this question if you live in a one-family house or mobile home. A *business*, such as a grocery store or barber shop, is easily recognized from the outside and usually has a separate entrance. A *medical office* is a doctor's or dentist's office regularly visited by patients.

7b. Include all rooms intended to be used as bedrooms in this house, apartment, or mobile home, even if they are currently being used for other purposes.

Enter "0" for an efficiency or studio apartment that does not have a separate bedroom. Your response to question **7b** should be smaller than the number of rooms reported in question **7a.**

8a. Mark **"Yes"** to **"hot and cold running water"** even if the unit has hot water only part of the time.

8d. Mark **"Yes"** to **"sink with a faucet"** if the sink is inside the house, apartment or mobile home and the water can be turned on and off with a faucet.

8e. Mark **"Yes"** to **"a stove or range"** if the stove or range is inside the house, apartment or mobile home. Portable cooking equipment is not considered a stove or range.

8g. Mark **"Yes"** to **"telephone service ..."** if (1) there is a telephone in working order, and someone receives service at this house, apartment, or mobile home; or (2) if someone has a cell phone from which you can both make and receive calls. If service has been discontinued because of nonpayment or any other reason, mark the **"No"** box.

9. Mark the **"Yes"** or **"No"** box for each part of question **9.**

DO NOT include devices such as portable book readers, internet movie players, portable gaming devices, and other devices with limited computing capabilities.

"Desktop, laptop, netbook, or notebook computer" are types of computers that operate primarily with a keyboard.

"Handheld computer, smart mobile phone, or other handheld wireless computer" are types of computers that can be used by holding in one hand. Some handheld computers, such as smartphones, are able to make phone calls while others cannot.

"Some other type of computer" are devices with advanced capabilities, such as tablet computers. These devices often feature "touch screen" operations and have applications that allow them to function like a desktop or a laptop computer.

10. Mark only one box.

Access to the internet ***with a subscription to an Internet service*** includes any service that any member of the household obtains directly through a contract agreement with an Internet service provider, or through payments to a landlord, the government, or someone else. Access to the Internet ***without a subscription to an Internet service*** includes services that do not require an account or contract agreement.

11. Mark the **"Yes"** or **"No"** box for each part of question **11.**

"Dial-up service" is a type of Internet service that uses a regular telephone line to connect to the Internet. **"DSL service"** is a broadband Internet service that uses a regular telephone line and, unlike dial-up, allows users to be online and use the phone at the same time. **"Cable modem service"** is a broadband Internet service that uses a cable TV line. **"Fiber-optic service"** is a broadband Internet service that uses a fiber-optic line. **"Mobile broadband plan for a computer or a cell phone"** include wireless broadband Internet service that can be accessed through a portable modem in a computer or cell phone. **"Satellite Internet service"** is a broadband Internet service that uses a satellite dish.

12. Include company cars, vans or SUVs (including police cars and taxicabs) and company trucks of one-ton (2,000 pounds) capacity or less that are regularly kept at home and are used by household members for nonbusiness purposes. **DO NOT** count (1) cars or trucks permanently out of working order, or (2) motorcycles or other recreational vehicles.

13. Mark **one** category for the fuel used **MOST** to heat this house, apartment, or mobile home. In buildings containing more than one apartment, you may obtain this information from the owner, manager, or janitor.

"Solar energy" is provided by a system that collects, stores, and distributes heat from the sun. **"Other fuel"** includes any fuel not listed separately, such as purchased steam, fuel briquettes, and waste material.

Attachment B. ACS-30 Instruction Guide (continued)

14a–14d.

If your house, apartment, or mobile home is rented, enter the costs for utilities and fuels **only if you pay for them in addition to the monthly rent.**

If you live in a condominium, enter the costs for utilities and fuels **only if you pay for them in addition to your condominium fee.**

If your fuel and utility costs are included in your rent or condominium fee, mark the **"Included in rent or condominium fee"** box. **DO NOT** enter any dollar amounts.

For items **14a** and **14b**, report **LAST MONTH'S costs.** For items **14c** and **14d**, report total costs for the **PAST 12 MONTHS.**

Estimate as closely as possible if you do not know exact costs. If you have lived in this house, apartment, or mobile home less than one year, estimate the costs for the **PAST 12 MONTHS** in **14c** and **14d.**

Report amounts even if your bills are unpaid or paid by someone else. If the bills include utilities or fuel used also by another apartment or a business establishment, estimate the amounts for your house or apartment only. If gas and electricity are billed together, enter the combined amount in **14a** and mark the **"Included in electricity payment entered above"** box in **14b.**

15. On October 1, 2008, the federal Food Stamp Program was renamed SNAP (Supplemental Nutrition Assistance Program). Some states may have their own specific name for this program. If you or any member of this household received benefits from the government to buy food for your family using a benefit card, mark the **"Yes"** box.

16. A *condominium* is housing in which the apartments, houses, or mobile homes in a building or development are individually owned, but the common areas, such as lobbies and halls, are jointly owned. Occupants of a cooperative should mark the **"No"** box.

A *condominium fee* is normally assessed by the condominium owners' association for the purpose of improving and maintaining the common areas. Enter a monthly amount even if it is unpaid or paid by someone else. If the amount is paid on some other periodic basis, see the instruction for question **18a** on how to change it to a monthly amount.

17. Housing is owned if the owner or co-owner lives in it.

If the house, apartment, or mobile home is mortgaged or there is a contract to purchase, mark the **"Owned by you or someone in this household with a mortgage or loan? *Include home equity loans.*"** box. If there is no mortgage or other debt, mark the **"Owned by you or someone in this household free and clear (without a mortgage or loan)?"** box. If the house, apartment, or mobile home is *owned* but the land is rented, mark one of the *owned* categories. If the mobile home is owned without an installment loan, but there is a mortgage on the land, mark the **"Owned by you or someone in this household with a mortgage or loan? *Include home equity loans.*"** box.

If any money rent is paid, even if the rent is paid by people who are not members of your household, or paid by a federal, state, or local government agency, mark the **"Rented?"** box.

If the unit is **not** owned or being bought by a member of this household and if money rent is **not** paid or contracted, mark the **"Occupied without payment of rent?"** box. The unit may be owned by friends or relatives who live elsewhere and who allow you to occupy this house, apartment, or mobile home without charge. A house or apartment may be provided as part of wages or salary. Examples are: caretaker's or janitor's house or apartment; parsonages; tenant farmer or sharecropper houses for which the occupants do not pay rent; or military housing.

18a. Report the rent agreed to or contracted for, even if the rent for your house, apartment, or mobile home is unpaid or paid by someone else.

If rent is paid:	Multiply rent by:	If rent is paid:	Divide rent by:
By the day	30	4 times a year	3
By the week	4	2 times a year	6
Every other week	2	Once a year	12

18b. If meals are included in the monthly rent payment, or you must contract for meals or a meal plan in order to live in this house, apartment, or mobile home, mark the **"Yes"** box.

Answer Housing questions 19 through 23 if you or any member of this household owns or is buying this house, apartment, or mobile home.

19. Enter your best estimate of the value of the property; that is, how much you think the property would sell for if it were on the market. If this is a house, include the value of the house, the land it is on, and any other structures on the same property. If the house is owned but the land is rented, estimate the combined value of the house and the land. If this is a condominium unit, estimate the value for the condominium, including your share of the common elements. If this is a mobile home, include the value of the mobile home **and the value of the land only if you own the land.**

20. Report taxes for all taxing jurisdictions (city or town, county, state, school district, etc.) even if they are included in your mortgage payment, not yet paid or paid by someone else, or are delinquent. **DO NOT** include taxes past due from previous years.

21. When premiums are paid other than on a yearly basis, convert to a yearly basis. Enter the yearly amount even if no payment was made during the past year.

22a. *Mortgages* includes all types of loans secured by real estate, including reverse mortgages.

22b. Enter a monthly amount even if it is unpaid or paid by someone else. If the amount is paid on some other periodic basis, see the instructions for **18a** to change it to a monthly amount.

Include payments on first mortgages and contracts to purchase only. Report payments for second or junior mortgages and home equity loans in **23b.**

If there is a reverse mortgage, mark the **"No regular payment required"** box.

If this is a mobile home, report payments on installment loans but **do not** include personal property taxes, site rent, registration fees, and license fees on the mobile home and site. Report these fees in item **24.**

23a. A *second mortgage* or *home equity loan* is also secured by real estate. You must have a first mortgage in order to have a second mortgage. You may have a home equity loan and other mortgages on the property or the home equity loan may be the only mortgage.

23b. Enter the monthly amount even if it is unpaid or paid by someone else. If the amount is paid on some other periodic basis, see instructions for **18a** to change it to a monthly amount. Include payments on all second or junior mortgages or home equity loans.

Answer Housing question 24 if this is a mobile home that you own or are buying.

24. Report an amount even if your bills are unpaid or are paid by someone else.

Include payments for personal property taxes, land or site rent, registration fees and license fees. **DO NOT** include real estate taxes already reported in **20.** Report the total annual amount even if you make payments in two or more installments. Estimate as closely as possible if you don't know exact costs.

Attachment B. ACS-30 Instruction Guide (continued)

Answer Person questions 7 through 17 for all persons on pages 2, 3, and 4.

Questions **7 – 48** are a continuation of the questions for each person. (Questions **1 – 6** appear on pages 2, 3, and 4 of the questionnaire.)

7. *For people born in the United States:*

Mark the **"In the United States"** box and then print the name of the state in which the person was born. If the person was born in Washington, D.C., print "District of Columbia."

For people born outside the United States:

Mark the **"Outside the United States"** box, and then print the name of the foreign country or Puerto Rico, Guam, etc. where the person was born. Use current boundaries, not boundaries at the time of the person's birth. For example, specify Czech Republic or Slovakia, not Czechoslovakia; North or South Korea, not Korea. Specify the particular country, not region. For example, specify Jamaica, not West Indies; Kenya, not East Africa.

8. If the person was born in the United States (50 states and the District of Columbia), mark the **"Yes, born in the United States"** box. If the person was born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas, mark the **"Yes, born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas"** box. Although not listed, if the person was born in American Samoa, mark **"Yes, born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas"** box. If the person was born outside the United States (50 states and the District of Columbia) or at sea and had at least one parent who was a U.S. citizen at the time of the person's birth, mark the **"Yes, born abroad of U.S. citizen parent or parents"** box. Mark the **"Yes, U.S. citizen by naturalization"** box only if this person was born outside the United States (50 states and the District of Columbia) and has completed the naturalization process and is now a United States citizen. In the box below *"Print year of naturalization,"* enter the four-digit year this person completed the formal naturalization process. If this person is not a U.S. citizen, mark the **"No, not a U.S. citizen"** box. Legal Permanent Residents (LPRs) or "green card" holders, or other non-naturalized immigrants or visitors to the U.S. are not citizens of the United States and therefore should mark the **"No, not a U.S. citizen"** box.

10a. A *public school* is any school or college that is supported and controlled primarily by a local, county, state, or federal government. Schools are *private* if supported and controlled primarily by religious organizations or other private groups. *Home school* applies to parental guided education outside of a public or private school for grades 1–12.

10b. Only record grades that the person attended in the **LAST 3 MONTHS**. If this is currently a summer month, do not record grades the person will attend in the future.

11. **Mark only ONE box** to indicate the highest grade or level of schooling the person has **COMPLETED** or the **highest degree** the person received.

Report schooling completed in foreign or ungraded schools as the equivalent level of schooling in the regular American school system.

Mark the **"GED or alternative credential"** box for persons who did not receive a regular high school diploma but completed high school by receiving a GED or other formal recognition of high school completion from a school or governmental authority.

If the person has not completed any college courses for credit, mark the highest level completed below the college level. If the person has not completed enough credit to be counted as a sophomore, mark the **"Some college credit, but less than 1 year of college credit"** box.

For the **"Professional degree beyond a bachelor's degree"** category, **do not** include certificates or diplomas for training in specific trades or occupations such as computer and electronics technology, medical assistant, or cosmetology. **DO NOT** include post-bachelor's certificates that are related to occupational training in such fields as teaching, accounting, or engineering.

12. Answer this question only if the person has a bachelor's degree or higher and print the specific major of this person's **BACHELOR'S DEGREE**. If this person has more than one bachelor's degree or more than one major, print the names of the specific majors for all of this person's bachelor's degree(s).

13. Print the ancestry group(s). *Ancestry* refers to the person's ethnic origin or descent, "roots," or heritage. *Ancestry* may also refer to the country of birth of the person or the person's parents or ancestors before their arrival in the United States. Answer this question for **all** persons, regardless of race, Hispanic origin, or place of birth.

Do not report a religious group as a person's ancestry.

A person may report two ancestry groups (for example: German, Irish).

14a. Mark the **"Yes"** box if the person sometimes or always speaks a language other than English at home.

Mark the **"No"** box if the person speaks only English, or if a non-English language is spoken only at school or is limited to a few expressions or slang.

14b. If this person speaks more than one non-English language and cannot determine which is spoken more often, report the one the person first learned to speak.

15a. If the person did not live in the United States or Puerto Rico one year ago, mark the **"No, outside the United States and Puerto Rico"** box and print the name of the foreign country, or U.S. Virgin Islands, Guam, etc., where the person lived. Be specific when printing the name of the foreign country; for example, specify Czech Republic or Slovakia, not Czechoslovakia; North or South Korea, not Korea. Specify the particular country, not region. For example, specify Jamaica, not West Indies; Kenya, not East Africa. Then **SKIP** to question **16.**

If the person lived somewhere else in the United States or Puerto Rico one year ago, mark the **"No, different house in the United States or Puerto Rico"** box.

15b. Include the house or structure number; street name; street type (for example, St., Road, Ave.); and the street direction (if a direction such as "North" is part of the address). For example, print 1239 N. Main St. or 1239 Main St., N.W., not just 1239 Main. If the person lived in Puerto Rico, the address should also include the name of the development or condominium.

If the only known address is a post office box, give a description of the residence location. For example, print the name of the building where the person lived, the nearest intersection, the name of a military base or installation, or the nearest street where the residence was located, etc. **DO NOT** give a post office box number.

Print the name of the U.S. county or the name of the municipio in Puerto Rico. If the person lived in Louisiana, print the parish name in the **"Name of U.S. county or municipio in Puerto Rico"** space. If the person lived in Alaska, print the borough or census area name, if known. If the person lived in New York City and the county name is not known, print the borough name. If the person lived in an independent city (not in any county) or in Washington, D.C., leave the **"Name of U.S. county or municipio in Puerto Rico"** space blank.

16. Mark the **"Yes"** or **"No"** box for each part of question **16.**

If the person reports any other type of coverage plan in **16h**, specify the type of coverage or name of the plan in the write-in box. **DO NOT** include plans that cover only one type of health care (such as dental plans) or plans that only cover a person in case of an accident or disability.

Attachment B. ACS-30 Instruction Guide (continued)

Answer Person questions 18a through 18c if this person is 5 years old or over.

18a–18c.

Mark the **"Yes"** or **"No"** box to indicate if the person has serious difficulty with any of the activities listed in parts a, b, and c because of a physical, mental, or emotional condition.

Answer Person questions 19 through 48 if this person is 15 years old or over.

20. Mark the **"Now married"** box for a married person regardless of whether his or her spouse is living in the household unless they are separated. If the person's only marriage was annulled, mark the **"Never married"** box. Mark the **"Divorced"** box only if the person has received a divorce decree.

21c. Mark the **"Yes"** box only if the person has received a divorce decree in the **PAST 12 MONTHS.**

22. Do not count marriages that ended in annulment.

23. Enter the four-digit year when the person last got married, even if the person is now widowed, divorced, or separated.

Answer question 24 if this person is female and is 15–50 years old.

24. Mark the **"Yes"** box if the person has given birth to at least one child born alive in the **past 12 months**, even if the child died or no longer lives with the mother. Do not consider miscarriages, or stillborn children, or any adopted, foster, or stepchildren.

26. *Active duty* means full-time service, other than active duty for training as a member of the Army, Navy, Air Force, Marine Corps, Coast Guard, or as a commissioned officer of the Public Health Service or the National Oceanic and Atmospheric Administration, or its predecessors, the Coast and Geodetic Survey or Environmental Science Service Administration. *Active duty* also applies to a person who is a cadet attending one of the five United States Military Service Academies. For a person with service in the military Reserves or National Guard, mark the **"Only on active duty for training in the Reserves or National Guard"** box if the person has never been called up for active duty, mobilized, or deployed. For a person whose only service was as a civilian employee or civilian volunteer for the Red Cross, USO, Public Health Service, or War or Defense Department, mark the **"Never served in the military"** box. For Merchant Marine service, count only the service during World War II as active duty and no other period of service.

27. Mark as many responses as apply.

28a. Mark the **"Yes"** box if the person has a Department of Veterans Affairs (VA) service-connected disability rating.

28b. Mark the **"0 percent"** box if the person has received a service-connected disability rating of zero. **DO NOT** mark the box showing **"0 percent"** to indicate no rating.

29a–29b.

Count as work – Mark the ***"Yes"*** *box if this person performed:*

- Work for someone else for wages, salary, piece rate, commission, tips, or payments "in kind" (for example, food or lodging received as payment for work performed).
- Work in own business, professional practice, or farm.
- Any work in a family business or farm, paid or not.
- Any part-time work including babysitting, paper routes, etc.
- Active duty in the Armed Forces.

Do not count as work – Mark the ***"No"*** *box if this person's activities were limited to the following:*

- Housework or yard work at home.
- Unpaid volunteer work.
- School work done as a student.
- Work done as a resident or inmate of an institution facility (like a nursing facility or correctional facility).

30. Include the building or structure number; street name; street type (for example, St., Road, Ave.); and the street direction (if a direction such as "North" is part of the address). For example, print 1239 N. Main St. or 1239 Main St., N.W., not just 1239 Main.

If the only known address is a post office box, give a description of the work location. For example, print the name of the building or shopping center where the person works, the nearest intersection, or the nearest street where the workplace is located, etc. **DO NOT give a post office box number.**

If the person worked at a military installation or military base that has no street address, report the name of the military installation or base, and a description of the work location (such as building number, building name, nearest street or intersection).

If the person worked at several locations, but reported to the same location each day to begin work, print the street address of the location where he or she reported. If the person did not report to the same location each day to begin work, print the address of the location where he or she worked most of the time last week.

If the person's employer operates in more than one location (such as a grocery store chain or public school system), print the street address of the location or branch where the person worked. If the street address of a school is not known, print the name of the school, and a description of the location (such as nearest street or intersection).

If the person worked on a college or university campus and the street address of the workplace is not known, print the name of the building where he or she worked, and a description of the location (such as nearest street or intersection).

If the person worked in a foreign country or Puerto Rico, Guam, etc., print the name of the country or the state or foreign country line.

31. Mark only one box to indicate the method of transportation used to travel the **longest distance** to work **LAST WEEK.**

- Mark the **"Car, truck, or van"** box if the person drove a station wagon, company car, light truck of 1-ton capacity or less, truck cab, mini bus, or private limousine (NOT for hire).
- Mark the **"Streetcar or trolley car"** box if the person took light rail or other vehicle that operates on tracks or rails with overhead electrical wires.
- Mark the **"Subway or elevated"** box if the person took a subway, or other vehicle that operates on tracks or rails with complete separation from other vehicle and pedestrian traffic.
- Mark the **"Railroad"** box if the person took Amtrak, or any other commuter train with occasional railroad crossings for vehicle and pedestrian traffic.
- Mark the **"Taxicab"** box if the person took a limousine such as an airport limousine for which a fare is charged.
- Mark the **"Motorcycle"** box if the person rode a motorbike, moped, motor scooter, or similar vehicle that is motor driven.
- Mark the **"Bicycle"** box if the person rode a bicycle or other vehicle that is pedaled.
- Mark the **"Walked"** box ONLY if the person walked all the way to work and used no other means of transportation.
- Mark the **"Worked at home"** box if the person worked on a farm where he/she lives, or an office or shop in the person's own home.
- Mark the **"Other method"** box if the person took an airplane, helicopter, horse, horse and buggy, boat (other than public ferries), large motor home, dog sled, large truck or truck rig, All-Terrain Vehicle (ATV), snow machine/snowmobile, Segway® or other self-balancing electric vehicle, skateboard, inline skates, or motorized chair.

Attachment B. ACS-30 Instruction Guide (continued)

Answer Person question 32 if you marked "Car, truck, or van" in question 31.

32. If the person was driven to work by someone who then drove back home or to a non-work destination, enter "1" in the box labeled **"Person(s)"**.

DO NOT include persons who rode to school or some other non-work destination in the count of persons who rode in the vehicle.

33. Give the time of day the person usually **left home to go to work. DO NOT** give the time that the person usually began his or her work.

If the person usually left home to go to work sometime *between 12:00 o'clock midnight and 12:00 o'clock noon*, mark **"a.m."**

If the person usually left home to go to work sometime *between 12:00 o'clock noon and 12:00 o'clock midnight*, mark **"p.m."**

34. Travel time is from door to door. Enter a one-way commute time for this person's usual daily commute from home to work **LAST WEEK**. Include time waiting for public transportation or picking up passengers in a carpool.

Answer Person questions 35a through 38 if the person did not work last week.

35a. Persons are on layoff if they are waiting to be recalled to a job from which they were temporarily separated for business-related reasons.

35b. If the person works only during certain seasons or on a day-by-day basis when work is available, mark the **"No"** box.

35c. If the person was informed by his or her employer, either formally or informally, that they will be recalled within the next 6 months, mark the **"Yes"** box. Also mark the **"Yes"** box if the person has been given, formally or informally, a specific date to return to work, even if that date is more than 6 months away.

36. Mark the **"Yes"** box if the person tried to get a job or start a business or professional practice at any time in the **LAST 4 WEEKS**; for example, registered at a public or private employment office, went to a job interview, placed or answered employment ads, or did anything toward starting a business or professional practice.

37. If the person was expecting to report to a job within 30 days, mark the **"Yes, could have gone to work"** box.

Mark the **"No, because of own temporary illness"** box only if the person expects to be able to work within 30 days.

If the person could not have gone to work because he or she was going to school, taking care of children, etc., mark the **"No, because of all other reasons (in school, etc.)"** box.

38. Refer to the instructions for questions **29a–29b** to determine what to count as work. Mark the **"Over 5 years ago or never worked"** box if the person: (1) never worked at any kind of job or business, either full or part time, (2) never worked, with or without pay, in a family business or farm, and (3) never served on active duty in the Armed Forces.

39a–39b.

Refer to the instructions for questions **29a–29b** to determine what to count as work. Include paid vacation, paid sick leave, and military service. Count every week in which the person worked at all, even for an hour.

40. If the hours worked each week varied considerably in the **PAST 12 MONTHS**, give an approximate average of the hours worked each week.

Answer Person questions 41 through 46 if the person worked in the past 5 years.

41. If the person worked for a cooperative, credit union, mutual insurance company, or similar organization, mark the **"an employee of a PRIVATE NOT-FOR-PROFIT, tax-exempt, or charitable organization?"** box.

If the person worked at a public school, college or university, mark the appropriate government category. For example, mark the **"a local GOVERNMENT employee (city, county, etc.)?"** box for a county-run community college or a city-run public school. Mark the **"a state GOVERNMENT employee?"** box for a state university.

Employees of foreign governments, the United Nations, and other international organizations should mark the **"a Federal GOVERNMENT employee?"** box for a state university.

42. If the person worked for a company, business, or government agency, print the name of the company, not the name of the person's supervisor. If the person worked for an individual or a business that had no company name, print the name of the individual this person worked for. If the person worked in his or her own un-named business, print "self-employed." If the person is currently in active duty military, please mark the checkbox and then print the name of the Armed Forces branch.

43. Describe the business, industry, or individual employer named in question **42**. If there is more than one activity, describe only the major activity at the place where the person worked. Describe what is made, what is sold, or what service is given.

Enter descriptions like the following: newspaper publishing, mail order house, auto engine manufacturing.

44. Mark one box to indicate the main type of business or industry where this person works or worked.

45. Describe the kind of work the person did. If the person was a trainee, apprentice, or helper, include that in the description.

Enter descriptions like the following: registered nurse, personnel manager, supervisor of order department, and high school teacher.

If possible, avoid single words such as: nurse, manager, and teacher.

46. Describe the most important activities or duties the person performed for his or her job.

Enter descriptions like the following: patient care, directing hiring policies, supervising order clerks, typing and filing, reconciling financial records.

Answer Person questions 47 through 48 if this person is 15 years old or over.

Mark the **"Yes"** or **"No"** box for each type of income, and enter the amount received IN THE **PAST 12 MONTHS** for each "Yes" response.

If income from any source was received jointly by household members, report, if possible, the appropriate share for each person; otherwise, report the whole amount for only one person and mark the **"No"** box for the other person.

When reporting income received jointly, **DO NOT** include the amount for a person not listed on pages 2, 3, or 4.

DO NOT include the following as income in any item:

- Refunds or rebates of any kind
- Withdrawals from savings of any kind
- Capital gains or losses from the sale of homes, shares of stock, etc.
- Inheritances or insurance settlements
- Any type of loan
- Pay in-kind such as food, free rent

Attachment B. ACS-30 Instruction Guide (continued)

47a. Include wages and salaries before deductions from **all** jobs. Be sure to include any tips, commissions, or bonuses. Owners of incorporated businesses should enter their salary here. Military personnel should include base pay plus cash housing and/or subsistence allowance, flight pay, uniform allotments, reenlistment bonuses.

47b. Include **nonfarm** profit (or loss) from self-employment in sole proprietorships and partnerships. Mark the **"Loss"** box if there is a loss. Exclude profit (or loss) of incorporated businesses the person owns.

Include **farm** profit (or loss) from self-employment in sole proprietorships and partnerships. Mark the **"Loss"** box if there is a loss. Exclude profit (or loss) of incorporated farm businesses the person owns. Also exclude amounts from land rented for cash but include amounts from land rented for shares.

47c. Include interest received or credited to checking and saving accounts, money market funds, certificates of deposit (CDs), IRAs, KEOGHs, and government bonds.

Include dividends received, credited, or reinvested from ownership of stocks or mutual funds.

Include profit (or loss) from royalties and the rental of land, buildings or real estate, or from roomers or boarders. Mark the **"Loss"** box if there is a loss. Income received by self-employed persons whose primary source of income is from renting property or from royalties should be included in **47b.** Include regular payments from an estate or trust fund.

47d. Include amounts, before Medicare deductions, of Social Security and/or Railroad Retirement payments to retired persons, to dependents of deceased insured workers, and to disabled workers.

47e. Include Supplemental Security Income (SSI) received by elderly, blind, or disabled persons.

47f. Include any public assistance or welfare payments received by check or electronic transfer from the state or local welfare office, even if received for only one month or less than a year. Include benefits received on behalf of children. These payments are sometimes referred to as Temporary Assistance for Needy Families (TANF), Aid to Families with Dependent Children (AFDC), Aid to Dependent Children (ADC), Welfare or welfare to work, General Assistance, General Relief, Emergency Assistance, and Diversion Payments. **Do not** include assistance received from private charities.

Do not include Supplemental Security Income (SSI), food assistance (such as food stamps and benefits from the Supplemental Nutrition Assistance Program, or SNAP), rental assistance, education assistance, child care assistance, transportation assistance, or assistance with heating or cooling costs or **any other** energy assistance (such as Low Income Home Energy Assistance Program, or LIHEAP).

47g. Include retirement, survivor or disability benefits received from companies and unions, federal, state, and local governments, and the U.S. military. Include regular income from annuities and IRA or KEOGH retirement plans.

47h. Include Veterans' (VA) disability compensation and educational assistance payments (VEAP); unemployment compensation, worker's compensation, child support or alimony; and all other regular payments such as Armed Forces transfer payments, assistance from private charities, regular contributions from persons not living in the household.

48. Add the total entries (subtracting losses) for **47a** through **47h** for the **PAST 12 MONTHS** and enter that number in the space provided. Mark the **"Loss"** box if there is a loss. Print the total amount in dollars.

What the Survey Is About --

Some Questions and Answers

Why are we taking a survey?
The Census Bureau is conducting the American Community Survey to provide more timely data than data we typically collect only once every 10 years during the decennial census.

What does the Census Bureau do with the information you provide?
The American Community Survey will be the source of summarized data that we make available to federal, state, and local governments, and also to the public. The data will enable your community leaders from government, business, and non-profit organizations to plan more effectively.

How was this address selected?
Your address was scientifically selected to represent a cross section of other households in your community. Households in the sample are required to complete the survey form. Please return it in the postage-paid envelope as soon as possible.

Why the Census Bureau Asks Certain Questions --

Here are reasons we ask some of the questions on the survey.

Name
Names help make sure that everyone in a household is included, and that no one is listed twice.

Value or rent
Government and planning agencies use answers to these questions in combination with other information to develop housing programs to meet the needs of people at different economic levels.

Plumbing and Kitchen facilities
This question helps provide information on the quality of housing. The data are used with other statistics to show how the "level of living" compares in various areas and how it changes over time.

Place of birth
This question provides information used to study long-term trends about where people move and to study migration patterns and differences in growth patterns.

Job
Answers to the questions about the jobs people hold provide information on the extent and types of employment in different areas of the country. From this information, communities can develop training programs, and business and local governments can determine the need for new employment opportunities.

Income
Income helps determine how well families or persons live. Income information makes it possible to compare the economic levels of different areas, and how economic levels for a community change over time. Funding for many government programs is based on the answers to these questions.

Education
Responses to the education questions in the survey help to determine the number of new public schools, education programs, and daycare services required in a community.

Disability
Questions about disability provide the means to allocate federal funding for healthcare services and new hospitals in many communities.

Journey to work
Answers to these questions help communities plan road improvements, develop public transportation services, and design programs to ease traffic problems.

Attachment C. Response Distributions for Select Demographics

To ensure that populations were equally represented in each treatment and that no immediately apparent confounding factors existed, the following demographic distributions were compared using chi-squared tests.

Table 16: Comparison of Response Distributions (in Percent) for Control versus Treatment 1 (Insert With Guide)

	Total Self-Response		Internet Response		Mail Response	
Item	**Control**	**Treatment 1**	**Control**	**Treatment 1**	**Control**	**Treatment 1**
AGE (*p*-value)	-	0.95	-	0.95	-	0.80
Under 5 years old	5.1 (0.2)	5.2 (0.2)	6.4 (0.3)	6.6 (0.3)	3.8 (0.2)	3.8 (0.2)
5 to 17 years old	15.7 (0.4)	15.7 (0.4)	19.5 (0.5)	19.2 (0.6)	12.0 (0.4)	12.5 (0.5)
18 to 24 years old	7.1 (0.3)	7.4 (0.3)	8.9 (0.4)	9.0 (0.4)	5.4 (0.3)	5.8 (0.3)
25 to 44 years old	22.8 (0.4)	22.8 (0.4)	29.5 (0.6)	29.5 (0.6)	16.1 (0.5)	16.5 (0.5)
45 to 64 years old	29.2 (0.4)	29.5 (0.4)	27.2 (0.6)	27.6 (0.6)	31.2 (0.5)	31.2 (0.6)
65 years old or older	20.0 (0.4)	19.5 (0.4)	8.5 (0.4)	8.0 (0.4)	31.5 (0.7)	30.2 (0.8)
HISPANIC ORIGIN (*p*-value)	-	0.49	-	0.89	-	0.34
Hispanic or Latino	12.9 (0.6)	12.4 (0.5)	14.2 (0.9)	14.1 (0.7)	11.6 (0.7)	10.7 (0.6)
Not Hispanic or Latino	87.1 (0.6)	87.6 (0.5)	85.8 (0.9)	85.9 (0.7)	88.4 (0.7)	89.3 (0.6)
RACE (*p*-value)	-	0.34	-	0.71	-	0.43
White alone	78.8 (0.6)	78.1 (0.6)	75.1 (1.0)	75.1 (0.9)	82.4 (0.6)	81.0 (0.7)
Black or African American alone	7.2 (0.4)	8.2 (0.4)	7.0 (0.6)	7.8 (0.6)	7.5 (0.5)	8.6 (0.6)
Some other race alone	10.5 (0.5)	10.1 (0.5)	14.1 (0.8)	13.5 (0.9)	6.9 (0.5)	6.9 (0.5)
Two or more races	3.5 (0.2)	3.6 (0.2)	3.7 (0.4)	3.6 (0.3)	3.2 (0.3)	3.5 (0.3)
EDUC. ATTAINMENT (*p*-value)	-	0.69	-	0.47	-	0.28
No schooling completed	3.9 (0.2)	3.7 (0.2)	3.6 (0.3)	3.7 (0.3)	4.2 (0.3)	3.7 (0.2)
Nursery to 11th grade	17.7 (0.4)	18.0 (0.4)	21.3 (0.6)	21.1 (0.6)	14.4 (0.5)	15.4 (0.5)
12th grade, no diploma	2.1 (0.1)	1.9 (0.1)	1.5 (0.2)	1.3 (0.2)	2.5 (0.2)	2.4 (0.2)
High school diploma	19.2 (0.5)	18.6 (0.4)	12.5 (0.5)	12.7 (0.5)	25.3 (0.7)	23.8 (0.6)
GED† or alternative credential	3.3 (0.2)	3.4 (0.2)	2.0 (0.2)	2.6 (0.2)	4.4 (0.3)	4.0 (0.2)
Some college, no degree	18.6 (0.4)	19.4 (0.4)	18.1 (0.6)	18.3 (0.6)	19.1 (0.5)	20.3 (0.5)
Associate's degree	7.3 (0.2)	6.9 (0.2)	7.6 (0.4)	6.8 (0.4)	7.1 (0.4)	7.0 (0.3)
Bachelor's degree	17.1 (0.4)	17.6 (0.4)	20.3 (0.5)	20.8 (0.6)	14.2 (0.5)	14.7 (0.6)
Advanced degree	10.8 (0.4)	10.5 (0.3)	13.2 (0.6)	12.7 (0.5)	8.7 (0.5)	8.7 (0.4)
BUILDING TYPE (*p*-value)	-	0.24	-	0.83	-	0.11
One-family, detached	67.8 (0.6)	68.3 (0.6)	67.3 (1.1)	66.5 (1.0)	68.2 (0.7)	69.5 (0.9)
One-family, attached	6.6 (0.3)	5.9 (0.3)	7.5 (0.6)	6.9 (0.5)	5.9 (0.4)	5.1 (0.4)
2 apartments	2.2 (0.2)	2.5 (0.2)	2.5 (0.3)	2.3 (0.3)	2.0 (0.2)	2.7 (0.3)
3 or 4 apartments	3.2 (0.2)	3.2 (0.2)	3.5 (0.3)	3.5 (0.3)	3.0 (0.3)	2.9 (0.3)
5 to 9 apartments	3.3 (0.2)	3.7 (0.3)	4.1 (0.4)	4.4 (0.5)	2.8 (0.3)	3.1 (0.3)
10 to 19 apartments	3.3 (0.3)	2.8 (0.2)	3.8 (0.4)	3.7 (0.4)	2.9 (0.3)	2.1 (0.3)
20 to 49 apartments	2.8 (0.2)	2.8 (0.2)	3.0 (0.3)	3.2 (0.4)	2.6 (0.3)	2.6 (0.3)
50 or more apartments	5.4 (0.3)	6.0 (0.3)	5.3 (0.5)	6.5 (0.5)	5.5 (0.4)	5.7 (0.3)
Other (boat, van, etc.)	5.4 (0.3)	4.9 (0.3)	3.0 (0.3)	3.0 (0.3)	7.2 (0.4)	6.3 (0.5)
TENURE (*p*-value)	-	0.64	-	0.12	-	0.76
Owned with a mortgage	47.5 (0.7)	47.4 (0.6)	55.8 (1.0)	54.4 (0.9)	41.2 (1.0)	42.2 (0.9)
Owned free and clear	25.4 (0.6)	24.8 (0.6)	14.2 (0.5)	13.9 (0.7)	34.1 (0.9)	33.0 (0.9)
Rented	25.5 (0.5)	26.0 (0.6)	29.1 (1.0)	29.9 (0.9)	22.6 (0.6)	23.0 (1.0)
Occupied without payment of rent	1.6 (0.2)	1.8 (0.2)	1.0 (0.2)	1.7 (0.3)	2.1 (0.2)	1.9 (0.2)

†General Educational Development

Source: U.S. Census Bureau, American Community Survey, 2015 "Why We Ask" Mail Package Insert Test

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses. Significant at α=0.1. P-values are unadjusted.

Table 17: Comparison of Response Distributions (in Percent) for Treatment 1 (Insert With Guide) versus Treatment 2 (Insert Without Guide)

	Total Self-Response		Internet Response		Mail Response	
Item	**Treatment 1**	**Treatment 2**	**Treatment 1**	**Treatment 2**	**Treatment 1**	**Treatment 2**
AGE (*p*-value)	-	0.55	-	0.95	-	0.22
Under 5 years old	5.2 (0.2)	5.5 (0.2)	6.6 (0.3)	6.6 (0.3)	3.8 (0.2)	4.4 (0.3)
5 to 17 years old	15.7 (0.4)	15.8 (0.3)	19.2 (0.6)	19.4 (0.5)	12.5 (0.5)	12.1 (0.5)
18 to 24 years old	7.4 (0.3)	7.2 (0.3)	9.0 (0.4)	8.6 (0.5)	5.8 (0.3)	5.8 (0.4)
25 to 44 years old	22.8 (0.4)	23.0 (0.4)	29.5 (0.6)	30.0 (0.6)	16.5 (0.5)	16.0 (0.4)
45 to 64 years old	29.5 (0.4)	28.5 (0.5)	27.6 (0.6)	27.1 (0.6)	31.2 (0.6)	29.8 (0.6)
65 years old or older	19.5 (0.4)	20.0 (0.5)	8.0 (0.4)	8.3 (0.4)	30.2 (0.8)	31.9 (0.7)
HISPANIC ORIGIN (*p*-value)	-	0.45	-	0.46	-	0.63
Hispanic or Latino	12.4 (0.5)	11.9 (0.5)	14.1 (0.7)	13.3 (0.7)	10.7 (0.6)	10.3 (0.6)
Not Hispanic or Latino	87.6 (0.5)	88.1 (0.5)	85.9 (0.7)	86.7 (0.7)	89.3 (0.6)	89.7 (0.6)
RACE (*p*-value)	-	0.84	-	0.99	-	0.66
White alone	78.1 (0.6)	77.6 (0.6)	75.1 (0.9)	74.9 (0.9)	81.0 (0.7)	80.3 (0.8)
Black or African American alone	8.2 (0.4)	8.2 (0.4)	7.8 (0.6)	7.8 (0.6)	8.6 (0.6)	8.5 (0.6)
Some other race alone	10.1 (0.5)	10.4 (0.4)	13.5 (0.9)	13.8 (0.7)	6.9 (0.5)	7.0 (0.5)
Two or more races	3.6 (0.2)	3.9 (0.2)	3.6 (0.3)	3.5 (0.3)	3.5 (0.3)	4.2 (0.3)
EDUC. ATTAINMENT (*p*-value)	-	0.58	-	0.98	-	0.12
No schooling completed	3.7 (0.2)	4.3 (0.3)	3.7 (0.3)	4.1 (0.4)	3.7 (0.2)	4.6 (0.3)
Nursery to 11th grade	18.0 (0.4)	17.6 (0.4)	21.1 (0.6)	21.0 (0.6)	15.4 (0.5)	14.4 (0.6)
12th grade, no diploma	1.9 (0.1)	2.0 (0.1)	1.3 (0.2)	1.3 (0.2)	2.4 (0.2)	2.6 (0.2)
High school diploma	18.6 (0.4)	18.9 (0.4)	12.7 (0.5)	12.6 (0.5)	23.8 (0.6)	24.7 (0.7)
GED† or alternative credential	3.4 (0.2)	3.6 (0.2)	2.6 (0.2)	2.4 (0.2)	4.0 (0.2)	4.7 (0.3)
Some college, no degree	19.4 (0.4)	18.8 (0.3)	18.3 (0.6)	18.3 (0.6)	20.3 (0.5)	19.4 (0.5)
Associate's degree	6.9 (0.2)	6.8 (0.2)	6.8 (0.4)	7.1 (0.3)	7.0 (0.3)	6.6 (0.3)
Bachelor's degree	17.6 (0.4)	17.5 (0.4)	20.8 (0.6)	21.0 (0.7)	14.7 (0.6)	14.2 (0.5)
Advanced degree	10.5 (0.3)	10.5 (0.3)	12.7 (0.5)	12.2 (0.5)	8.7 (0.4)	8.9 (0.4)
BUILDING TYPE (*p*-value)	-	0.28	-	0.71	-	0.20
One-family, detached	68.3 (0.6)	67.2 (0.6)	66.5 (1.0)	67.4 (0.9)	69.5 (0.9)	67.0 (0.7)
One-family, attached	5.9 (0.3)	6.3 (0.4)	6.9 (0.5)	6.7 (0.5)	5.1 (0.4)	6.0 (0.5)
2 apartments	2.5 (0.2)	2.7 (0.2)	2.3 (0.3)	2.5 (0.3)	2.7 (0.3)	2.9 (0.3)
3 or 4 apartments	3.2 (0.2)	3.5 (0.2)	3.5 (0.3)	3.7 (0.4)	2.9 (0.3)	3.4 (0.3)
5 to 9 apartments	3.7 (0.3)	3.4 (0.2)	4.4 (0.5)	4.3 (0.4)	3.1 (0.3)	2.7 (0.2)
10 to 19 apartments	2.8 (0.2)	2.9 (0.2)	3.7 (0.4)	3.8 (0.4)	2.1 (0.3)	2.3 (0.3)
20 to 49 apartments	2.8 (0.2)	2.6 (0.2)	3.2 (0.4)	2.5 (0.4)	2.6 (0.3)	2.8 (0.3)
50 or more apartments	6.0 (0.3)	5.5 (0.3)	6.5 (0.5)	5.7 (0.5)	5.7 (0.3)	5.4 (0.4)
Other (boat, van, etc.)	4.9 (0.3)	5.7 (0.3)	3.0 (0.3)	3.5 (0.4)	6.3 (0.5)	7.5 (0.5)
TENURE (*p*-value)	-	0.90	-	0.20	-	0.29
Owned with a mortgage	47.4 (0.6)	47.0 (0.8)	54.4 (0.9)	55.7 (1.1)	42.2 (0.9)	39.9 (0.9)
Owned free and clear	24.8 (0.6)	25.1 (0.6)	13.9 (0.7)	14.0 (0.7)	33.0 (0.9)	34.1 (0.8)
Rented	26.0 (0.6)	26.3 (0.6)	29.9 (0.9)	29.3 (1.0)	23.0 (1.0)	23.8 (0.7)
Occupied without payment of rent	1.8 (0.2)	1.7 (0.1)	1.7 (0.3)	1.0 (0.2)	1.9 (0.2)	2.2 (0.3)

†General Educational Development

Source: U.S. Census Bureau, American Community Survey, 2015 "Why We Ask" Mail Package Insert Test

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses. Significant at α=0.1. P-values are unadjusted.