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MEMORANDUM FOR	ACS Research and Evaluation Workgroup
From:	Patrick J. Cantwell
	Chief, Decennial Statistical Studies Division
	Victoria A. Velkoff
	Chief, American Community Survey Office
Prepared by:	Broderick E. Oliver and Lindsay Longsine
	American Community Survey Experiments Branch
	Decennial Statistical Studies Division
	Jonathan P. Schreiner and Megan Rabe
	Methods Panel Coordination Branch
	American Community Survey Office
Subject:	2017 American Community Survey Mail Design Test

Attached is the American Community Survey (ACS) Research and Evaluation report entitled, "2017 American Community Survey Mail Design Test." This report provides results of a controlled experiment to assess the impact on response and cost of three proposed design changes to the ACS mail materials using the August 2017 ACS panel.

If you have any questions about this report, please contact Elizabeth Poehler at 301-763-9305 or Broderick Oliver at 301-763-9350 or Lindsay Longsine at 301-763-0364.

Attachment



Kerri Givens	ACSO	Sarah Heimel	DSSD
Dameka Reese	ACSO	Michael Risley	DSSD
George Brian Wilson	ACSO	Christine Flanagan Borman	РОР
Dorothy Barth	DSSD	Jason Lee	SEHSD
Jennifer Berkley	DSSD	Nathan Walters	SEHSD
Julia Coombs	DSSD		

September 10, 2018

2017 American Community Survey Mail Design Test

FINAL REPORT



Broderick E. Oliver Lindsay Longsine Decennial Statistical Studies Division Jonathan P. Schreiner Megan Rabe American Community Survey Office

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EXECUTIVE SUMMARY

The U.S. Census Bureau conducted the 2017 American Community Survey Mail Design Test (i.e., 2017 Mail Design Test) to evaluate three proposed redesigns of the American Community Survey (ACS) mail materials and messaging. This test was a follow-up to the 2015 Summer Mandatory Messaging Test in which multiple designs were tested—three of which softened the mandatory language in the mail materials to varying degrees to address concerns from some members of the public. Of these three experimental treatments, the Softened Revised Design had the least negative impact on self-response return rates—decreasing the self-response return rates by 7.8 percentage points.

In the *Softened Revised Design*, references to the mandatory nature of the survey were removed from the reminder postcards and were changed to "your response is important to your community" on the envelopes that contained the Initial and Paper Questionnaire Package mailings. The references to the mandatory nature of the survey were kept, but softened in the Initial Mail Package letter, the Reminder Letter, and the Paper Questionnaire Package letter. These references were softened using plain text instead of bold text and were included in sentences with statements about the benefits of the survey.

We conducted the 2017 Mail Design Test to find an alternative treatment to the Softened Revised Design—a treatment that would still maintain the softening of the mandatory language in the mail materials, but produce higher self-response rates than the Softened Revised Design treatment. The 2017 Mail Design Test evaluated three designs of the ACS mail materials and messaging—a modification of the Softened Revised Design treatment from the 2015 Summer Mandatory Messaging Test and two derivative treatments—the Partial Redesign and the Full Redesign.

The 2017 Mail Design Test evaluated the impact on self-response, cost, and reliability of replacing the current mailing design with one of the three experimental treatments. Table E1 outlines the different designs and materials for each of these treatments as well as the control treatment. Table E1 is organized by the five possible mailings that a sample d address could receive.

The *Partial Redesign* and the *Full Redesign* treatments departed from the *Softened Revised Design* treatment in the following ways:

- Removal of the "Multilingual Brochure" to reduce the number of mail pieces. This information was included on the enclosed letter.
- The addition of a "Why We Ask" pamphlet, a color pamphlet designed to engage the recipient and provide summary information about the benefits of the ACS.

- Design changes to the front page of the questionnaire to provide instruction information that would have been contained on the "instruction card." The rationale was a standalone questionnaire that provided sufficient instructions. Hence, the instruction card was not included in the questionnaire package for these treatments.
- The use of a letter instead of a postcard for the final reminder to allow us to include login information on the letter to make internet response easier. The accompanying envelope contained a new message, "Final Notice Respond Now" to make a strong push for response.

Key findings:

Self-Response Return Rates

- The Softened Revised Design had higher self-response return rates than Partial Redesign in the beginning, with Partial Redesign catching up before the final reminder was sent, and then surpassing Softened Revised Design by the end of CATI.
 - The *Partial Redesign* had higher self-response return rates for the mail mode while the *Softened Revised Design* had higher self-response return rates for internet.
- Omitting "Open Immediately" from the envelopes and changing the size of the envelope of the *Full Redesign* may have negatively affected the response rate from the beginning.
- Including the "Why We Ask" brochure in the initial mailing resulted in significantly lower response rates than the treatments that did not include the brochure.
- The *Partial Redesign* treatment had higher self-response return rates than the *Softened Revised Design* after the fifth mailing. We believe this is due to the replacement of the final postcard with a letter containing login information. We cannot say for certain though because of the multiple differences in treatments in the earlier mailings.

Data Collection Costs and Reliability of the Estimates

Due to processing problems during data collection, we do not report data collection costs and the reliability of the estimates for the *Full Redesign* treatment. This limitation will not have a significant impact on the findings as this treatment had lower response and higher costs compared to the *Softened Revised Design* and *Partial Revised Design* treatments with respect to self-response return rates.

• When maintaining the current production sample size, both the *Partial Redesign* and *Softened Revised Design* would see an increase in costs and a loss of reliability. The *Softened Revised Design* would have a larger negative impact (higher costs and lower reliability) than the *Partial Redesign*.

- When maintaining the current reliability, both the *Partial Redesign* and *Softened Revised Design* would need a larger sample size, resulting in an increase in data collection costs. The *Softened Revised Design* would have a larger negative impact than the *Partial Redesign*.
- When maintaining current costs, both the *Partial Redesign* and *Softened Revised Design* would require a reduction in sample size, and the reliability would decrease. The *Softened Revised Design* would have a larger negative impact than the *Partial Redesign*.

			Experimental frequients			
		Control	Softened Revised	Partial Revised	Full Redesign	
Mailing Classification	Mail Piece	(CTL)	Design (SRD)	Design (PRD)	(FRD)	
Initial Mailing	Outgoing Envelope	Your Response is	Your Response is	Your Response is	Your Response is	
		Required by Law	Important to Your	Important to Your	Important to Your	
			Community	Community	Community	
			Open Immediately	Open Immediately	†	
		11.5 by 6 inches	11.5 by 6 inches	11.5 by 6 inches	9.5 by 4.375 inches +	
	Frequently Asked Questions Brochure	YES	NO	NO	NO	
	Letter	No callout box	Callout box	Callout box	Callout box	
			Softened Wording	Softened Wording	Wording Changes +	
	Instruction Card	YES	YES	YES φ	NO †	
	Multilingual Information	Brochure included	Brochure Included *	Included in the letter	Included in the letter	
	"Why We Ask" pamphlet	NO	NO*	YES	YES	
Reminder Letter	Outgoing Envelope	No Message	No Message	No Message	No Message	
	Letter				Wording Changes*	
Questionnaire Package	Outgoing Envelope	Your Response is	Your Response is	Your Response is	Your Response is	
		Required by Law	Important to Your	Important to Your	Important to Your	
			Community	Community	Community	
			Open Immediately	Open Immediately	†	
	Questionnaire	Current	Current*	Design Changes o	Design Changes e	
	Frequently Asked					
	Questions Brochure	YES	NO	NO	NO	
	Letter	Current	Softened Wording	Softened Wording	Wording Changes +	
	Instruction Card	YES	YES*	NO	NO	
	Return Envelope	YES	YES	YES	YES	
Reminder Postcard	Postcard		Softened Wording	Softened Wording	Wording Changes +	
Final Reminder		Postcard	Postcard*	Letter	Letter	
			Softened Wording	Softened Wording	Wording Changes +	
			*	'Final Notice Respond Now' on envelope	'Final Notice Respond Now' on envelope	

Table E1. Description of Mail Materials for all Treatments in the 2017 Mail Design Test

⁺ Designates where the FRD differs from the SRD and PRD

Φ The instruction card was necessary because the letter did not have space to print both the respondent address and the login information.

 $\ensuremath{^*}$ Designates where the SRD differs from the PRD and FRD

Θ The front page of the questionnaire includes instruction information that would have been placed on the instruction card.

1. INTRODUCTION

Among the information included in the mailings that the U.S. Census Bureau mails to recipients of the American Community Survey (ACS) is information about the legal requirement to complete the survey. In the past, some recipients have expressed concerns that the tone of the ACS materials is too strong. In response, the Census Bureau conducted tests in 2014 (Barth et al., 2015) and 2015 (Oliver, Risley, & Roberts, 2016) to evaluate proposed changes to reduce the strength and prevalence of the messages regarding the mandatory nature of participation.

The 2015 Summer Mandatory Messaging Test (Oliver, Risley, & Roberts, 2016) assessed the impact on response, cost, and reliability of survey estimates of four sets of proposed design changes to the ACS mail materials that modified the mandatory language in the mail materials to varying degrees. To mitigate the expected drop in self-response, these designs included changes to simultaneously bolster self-response—changes to the way the Census Bureau communicates the importance and benefits of the ACS, using an updated look-and-feel of the mail materials.

Of the four designs evaluated, the *Revised Design*, which included the use of different logos on the envelopes and letters, the use of bold lettering and boxes to highlight elements of the material, and the addition of a box that reads "Open Immediately" on the envelopes proved to be the most promising. The *Revised Design* treatment:

- Increased the self-response return rates (before the Computer-Assisted Telephone Interview (CATI)) significantly (by 3.5 percentage points) and reduced the nonresponse follow-up workload.¹
- Would (if adopted) reduce the overall data collection costs by \$7.3 million annually.²

The *Revised Design* treatment did not however address concerns by some members of the public about the strong mandatory messages in the ACS materials. Of the three remaining experimental treatments tested where the mandatory messages in the ACS materials were softened to varying degrees, the *Softened Revised Design* treatment was the best option in regards to response rates and costs.³ The *Softened Revised Design* treatment however:

• Decreased the self-response return rates (before CATI) significantly (by 7.8 percentage points).

¹ As of the 2017 October ACS panel, CATI has been discontinued.

² Using budget information from the 2015 fiscal year. See Oliver, Risley, & Roberts (2016) for more details.

³ References to the mandatory nature of the ACS were softened in the Initial Mail Package Letter, the Reminder Letter, and the Paper Questionnaire Package Letter. See Oliver, Risley, & Roberts (2016) for more details.

• Would (if adopted) increase the overall data collections costs by \$11.2 million annually to compensate for this drop in self-response.⁴

In August 2017, the Census Bureau conducted the 2017 ACS Mail Design Test to evaluate variations of the Softened Revised Design that it hoped would produce higher self-response rates than the Softened Revised Design and still maintain the softening of the mandatory messages. The belief following the 2015 Summer Mandatory Messaging Test was that Census Bureau would be required to soften the mandatory language in the ACS materials. This report presents results from the 2017 ACS Mail Design Test.

2. BACKGROUND

The ACS is an ongoing, nationwide survey conducted by the Census Bureau to collect detailed social, economic, housing, and demographic information from the population living in housing units and group quarters. The ACS uses a mail contact strategy to encourage residents in sampled addresses to self-respond.

To encourage self-response, the Census Bureau sends up to five mailings to a mailable sampled address.⁵ The list of mailable sampled addresses is updated (i.e., cut) two times during this process to remove households that have already responded, minimizing the number of mail contacts received by those who have already responded.

The first mailing (initial mailing package) is sent to all mailable addresses in the sample. The initial mailing package includes an invitation to participate in the ACS online and information that a paper questionnaire will be sent in a few weeks to those who are unable to or prefer not to respond online.⁶ About seven days later, these addresses are sent a follow-up reminder letter (second mailing), which repeats the instructions to respond online or wait for a paper questionnaire.

About three weeks after the initial mailing, nonresponders are sent a third mailing—a package that includes a paper questionnaire (a new response mode option for them) and instructions for responding online. These addresses are sent a reminder postcard about four days later (fourth mailing).

⁴ Using budget information from the 2015 fiscal year. See Oliver, Risley, & Roberts (2016) for more details.

⁵ The requirement for a "mailable" address in the United States is met if there is either a complete city-style (includes a house number, street name, and ZIP Code) or rural-route address (includes a rural-route number, box number, and ZIP Code).

⁶ Al though not offered as a response option, prospective respondents can complete the survey by telephone via the Telephone Questionnaire Assistance Center (TQA) during any of the ACS mailings.

After the fourth mailing, nonresponders for which we have telephone contact information are eligible for inclusion in the CATI nonresponse follow-up operation. However, only a subset of these addresses are selected for this operation. ⁷ The remaining nonresponders, for whom we do not have a telephone number, are sent a reminder postcard as a last attempt to collect a self-response (fifth mailing). At the end of the CATI operation, a subsample of the nonresponders are selected for the Computer-Assisted Personal Interviewing (CAPI) nonresponse follow-up operation.

The ACS mailing universe is updated (i.e., cut) twice during data collection, resulting in three mailing universes. The initial mailing package and follow-up reminder letter fall into the M1 universe. The responders in the M1 universe are removed to produce the M2 universe (first cut). Addresses in the M2 universe receive the paper questionnaire package and the follow-up reminder postcard. The responders in the M2 universe as well as those units eligible for CATI are removed to produce the M3 universe (second cut). Addresses in the M3 universe receive the final reminder postcard. See Figure 1 below.

Figure 1. Overview of the 2017 ACS Mail Contact Strategy and Mailing Universes



The days between mailings (approximate) are noted on the arrows

See the ACS Design and Methodology Report (U.S. Census Bureau, 2014) for additional information about the ACS.

3. LITERATURE REVIEW

Between October 2013 and November 2014, the Census Bureau collaborated with Reingold Inc. to research and propose design and messaging changes to the ACS mail materials that could potentially increase the ACS self-response rates (U.S. Census Bureau, 2015). The high-level recommendations from the report are:

• Emphasize the Census brand in ACS mail materials.

⁷ The CATI operation, which was part of ACS data collection operations during this test, was discontinued beginning October 2017. Now, <u>all</u> remaining nonresponders are sent the final reminder postcard.

- Use visual design principles to draw attention to key messages and help respondents better navigate ACS material.
- Use deadline-oriented messages to attract attention and create a sense of urgency.
- Prioritize an official "governmental" appearance over a visually rich "marketing" approach.
- Emphasize effective "mandatory" messaging.
- Demonstrate benefits of ACS participation to local communities.
- Draw a clearer connection between objectionable questions and real-world applications and benefits.
- Streamline mail packages and individual materials.

Based on these and other recommendations, the ACS conducted five field tests in 2015 to improve the mail materials and messaging and simultaneously address respondent burden, respondent concerns about the perceived intrusiveness of the ACS, and self-response rates. A description of each of these five tests is provided below:

- **Paper Questionnaire Package Test** (Clark, 2015a): conducted on the March 2015 panel to examine ways to reduce the complexity of this package by removing some of the inserts and softening the response mode choice (paper or internet) in the messages included in the package. Among the key findings: removing the choice card or instruction card had no effect on self-response and would result in cost savings.
- *Mail Contact Strategy Modification Test* (Clark, 2015b): conducted on the April 2015 panel to examine ways to streamline the mail materials by eliminating a pre-notice and sending the initial mailing earlier, replacing the reminder postcard with a letter that explicitly provides the internet user ID, and other modifications to the mailings. Among the key findings: using a reminder letter that highlights the internet user ID and includes mandatory language significantly increased total self-response return rates as compared to a reminder postcard.
- **Envelope Mandatory Messaging Test** (Barth et al., 2015): conducted on the May 2015 panel to study the impact of removing mandatory messages from the envelopes. This test found that eliminating the phrase, "your response is required by law" from the two mailing envelopes significantly lowered the self-response return rate and the overall final response rate.
- **2015** Summer Mandatory Messaging Test (Oliver, Risley, & Roberts, 2016): conducted on the September 2015 panel to study the impact of removing or softening the mandatory messages from the mail materials. This test found that removing or softening the mandatory language in the mail materials significantly lowered self-response, whereas enhancing the mandatory language significantly increased it.
- *Why We Ask* (Heimel, Barth, & Rabe, 2016): conducted on the November 2015 panel to study the impact of the new "Why We Ask" insert with and without the Instruction

Guide in the paper questionnaire mailing package. This test found no evidence that the presence or absence of the Instruction Guide affected self-response.

In July 2016, the Census Bureau also held a series of meetings with Don Dillman who provided a critique of the current mail materials and messaging and offered suggestions for improvement.⁸ Dillman (2016) recommended a communications strategy that:

- Places greater emphasis on the benefits to respondents.
- Makes the messaging between mailings more distinct, but mutually supportive.
- Attaches the response request to the Census Bureau.

Building upon this research and expert recommendations, we developed two mail treatments for testing that are derivatives of the *Softened Revised Design* treatment from the *2015 Summer Mandatory Messaging Test*—the *Partial Redesign* and the *Full Redesign*. These two new treatments were largely inspired by recommendations from our meeting with Dillman. These treatments were designed to increase engagement with the recipient through a more conversational communication style, make information about the survey more visible through placement on a letter and on the questionnaire, and reduce the number of materials included in the mailings, especially the initial mailing package and the paper questionnaire package.

Our principal objective in conducting the 2017 Mail Design Test was to provide an improvement to the Softened Revised Design treatment from the 2015 Summer Mandatory Messaging Test, for which the softening of the mandatory language had a negative impact on the self-response rates. We sought an alternative treatment that would still maintain the softening of the mandatory language, but produce higher self-response rates than the Softened Revised.

4. METHODOLOGY

This report answers the following research questions:

- 1) What is the impact on self-response of placing the multilingual information on a letter instead of a brochure and including a "Why We Ask" pamphlet? (Is there a difference between the *Softened Revised Design* and the *Partial Redesign*?)
- 2) What is the impact on self-response of placing the multilingual information on a letter instead of a brochure; including a "Why We Ask" pamphlet; and using a conversational tone? (Is there a difference between the *Softened Revised Design* and the *Full Redesign*?)

⁸ Don Dillman is Regents Professor of the Department of Sociology and Deputy Director for Social and Economic Sciences Research (SESRC) at Washington State University. He previously served as the senior survey methodologist in the Office of the Director at the U.S. Census Bureau.

- 3) What is the impact on self-response of using a conversational tone? (Is there a difference between the *Partial Redesign* and the *Full Redesign*?)
- 4) What is the overall impact of each of the experimental treatments on final response rates, data collection costs, and reliability of survey estimates? (Is there a difference between Control and *Softened Revised Design*, *Partial Redesign*, or *Full Redesign*?)
- 5) What is the impact on item missing data rates of moving the date field to the second page of the questionnaire of the *Partial Redesign* and the *Full Redesign*?

The following sections explain the experimental design, the sample design, and the statistics employed to compare treatments.

4.1 Experimental Design

For the 2017 Mail Design Test, we evaluated three experimental treatments: a modification of the Softened Revised Design treatment from the 2015 Summer Mandatory Messaging Test and two derivative treatments—the Partial Redesign and the Full Redesign. The test also included a control treatment, for which the materials were the same as production.

Modifications to the *Softened Revised Design* included the addition of the phrase, "our toll free number" preceding the toll free number provided; an updated confidentiality statement; and a new Reingold-inspired design for the outgoing envelope containing the reminder letter.⁹

The *Partial Redesign* and the *Full Redesign* treatments departed from the *Softened Revised Design* treatment in the following ways:

- Removal of the "Multilingual Brochure" to reduce the number of mail pieces. This information was included on the enclosed letter.
- The addition of a "Why We Ask" pamphlet, a color pamphlet designed to engage the recipient and provide summary information about the benefits of the ACS.
- Design changes to the front page of the questionnaire to provide instruction information that would have been contained on the "instruction card." The rationale was a standalone questionnaire that provided sufficient instructions. Hence, the instruction card was not included in the questionnaire package for these treatments.
- The use of a letter instead of a postcard for the final reminder to allow us to include login information on the letter to make internet response easier. The accompanying envelope contained a new message, "Final Notice Respond Now" to make a strong push for response.

⁹ In 2013, the Census Bureau contracted with Reingold, Inc. to conduct messaging and mail package assessment research.

The *Full Redesign* differs from the *Partial Redesign* in the manner in which we communicate with the ACS recipients in the letters and postcards. The communication in the *Full Redesign* (per Dillman's recommendation) is conversational and friendly (see Dillman et al. (2014) to learn more about this approach). In the *Full Redesign* treatment, the Instruction Card was omitted from the initial mailing package, as the initial mailing letter in this treatment contained sufficient information. Consequently, we were able to use a smaller outgoing envelope.

Table 1 provides an inventory of the mail materials used for all treatments. The mail materials are organized by the five ACS mailings that a sampled address could possibly receive—Initial Mailing, Reminder Letter, Questionnaire Package, Reminder Postcard, and Final Reminder.

The Initial Mailing and Reminder Letter are in the M1 mailing universe. The Questionnaire Package and the Reminder Postcard are in the M2 mailing universe. The Final Reminder is in the M3 universe. The mailout dates for the mail materials are:

- Initial Mailing, 7/20/17
- Reminder Letter, 7/27/17
- Questionnaire Package, 8/10/17
- Reminder Postcard, 8/14/17
- Final Reminder, 9/5/17

The CATI operation ran from 9/1/17-9/30/17 and the CAPI operation ran from 10/1/17-11/3/17.

See Appendices A – D for facsimiles of the mail materials listed in Table 1. The Appendices are presented in the following order:

- Appendix A: Current Production Treatment Materials
- Appendix B: Softened Revised Design Treatment Materials
- Appendix C: Partial Redesign Treatment Materials
- Appendix D: Full Redesign Treatment Materials

			Experimental Treatments		
Mailing Classification	Mail Piece	Control (CTL)	Softened Revised Design (SRD)	Partial Revised Design (PRD)	Full Redesign (FRD)
Initial Mailing	Outgoing Envelope	Your Response is Required by Law	Your Response is Important to Your Community	Your Response is Important to Your Community	Your Response is Important to Your Community
			Open Immediately	Open Immediately	†
		11.5 by 6 inches	11.5 by 6 inches	11.5 by 6 inches	9.5 by 4.375 inches +
	Frequently Asked Questions Brochure	YES	NO	NO	NO
	Letter	No callout box	Callout box Softened Wording	Callout box Softened Wording	Callout box Wording Changes +
	Instruction Card	YES	YES	YES φ	NO †
	Multilingual Information	Brochure included	Brochure Included *	Included in the letter	Included in the letter
	"Why We Ask" pamphlet	NO	NO*	YES	YES
Reminder Letter	Outgoing Envelope	No Message	No Message	No Message	No Message
	Letter				Wording Changes*
Questionnaire Package	Outgoing Envelope	Your Response is Required by Law	Your Response is Important to Your Community	Your Response is Important to Your Community	Your Response is Important to Your Community
			Open Immediately	Open Immediately	†
	Questionnaire	Current	Current*	Design Changes e	Design Changes e
	Frequently Asked Questions Brochure	YES	NO	NO	NO
	Letter	Current	Softened Wording	Softened Wording	Wording Changes +
	Instruction Card	YES	YES*	NO	NO
	Return Envelope	YES	YES	YES	YES
Reminder Postcard	Postcard		Softened Wording	Softened Wording	Wording Changes +
Final Reminder		Postcard	Postcard*	Letter	Letter
			Softened Wording	Softened Wording	Wording Changes +
			*	'Final Notice Respond Now' on envelope	'Final Notice Respond Now' on envelope

Table 1. Description of Mail Materials for all Treatments in the 2017 Mail Design Test

⁺ Designates where the FRD differs from the SRD and PRD

 Φ The instruction card was necessary because the letter did not have space to print both the respondent address and the login information.

* Designates where the SRD differs from the PRD and FRD

 Θ The front page of the questionnaire includes instruction information that would have been placed on the instruction card.

4.2 Sample Design

The monthly ACS production sample of approximately 295,000 addresses is divided into 24 nationally representative groups, referred to as methods panel groups. Each methods panel group consists of approximately 12,000 addresses. This test was carried out in the August 2017 ACS production sample. In total, approximately 96,000 addresses were used for the four treatments, which includes the current production treatment group. Two randomly selected groups were assigned to each treatment (including the control treatment) meaning each treatment had a sample size of approximately 24,000 addresses. The remaining 16 panel groups received production materials and were not part of this analysis.

4.3 Analysis Rates

We evaluated the effect of the experimental treatments on self-response by comparing their self-response return rates at specified points in time during the self-response phase of data collection. We evaluated the effect of the experimental treatments on overall response by comparing their final response rates, data collection costs, and the effect on survey estimates (reliability) to that of the control at closeout.

Table 2 provides a summary of these comparisons. The rationale for the points in time (i.e., cutoff point) during data collection when we compared treatments is provided below.

- The **date the questionnaire package was mailed** (cut-off point) helped us determine the effect of each treatment on self-response for households provided with one mode for self-response (internet) and a reminder letter.
- The **date the final reminder was mailed** (cut-off point) helped us determine the cumulative effect of each treatment on self-response for nonrespondent households that had two choices for self-response (internet and mail) and received a reminder postcard.
- **The date CATI ended** (cut-off point) helped us determine the cumulative effect of each treatment on self-response for the households that received a final reminder postcard or letter.
- The **closeout date** (cut-off point) helped us determine the overall effectiveness of the experimental treatments versus the control treatment.

Research Question	Treatment Comparison	When Compared
What is the impact of placing the multilingual information on a letter instead of a brochure and including a "Why We Ask" pamphlet on <i>self-</i> <i>response return rates</i> ?	Partial Redesign vs Softened Revised Design	 Date Questionnaire Package is mailed Date final reminder postcard/letter is mailed Date CATI ends*
What is the impact on self-response of placing the multilingual information on a letter instead of a brochure; including a "Why We Ask" pamphlet; and using wording that conveys a deferential tone?	Full Redesign vs Softened Revised Design	 Date Questionnaire Package is mailed Date final reminder postcard/letter is mailed Date CATI ends*
What is the impact on self-response of using wording that expresses a deferential tone?	Full Redesign vs Partial Redesign	 Date Questionnaire Package is mailed Date final reminder postcard/letter is mailed Date CATI ends
What is the overall impact of the experimental treatment vs the control treatment on <i>final response rates, data</i> <i>collection costs,</i> and <i>reliability of survey</i> <i>estimates</i> ?	All Experimental Treatments vs Control	 Closeout*
Is the <i>item missing data rate</i> for the month/day fields of the "please print today's date" question the same?	Partial and Full Redesign Treatments vs. Control	 Closeout*

 Table 2. Experimental Design for the 2017 Mail Design Test

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

*Only units with no apartment designations will be compared. See Section 4.3.4 for details.

The inclusion of additional information on the front of the redesigned questionnaire used in the *Partial* and *Full Redesign* treatments resulted in the shifting of the date field from the front of the questionnaire to the second page of the questionnaire. Because we were concerned that the shifting of the date field could possibly negatively affect response in this field, we compared the item missing data rates for this field for the *Partial* and *Full Redesign* treatments to that of the control.

The formulas for the self-response return rate, the final response rate, and the item missing data rate are defined in Sections 4.3.1, 4.3.2, and 4.3.3, respectively.

4.3.1 Self-Response Return Rates

Self-response return rates were calculated for total self-response and separately for internet and mail response. They were calculated using the base weights—the inverse of the probability of selection for a unit.

Number of mailable and deliverable sample addresses that provided a non-blank¹⁰ paper questionnaire via mail or TQA Self-Response Return Rate= $\frac{OR \text{ a complete or sufficient partial Internet response¹¹}}{\text{Total number of mailable and deliverable sample addresses}} \times 100$

Note: For the comparisons of return rates by mode, the small number of returns obtained from Telephone Questionnaire Assistance (TQA) were classified as mail returns.

Addresses designated as "undeliverable-as-addressed" (UAA) by the United States Postal Service (USPS) and for which no response was received, and unmailable addresses were excluded from all return rate calculations. If more than one response was received from a single address (i.e., the survey was completed online and a paper questionnaire was mailed back), the response received first was considered the mode of response for this test.

Due to a processing error, the UAAs for the *Full Redesign* treatment were not captured correctly after the initial mailing and before the address file creation for the third and fourth mailings. As a result, about 2,300 addresses were incorrectly sent the third and fourth mailings for the *Full Redesign* treatment. We detected this error after the self-response rates were already calculated. Using postal tracking files, we simulated what would have happened to these UAA cases had they been properly identified and corrected the self-response return rates. None of the initial findings changed as a result of this correction.

4.3.2 Final Response Rates

Final response rates were calculated overall and separately by mode. They were calculated using the base weights for self-responses; CAPI cases were weighted by multiplying a subsampling factor by the initial base weight.

Final Response Rate = ______ Number of the addresses that provided a complete or sufficient partial response *100

Total number of mailable and deliverable sample addresses¹²

¹⁰ A return is considered "blank" if there are no persons with sufficient response data and there is no telephone number listed on the form by the respondent.

¹¹ A "sufficient partial response" is one that is complete up to the first question in the detailed person question section for the first person in the household.

¹² Excluding nonrespondent addresses that were not sampled for CAPI and addresses that were out-of- scope (e.g., demolished homes, homes under construction, relocated houses or trailers)

4.3.3 Item Missing Data Rates

We compared the item missing data rates for the date field on the front of the questionnaire used in the *Partial Revised Design* and *Full Revised Design* treatments to the production questionnaire used in the *Control* treatment.

Number of eligible housing units that did not provide a required response for the item Total number of eligible housing units required to provide a response to the item

4.3.4 Issue with M3 Universe

There was an error when printing the addresses for the two treatments—the *Control* treatment and the *Softened Revised Design* treatment—that sent ACS recipients a reminder postcard in the final mailing (M3 universe). If an address in these treatments had a unit designation (i.e., apartment number), it was not printed on the reminder postcard in the M3 universe. This error did not occur for the two treatments—the *Partial Redesign* and the *Full Redesign*—that used a reminder letter instead of a postcard; therefore, these two treatments were not affected by this printing error.

Across the four treatments, there were 14,500 cases in the M3 universe with a unit designation (35.1 percent of the M3 universe). Of these 14,500 cases, 47.2 percent were affected by the printing error (22.4 percent, *Control*; 24.8 percent, *Softened Revised Design*). These affected cases accounted for 16.6 percent of the M3 universe.

Because of this issue, we adjusted some of our calculations to make comparisons of the treatments comparable. We removed the cases in the M3 universe that had a value for unit designation. We refer to this new universe as the Partial Universe. It not necessary to use the Partial Universe for our return rates calculated prior to the M3 universe.

4.4 Standard Errors

All variances were estimated using the Successive Differences Replication (SDR) method with replicate weights, the standard method used for the ACS. The standard error of the estimate (X₀) is the square root of the variance:

$$Var(X_0) = \frac{4}{80} \sum_{r=1}^{80} (X_r - X_0)^2$$

Where:

 X_r = the estimate calculated for replicate r

 X_0 = the estimate calculated using the full sample

4.5 Cost and Reliability Analysis

A reduction in self-response incurs additional costs because we send more mailings and have higher CAPI workloads. The reliability of the ACS estimates is also affected by a reduction in self-response. To report the likely impact of implementing each experimental treatment we consider our ability to

- Maintain current sample size
- Maintain current reliability
- Maintain costs

4.5.1 Calculating Costs

For this analysis, we included the cost of collecting data through self-response modes (mail and internet) and through a personal visit mode (CAPI). We did not include costs for a telephone mode (CATI) in this analysis. At the time of the test, the ACS was transitioning from a telephone mode, making the CATI costs derived from this test unrepresentative of future ACS data collection costs.

Data collection costs for both the self-response modes and the personal visit mode were based on the Fiscal Year 2017 (FY17) budget allocations and estimated yearly workloads, but the selfresponse cost incorporates some additional factors. The self-response cost estimate for each treatment accounts for the difference in data collection costs between internet and mail responses. Because mail questionnaire data capture is a more manual operation than internet data capture, it is more expensive, and a treatment with more mail responses than internet responses will have a higher self-response cost than a treatment with the same total selfresponse but more internet responses.

The self-response cost estimates also incorporated changes in cost due to changes in the questionnaire mailing and final mailing workloads. The lower the self-response rate for a given treatment during the M1 (M2) mailout period, the greater the number of households sent a follow-up mailing during the M2 (M3) mailout period—increasing total mailout costs. Conversely, higher self-response rates reduce subsequent mailing costs. The number of cases placed in the personal visit (CAPI) universe are affected by the total response rates at the end of the mail contact period.

Lastly, the self-response cost estimates included increases or decreases in cost based on required postage and printing and assembling various mail pieces. Some treatments included less expensive mail pieces—reducing self-response costs.

4.5.2 Calculating Reliability

To assess the potential impact of softening the messaging and other design changes to the ACS mail materials on the reliability of the estimates, we calculated a reliability of the estimates

metric. The metric, a ratio of the sum of the squared weights for the interviews under an experimental treatment as compared to the control, estimates the overall impact on the reliability of the estimates rather than the impact on specific characteristics. The weights were then adjusted to take into consideration the effect of the increased nonresponse, as well as the shift in mode distribution due to lower self-response. Additionally, we explored alternative sampling and subsampling approaches that could be implemented to offset a reduction in self-response to maintain costs.

To address the issue of the M3 mailing (see Section 4.3.4), the reliability analysis measured the difference between the control treatment and each experimental treatment, and then applied those changes to the 2016 data to model what the change in reliability would be under each treatment. To perform the reliability analysis, we accounted for the missing M3 cases in the *Control* and *Softened Revised Design* treatment by using prior production data to help produce an estimate of how many of the M3 cases would have responded had they had the opportunity to. We then applied the increased M3 response to the response data for the affected treatments and adjusted the CAPI workloads and interview counts to account for the increased M3 response. Since this only affected records with a unit designation in the M3 universe, it was not a large change, and did not change overall results, just some of the particular comparisons.

5. ASSUMPTIONS AND LIMITATIONS

5.1 Assumptions

- A single ACS monthly sample is representative of an entire year (twelve panels) and the entire frame sample with respect to both return rates and cost.
- A single methods panel group (1/24 of the full monthly sample) is representative of the full monthly sample.
- We assume that there is no difference in mail delivery timing or subsequent response time across samples of similar size using the same postal sort and mailout procedures, as we have chosen sample sizes of the experimental treatments considering postal procedures.

5.2 Limitations

- Group quarters and sampled housing unit addresses from remote Alaska and Puerto Rico were not included in the sample for the test.
- The M2 and M3 universes from treatment to treatment are different, and some caution should be given in drawing conclusions about those mailings from treatment comparisons.
- During the time that this test was conducted, the CATI operation was a part of the nonresponse follow-up operations. The CATI operation was discontinued as of October

2017. Extrapolations of the results to the new data collection should consider this limitation.

- The estimates used to make cost projections for the cost analysis do not account for sampling variability in return rates or monthly variability in production costs such as changes in staffing, production rates, or printing price adjustments.
- Due to an error on the address file for the Control and the Softened Revised Design treatments, addresses for these treatments in the M3 universe with a unit designation (i.e., apartment number) were sent a final reminder postcard where the unit designation was omitted. This likely resulted in these cases not receiving the fifth mailing. We are unsure if we would have gotten a response from these addresses if they had received the mailing. See Section 4.4.4 for more information.
- The calculations of self-response return rates exclude cases returned to the post office that are UAA. UAAs are also excluded from the address file for subsequent mailings. Due to a processing error, the Full Redesign treatment UAAs were not captured correctly after the initial mailing and before the address file creation for the third and fourth mailings. As a result, about 2,300 addresses were sent the third and fourth mailings for the Full Redesign treatment that otherwise would not have been sent those mailings. UAAs were correctly identified for all other mailings. To closely simulate what should have happened with the UAAs for the initial mailing, we used postal tracking files to identify the *Full Redesign* treatments cases that should not have received the third and fourth mailings. We eliminated those cases from our calculations of self-response return rates for the Full Redesign treatment. However, depending on the timing of a mailing, sometimes we get a response from address determined to be a UAA and we keep those cases in the return rates. However, the Full Redesign UAAs were removed completely.

6. **RESULTS**

6.1 Self-Response Return Rates

We used self-response return rates to determine if either the *Partial Redesign* or *Full Redesign* was an improvement over the *Softened Revised Design*.

We calculated self-response return rates at three points in time:

- The date the questionnaire package was mailed
- The date the final reminder postcard/letter was mailed
- The date CATI ended

6.1.1 Self-Response Return Rates – Partial Redesign versus Softened Revised Design

What is the impact on self-response of placing the multilingual information on a letter instead of a brochure and including a "Why We Ask" pamphlet?

To answer this question, we compared the self-response return rates of the *Partial Redesign* and *Softened Revised Design* treatments. See Tables 3 through 5. An explanation of the results follows.

Table 3. Total Self-Response Return Rates for Partial Redesign vs Softened Revised Design

	Partial	Softened Revised		
Point in Data Collection Cycle	Redesign	Design	Difference	P-value
Date Questionnaire Package mailed	19.0 (0.3)	20.3 (0.3)	-1.3 (0.5)	0.01*
Date Final Reminder Postcard/Letter mailed	39.2 (0.5)	39.4 (0.4)	-0.1 (0.7)	0.83
Date CATI ended (Partial Universe)	52.9 (0.4)	51.5 (0.5)	1.4 (0.7)	0.05*

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

*P-value is significant based on a two-tailed t-test at α =0.1 level

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses.

The Partial Universe excludes addresses on the M3 file with a unit designation. See Section 4.3.4.

	Partial	Softened Revised		
Point in Data Collection Cycle	Redesign	Design	Difference	P-value
Date Questionnaire Package mailed	18.8 (0.3)	20.1 (0.3)	-1.3 (0.5)	<0.01*
Date Final Reminder Postcard/Letter mailed	25.8 (0.3)	27.0 (0.4)	-1.1 (0.5)	0.04*
Date CATI ended (Partial Universe)	34.0 (0.4)	34.1 (0.4)	-0.1 (0.6)	0.82

Table 4. Internet Self-Response Return Rates for Partial Redesign vs Softened Revised Design

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

*P-value is significant based on a two-tailed t-test at α =0.1 level

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses.

The Partial Universe excludes addresses on the M3 file with a unit designation. See Section 4.3.4.

Table 5. Mail Self-Response Return Rates for Partial Redesign vs Softened Revised Design

	Partial	Softened Revised		
Point in Data Collection Cycle	Redesign	Design	Difference	P-value
Date Questionnaire Package mailed	0.3 (<0.1)	0.2 (<0.1)	<0.1 (<0.1)	0.37
Date Final Reminder Postcard/Letter mailed	13.4 (0.3)	12.4 (0.3)	1.0 (0.4)	0.01*
Date CATI ended (Partial Universe)	18.9 (0.3)	17.4 (0.3)	1.6 (0.5)	<0.01*

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

*P-value is significant based on a two-tailed t-test at $\alpha {=} 0.1$ level

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses.

The Partial Universe excludes addresses on the M3 file with a unit designation. See Section 4.3.4.

For the total self-response return rates (internet and mail combined), the rate for the *Softened Revised Design* was significantly higher than the *Partial Redesign* treatment in the beginning (by 1.3 percentage points). At the point in time when the final reminder was sent, there was no significant difference between the rates for the two treatments. However, by the end of CATI, the total self-response return rate for the *Partial Redesign* surpassed that of the *Softened Revised Design* (by 1.4 percentage points).

The research question asks about the impact of the inclusion of the "Why We Ask" pamphlet and moving multilingual information on self-response. These changes only pertain to the initial mailing package. To understand the impact of changes to the initial mailing package we looked at the return rates when the paper questionnaire package was mailed. As seen in Tables 3-5, these changes did not boost self-response in the *Partial Redesign* treatment during this first mailing. In fact, for overall and internet self-response they had a detrimental effect.

Although there were multiple differences between the contents of the first mailing for the *Partial Redesign* and *Softened Revised Design* treatments, we believe that the addition of the "Why We Ask" pamphlet in the *Partial Redesign* treatment is the main cause of the difference between the self-response return rates. However, the *Partial Redesign* did perform better later, which suggests that elements in the later mailings of that treatment may be beneficial and

warrant further testing (specifically, replacing the final reminder postcard with a letter). We recommend that the "Why We Ask" pamphlet not be incorporated into production.

6.1.2 Self-Response Return Rates – Full Redesign versus Softened Revised

What is the impact on self-response of placing the multilingual information on a letter instead of a brochure; including a "Why We Ask" pamphlet; and using wording that conveys a deferential tone?

To answer this question, we compared the self-response return rates of the *Softened Revised Design* and *Full Redesign* treatments. See Tables 6 through 8. An explanation follows.

Table 6. Total Self-Response Return Rates for Full Redesign vs Softened Revised

	Full	Softened Revised		
Point in Data Collection Cycle	Redesign	Design	Difference	P-value
Date Questionnaire Package mailed	16.5 (0.2)	20.3 (0.3)	-3.9 (0.4)	<0.01*
Date Final Reminder Postcard/Letter mailed	34.2 (0.3)	39.4 (0.4)	-5.2 (0.5)	<0.01*
Date CATI ended (Partial Universe)	48.3 (0.4)	51.5 (0.5)	-3.1 (0.6)	<0.01*

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

*P-value is significant based on a two-tailed t-test at $\alpha {=} 0.1$ level

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses.

The Partial Universe excludes addresses on the M3 file with a unit designation. See Section 4.3.4.

Table 7. Internet Self-Response Return Rates for Full Redesign vs Softened Revised Design

	Full	Softened Revised		
Point in Data Collection Cycle	Redesign	Design	Difference	P-value
Date Questionnaire Package mailed	16.2 (0.2)	20.1 (0.3)	-4.0 (0.4)	<0.01*
Date Final Reminder Postcard/Letter mailed	21.5 (0.3)	27.0(0.4)	-5.5 (0.5)	< 0.01*
Date CATI ended (Partial Universe)	29.7 (0.4)	34.1(0.4)	-4.4 (0.6)	< 0.01*

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

*P-value is significant based on a two-tailed t-test at α=0.1 level

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses.

The Partial Universe excludes addresses on the M3 file with a unit designation. See Section 4.3.4.

	Full	Softened Revised		
Point in Data Collection Cycle	Redesign	Design	Difference	P-value
Date Questionnaire Package mailed	0.3 (<0.1)	0.2 (<0.1)	0.1 (0.1)	0.30
Date Final Reminder Postcard/Letter mailed	12.7 (0.3)	12.4 (0.3)	0.3 (0.3)	0.38
Date CATI ended (Partial Universe)	18.6 (0.3)	17.4 (0.3)	1.3 (0.5)	0.01*

Table 8. Mail Self-Response Return Rates for Full Redesign vs Softened Revised Design

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

*P-value is significant based on a two-tailed t-test at α =0.1 level

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses.

The Partial Universe excludes addresses on the M3 file with a unit designation. See Section 4.3.4.

The Softened Revised Design had significantly higher self-response return rates than the Full Redesign in the beginning (by 3.9 percentage points) and at the two subsequent points in time considered. In the mail mode, there was no significant difference between the return rates for the Full Redesign and the Softened Revised Design until the end of CATI with the Full Redesign treatment having higher return rates (by 1.3 percentage points).

The overall (total) and internet return rates are lower for the *Full Redesign*. However, the difference decreased by the time CATI ended. Since we saw an increase in return rates for *Partial Redesign* as well after the fifth mailing, there may be evidence that supports replacing the final reminder postcard with a letter.

6.1.3 Self-Response Return Rates – Full Redesign versus Partial Redesign

What is the impact on self-response of using wording that expresses a deferential tone?

To answer this question, we compared the self-response return rates of the *Full Redesign* and *Partial Redesign*. See Table 9 through 11. An explanation follows.

Table 9. Total Self-Response Return Rates for Full Redesign vs Partial Redesign

	Full	Partial		
Point in Data Collection Cycle	Redesign	Redesign	Difference	P-value
Date Questionnaire Package mailed	16.5 (0.2)	19.0 (0.3)	-2.6 (0.4)	<0.01*
Date Final Reminder Postcard/Letter mailed	34.2 (0.3)	39.2 (0.5)	-5.1 (0.5)	<0.01*
Date CATI ended (Partial Universe)	48.3 (0.4)	52.9 (0.4)	-4.6 (0.6)	<0.01*

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

*P-value is significant based on a two-tailed t-test at α =0.1 level

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses.

The Partial Universe excludes addresses on the M3 file with a unit designation. See Section 4.3.4.

	Full	Partial		
Point in Data Collection Cycle	Redesign	Redesign	Difference	P-value
Date Questionnaire Package mailed	16.2 (0.2)	18.8 (0.3)	-2.6 (0.4)	<0.01*
Date Final Reminder Postcard/Letter mailed	21.5 (0.3)	25.8 (0.3)	-4.4 (0.4)	<0.01*
Date CATI ended (Partial Universe)	29.7 (0.4)	34.0 (0.4)	-4.3 (0.6)	<0.01*

Table 10. Internet Self-Response Return Rates for Full Redesign vs Partial Redesign

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

*P-value is significant based on a two-tailed t-test at α =0.1 level

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses.

The Partial Universe excludes addresses on the M3 file with a unit designation. See Section 4.3.4.

Table 11. Mail Self-Response Return Rates for Full Redesign vs Partial Redesign

	Full	Partial		
Point in Data Collection Cycle	Redesign	Redesign	Difference	P-value
Date Questionnaire Package mailed	0.3 (<0.1)	0.3 (<0.1)	<0.1 (<0.1)	0.63
Date Final Reminder Postcard/Letter mailed	12.7 (0.3)	13.4 (0.3)	-0.7 (0.4)	0.05*
Date CATI ended (Partial Universe)	18.6 (0.3)	18.9 (0.3)	-0.3 (0.5)	0.49

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

*P-value is significant based on a two-tailed t-test at α =0.1 level

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses.

The Partial Universe excludes addresses on the M3 file with a unit designation. See Section 4.3.4.

For total self-response, the *Partial Redesign* produced higher self-response return rates than the *Full Redesign*. This seems to be driven by the internet mode. We are not convinced that the more conversational wording is what hurt the *Full Redesign* treatment. It is hard to say whether the *Full Redesign* would have fared poorly if "Open Immediately" had been printed on the envelopes or if the envelope was the same size as the other treatments.

6.2 Final Response Rates

What is the overall impact of each of the experimental treatments on final response rates, data collection costs, and reliability of survey estimates?

To answer the question of the impact on final response rates, we compared the final response rates and final response rates from each mode of all three experimental treatments to that of the *Control* treatment (production). See Tables 12-16. The impact on cost and reliability is covered in Section 6.3.

As displayed in Table 12, the *Softened Revised Design*, *Partial Redesign*, and *Full Redesign* treatments all had lower final response rates than the *Control* treatment.

		-	
		Experimental –	
Treatment	Rate	Production	P-value
Production (Control)	94.3 (0.3)	_	—
Softened Revised Design	93.3 (0.3)	-1.0 (0.4)	0.02*
Partial Redesign	93.0 (0.3)	-1.3 (0.4)	<0.01*
Full Redesign	92.6 (0.4)	-1.7 (0.5)	<0.01*

Table 12. Final Response Rates (Partial Universe)

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

*P-value is significant based on a two-tailed t-test at $\alpha {=} 0.1$ level

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses.

The Partial Universe excludes addresses on the M3 file with a unit designation. See Section 4.3.4.

Table 13 shows the final response rates from the self-response modes (mail and internet rates combined). All three experimental treatments had lower rates than that of the *Control*.

Table 13. Final Proportion of Eligible Cases Responding Via the Self-Response Modes (Partial Universe)

		Experimental –	
Treatment	Rate	Production	P-value
Production (Control)	57.3 (0.6)	—	_
Softened Revised Design	50.1 (0.6)	-7.2 (0.8)	<0.01*
Partial Redesign	51.3 (0.5)	-6.0 (0.8)	<0.01*
Full Redesign	48.6 (0.6)	-8.7 (0.9)	<0.01*

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

*P-value is significant based on a two-tailed t-test at α =0.1 level

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses.

The Partial Universe excludes addresses on the M3 file with a unit designation. See Section 4.3.4.

The same results in Tables 13 hold when we examine the rates by mode, as displayed in Tables 14 and 15.

		Experimental –	
Treatment	Rate	Production	P-value
Production (Control)	20.5 (0.4)	_	_
Softened Revised Design	16.2 (0.3)	-4.3 (0.5)	<0.01*
Partial Redesign	17.7 (0.3)	-2.8 (0.5)	<0.01*
Full Redesign	17.9 (0.4)	-2.7 (0.5)	<0.01*

Table 14. Final Proportion of Eligible Cases Responding Via the Mail Mode (Partial Universe)

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

*P-value is significant based on a two-tailed t-test at α =0.1 level

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses.

The Partial Universe excludes addresses on the M3 file with a unit designation. See Section 4.3.4.

Table 15. Final Proportion of Eligible Cases Responding Via the Internet Mode (Partial Universe)

		Experimental –	
Treatment	Rate	Production	P-value
Production (Control)	36.8 (0.5)	-	-
Softened Revised Design	33.8 (0.5)	-2.9 (0.7)	<0.01*
Partial Redesign	33.6 (0.4)	-3.1 (0.7)	<0.01*
Full Redesign	30.7 (0.5)	-6.1 (0.7)	<0.01*

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

*P-value is significant based on a two-tailed t-test at α =0.1 level

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses.

The Partial Universe excludes addresses on the M3 file with a unit designation. See Section 4.3.4.

Table 16 shows the proportion of eligible cases that had a CATI response. There was no significant difference between the final rate for the *Control* and that of any of the experimental treatments.

Table 16. Final Proportion of Eligible Cases Responding Via the CATI Mode (Partial Universe)

		Experimental –	
Treatment	Rate	Production	P-value
Production (Control)	0.7 (0.1)	-	-
Softened Revised Design	0.9 (0.1)	0.1 (0.1)	0.19
Partial Redesign	0.8 (0.1)	0.1 (0.1)	0.18
Full Redesign	0.8 (0.1)	0.1 (0.1)	0.31

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses.

The Partial Universe excludes addresses on the M3 file with a unit designation. See Section 4.3.4.

Table 17 shows the proportion of eligible cases that had a CAPI response. *Control* had significantly lower rates than all of the experimental treatments. This is likely due to the fact that the *Softened Revised Design*, *Partial Redesign*, and *Full Redesign* had many more CAPI cases.

		Experimental –	
Treatment	Rate	Production	P-value
Production (Control)	36.3 (0.6)	_	—
Softened Revised Design	42.4 (0.6)	6.1 (0.9)	<0.01*
Partial Redesign	40.8 (0.6)	4.5 (0.8)	<0.01*
Full Redesign	43.2 (0.7)	6.9 (1.0)	<0.01*

Table 17. Final Proportion of Eligible Cases Responding Via the CAPI Mode (Partial Universe)

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

*P-value is significant based on a two-tailed t-test at α =0.1 level

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses.

The Partial Universe excludes addresses on the M3 file with a unit designation. See Section 4.3.4.

6.3 Cost and Reliability

Due to a procedural error, sampled addresses in *the Full Redesign* treatment identified as UAAs in the initial mailing were not captured at the Census Bureau's National Processing Center. Consequently, these addresses were sent the M2 mailing (see Section 4.3.1). Since the *Full Redesign* treatment was not a viable option based on the response rate results discussed in Sections 6.1 and 6.2, we only report cost and reliability information for the *Control* (Production), *Softened Revised Design* (SRD), and *Partial Redesign* (PRD) treatments.

Table 18 shows the differences in workloads for the initial, questionnaire, and final mailings used to calculate the costs for each mailing.

Tuble 10. Workload Estimates							
Universe	Production Workload (millions)	Production % of Initial Sample	SRD [#] Workload (millions)	SRD [#] % of Initial Sample	PRD [#] Workload (millions)	PRD [#] % of Initial Sample	
Initial Sample	3.540	100.0	3.540	100.0	3.540	100.0	
Initial Mailing	3.442	97.2	3.442	97.2	3.442	97.2	
Questionnaire Mailing	2.559	72.3	2.628	74.2	2.637	74.5	
Final Mailing	1.899	53.7	2.108	59.5	2.118	59.8	
Personal Visit	0.806	22.8	0.876	24.7	0.873	24.7	

Table 18. Workload Estimates

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test # Softened Revised Design (SRD), Partial Redesign (PRD), and Full Redesign (FRD)

To report the likely impact of implementing each experimental treatment we consider three scenarios:

- Maintain current sample size
- Maintain current reliability
- Maintain costs

6.3.1 Maintaining the Current Sample Size

As shown in Table 19, implementing any of the experimental treatments into a full ACS production year while maintaining the current sample size would increase costs due to lower return rates. Because it had the best self-response return rate when compared to the other experimental treatments, implementing the *Partial Redesign* would lead to the smallest increase in total cost with \$7.8 million additional expenditure. The *Softened Revised Design* would result in a greater increase in total cost, \$8.2 million.

	Production	Production	SRD [#]	SRD [#]	PRD [#]	PRD [#]
	Workload	Cost	Workload	Cost	Workload	Cost
Initial Sample	3.540		3.540		3.540	
Initial Mailing	3.442	\$35.300	3.442	\$34.400	3.442	\$34.400
Personal Visit	0.806	\$104.300	0.876	\$113.400	0.873	\$113.000
Subtotal		\$139.600		\$147.800		\$148.400
Difference from				\$8.200		\$7.800
Production						
Percent Change				3.7%		3.5%
from Production†						

Table 19. Data Collection Cost for each Experimental Treatment when Maintaining the Current Sample Size (in millions)

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

⁺ This is the percent increase from the FY 17 total ACS budget of approximately \$219 million.

Softened Revised Design (SRD), Partial Redesign (PRD), and Full Redesign (FRD)

The experimental treatments would also have a negative impact on reliability when maintaining the current sample. Table 20 shows that when maintaining the current sample, the *Partial Redesign* yields the highest expected completed interviews (2.103 million) and the lowest change in the margins of error (2.9 percent).

	ACS Production	Softened Revised	Partial
	Methodology	Design	Redesign
Initial Sample	3.540	3.540	3.540
Expected Completed Interviews	2.272	2.083	2.103
Change in Completed Interviews		-0.189	-0.169
Estimated Change in Variance		7.3%	5.9%
Estimated Change in Margin of Error		3.6%	2.9%

 Table 20. Reliability for each Experimental Treatment when Maintaining the Current

 Sample Size (in millions)

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

6.3.2 Maintaining Current Reliability

To maintain the current ACS reliability, the experimental treatments would need an increase in initial sample size (due to decreased self-response), as shown in Table 21. The *Partial Redesign* would require the fewest additional cases (around 217,000).

Table 21. Sample Size (in millions) for each Experimental Treatment when Maintaining the Current Reliability

	ACS Production	Softened	Partial
	Methodology	Revised Design	Redesign
Initial Sample	3.540	3.809	3.757
Difference from Current Sample		0.269	0.217
% Difference from Current Sample		7.6%	6.1%

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

The increase in initial sample size would increase the cost for all treatments (Table 22). The *Partial Redesign* would require the smallest increase in cost—with an increase in expenditure of \$16.8 million. The *Softened Revised Design* would cost an additional \$19.4 million.

	Production	Production	SRD [#]	SRD [#]	PRD [#]	PRD [#]
	Workload	Cost	Workload	Cost	Workload	Cost
Initial Sample	3.540		3.809		3.757	
Initial Mailing	3.442	\$35.300	3.704	\$37.000	3.654	\$36.500
Personal Visit	0.806	\$104.300	0.942	\$122.000	0.926	\$119.900
Subtotal		\$139.600		\$159.000		\$156.400
Difference from ACS Production				\$19.400		\$16.800
Percent change from ACS Production				8.8%		7.7%

 Table 22. Data Collection Cost (in millions) for each Experimental Treatment when

 Maintaining the Current Reliability

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test # Softened Revised Design (SRD), Partial Redesign (PRD), and Full Redesign (FRD)

6.3.3 Maintaining Current Data Collection Costs

To maintain the current ACS data collection costs, all experimental treatments would require using a smaller initial sample size than ACS production, as shown in Table 23. Because the *Partial Redesign* treatment costs the least, it has the smallest reduction in sample size — around 187,000 fewer cases. The *Softened Revised Design* would have a reduction of around 196,000 cases.

Table 23. Sample Size (in millions) for each Experimental Treatment when Maintaining the Current Data Collection Costs

	ACS Production	Softened	Partial
	Methodology	Revised Design	Redesign
Initial Sample	3.540	3.344	3.353
Difference from Current Sample		-0.196	-0.187
% Difference from Current Sample		-5.5%	-5.3%

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

Decreasing the initial sample size to maintain costs decreases the number of completed interviews, which adversely affects reliability of the estimates for the experimental treatments. Similar to the situation of maintaining the current sample, implementing the *Partial Redesign* treatment results in the best reliability of the experimental treatments, as shown in Table 24.

When maintaining data collection costs, the *Partial Redesign* yields the highest expected completed interviews, 1.995 million, and the lowest change in the margins of error, 5.6 percent, due to it having the highest overall return rates of the experimental treatments. The *Softened Revised Design* results in 1.971 million completed interviews and an estimated change in the estimates' margins of error of 6.4 percent.
	ACS Production	Softened Revised	Partial Redesign
	Methodology	Design	
Initial Sample	3.540	3.344	3.353
Expected Completed Interviews	2.272	1.971	1.995
Change in Completed Interviews		-0.301	-0.277
Estimated Change in Variance		13.3%	11.5%
Estimated Change in Margin of Error		6.4%	5.6%

Table 24. Reliability for each Experimental Treatment when Maintaining the Current Data Collection Costs

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

6.3.4 Summary of Each Experimental Treatment's Impact on Cost, Reliability, and Sample

As summarized in Table 25, maintaining the current sample while using the *Softened Revised Design* treatment would result in increased data collection costs (around \$8.2 million annually) as well as an increased margin of error (3.6 percent). To maintain current levels of reliability, this treatment would require a larger sample (7.6 percent) which would increase costs by around \$19.4 million annually. To maintain current costs, this treatment would need reduced workloads, decreasing the sample by 5.5 percent. This decrease in sample would increase the margin of error (by 6.4 percent).

Table 25. Softened Revised Design Compared to ACS Production

	Maintain Current	Maintain Current	Maintain Current
	Sample	Reliability	Costs
Change in Data Collection Cost (in millions)	\$8.200	\$19.407	
Percent Change in Sample		7.6%	-5.5%
Estimated Change in Margin of Error	3.6%		6.4%

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

Maintaining the current sample while using the *Partial Redesign* treatment would result in increased data collection costs (by around \$7.8 million annually) as well as an increased margin of error (by 2.9 percent), as shown in Table 26. To maintain current levels of reliability, this treatment would require a larger sample (by 6.1 percent) which would increase costs by around \$16.8 million annually. To maintain current costs, this treatment would need reduced workloads, decreasing the sample by 5.3 percent. This decrease in sample would increase the margin of error (by 5.6 percent).

	Maintain Current	Maintain Current	Maintain Current
	Sample	Reliability	Costs
Change in Data Collection Cost (in millions)	\$7.800	\$16.800	
Percent Change in Sample		6.1%	-5.3%
Estimated Change in Margin of Error	2.9%		5.6%

Table 26. Partial Redesign Compared to ACS Production

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

None of the experimental treatments performed better than the *Control* treatment. Comparing the experimental treatments by the end of the self-response period, *Partial Redesign* treatment performed best across all cost-related metrics. However, it is important to note that up until the final mailing, the *Softened Revised* Design was outperforming the *Partial Redesign* treatment in terms of response rate (not accounting for costs).

6.4 Item Nonresponse Rates

What is the impact on item nonresponse rates of moving the date field to the second page of the questionnaire of the Partial Redesign and the Full Redesign?

I	•	Experimental –		
Treatment	Rate	Production	P-value	
Production (Control)	7.6 (0.5)	_	_	
Partial Redesign	7.0 (0.5)	-0.6 (0.7)	0.42	
Full Redesign	6.6 (0.5)	-0.9 (0.7)	0.18	

Table 27. Item Nonresponse Rates (Partial Universe) – Date Field

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses.

The Partial Universe excludes addresses on the M3 file with a unit designation. See Section 4.3.4.

There was no impact on item nonresponse of moving the date field from the first page of the questionnaire to the second. However, since the comparison is made using the paper questionnaire (sent in the third mailing), the comparisons may be affected by differences in the universe of each treatment.

After further review of the revised questionnaire, we were concerned about the potential item nonresponse rates of a few additional variables

- Respondent name
- Respondent telephone number
- Number of people

These are included on the first page of both questionnaires, but may not have been noticeable on the revised version in the *Partial Redesign* and *Full Redesign* treatments due to the design changes. Tables 28-30 show the item nonresponse rates for each of these variables separately. Table 31 shows when all three are missing.

		Experimental –	
Treatment	Rate	Production	P-value
Production (Control)	0.9 (0.2)	—	—
Partial Redesign	1.7 (0.3)	0.8 (0.3)	0.01*
Full Redesign	1.6 (0.2)	0.7 (0.3)	0.01*

Table 28. Item Nonresponse Rates (Partial Universe) – Name Field

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

*P-value is significant based on a two-tailed t-test at α =0.1 level

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses.

The Partial Universe excludes addresses on the M3 file with a unit designation. See Section 4.3.4.

Table 29. Item Nonresponse Rates (Partial Universe) – Telephone Number Field

		Experimental –	
Treatment	Rate	Production	P-value
Production (Control)	5.3 (0.4)	—	—
Partial Redesign	6.7 (0.5)	1.4 (0.6)	0.03*
Full Redesign	6.1 (0.5)	0.8 (0.6)	0.19

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

*P-value is significant based on a two-tailed t-test at α =0.1 level

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses.

The Partial Universe excludes addresses on the M3 file with a unit designation. See Section 4.3.4.

		Experimental –	
Treatment	Rate	Production	P-value
Production (Control)	2.8 (0.3)	—	—
Partial Redesign	3.0 (0.3)	0.2 (0.4)	0.60
Full Redesign	3.1 (0.4)	0.3 (0.5)	0.46

Table 30. Item Nonresponse Rates (Partial Universe) – Number of People Field

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses.

The Partial Universe excludes addresses on the M3 file with a unit designation. See Section 4.3.4.

The *Partial Redesign* and *Full Redesign* have higher item nonresponse rates for the name field. The *Partial Redesign* has a higher item nonresponse for the telephone number field.

Table 31 shows the nonresponse rate when all three fields (name, telephone, and number of people) were not filled in on the front of the redesigned questionnaire employed in the *Partial Redesign* and *Full Redesign* treatments. The significantly higher nonresponse rate compared to production, suggests that more respondents skipped the redesigned front page.

		Experimental –	
Treatment	Rate	Production	P-value
Production (Control)	0.4 (0.1)	_	_
Partial Redesign	1.0 (0.2)	0.6 (0.2)	0.01*
Full Redesign	1.0 (0.2)	0.6 (0.2)	<0.01*

Table 31. Item Nonresponse Rates (Partial Universe) – Name, Telephone, and Number of People Fields

Source: U.S. Census Bureau, American Community Survey, 2017 Mail Design Test

*P-value is significant based on a two-tailed t-test at α =0.1 level

Note: Minor additive discrepancies are due to rounding. Standard errors are in parentheses.

The Partial Universe excludes addresses on the M3 file with a unit designation. See Section 4.3.4.

These results suggest there could potentially be a problem with the redesigned questionnaire. If we were to further test the redesigned questionnaire, a revision should be considered to ensure the questions on the front page are seen and reduce nonresponse to these items.

7. CONCLUSIONS

The Softened Revised Design treatment from the 2015 Summer Mandatory Test, which softened the mandatory messaging in the ACS mail materials, reduced self-response significantly. For the 2017 ACS Mail Design Test, we tested two newly proposed treatments—the Partial Redesign and the Full Redesign that we hoped would produce higher self-response return rates than the Softened Revised Design, but still maintain the softening of the mandatory messages.

The Softened Revised Design had significantly higher self-response return rates than the Partial Redesign treatment at the beginning of data collection (by 1.3 percentage points). However, by the end of CATI, the self-response return rate for the Partial Redesign surpassed that of the Softened Revised Design (by 1.4 percentage points). Because the Full Redesign fared poorly in comparison to both Softened Revised Design and Partial Redesign treatments, we focus the remaining discussion on these two treatments.

The *Softened Revised Design* and *Partial Redesign* treatments produced significantly lower selfresponse return rates than the *Control* treatment, where the mail materials were the same as production. The consequences of this reduction in self-response are explained in terms of sample size, reliability, and costs in the paragraphs below.

• If we wanted to <u>maintain the current sample size</u>, both the *Softened Revised Design* and the *Partial Revised Design* would increase the data collection costs due to reduced self-response. However, the *Softened Revised Design* would increase the data collection costs more than the *Partial Revised Design* (\$8.2 million annually versus \$7.8 million annually).

- If we wanted to <u>maintain the current levels of reliability</u>, both the *Softened Revised Design* and the *Partial Revised Design* would require larger sample sizes due to reduced self-response. However, the *Softened Revised Design* would require a larger increase in the sample than the Partial Revised Design (7.6 percent versus 6.1 percent, respectively). These increases would increase data collections costs by \$19.4 million annually and \$16.8 million annually, respectively).
- If we wanted to <u>maintain the current costs</u>, the *Softened Revised Design* would result in a 5.5 percent decrease in the initial sample, resulting in a 6.4 percent increase in the margin of error. The *Partial Redesign* would result in a 5.3 percent decrease in the initial sample, resulting in a 5.6 percent increase in the margin of error.

Looking at some of the components of the different treatments we have concluded that :

- Omitting "Open Immediately" from the envelopes and changing the size of the envelope in the *Full Redesign* treatment may have negatively impacted the response rate from the beginning.
- Including the "Why We Ask" brochure in the initial mailing resulted in significantly lower response rates.
- The replacement of the final postcard with a letter appears to have boosted return rates and warrants further testing.

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Appendix A. Control Treatment Materials

Control Treatment: Initial Mailing – Outgoing Envelope





Census

* * *

Initial Mailing - FAQ Brochure (Inside)

What is the American Community Survey?

The American Community Survey collects information about population and housing characteristics for the nation, states, cities, counties, metropolitan areas, and communities on a continuous basis. Based on the American Community Survey, the Census Bureau can provide up-to-date data about our rapidly changing country more often than once every 10 years when the census is conducted.

How do I benefit by answering the American Community Survey?

Communities need data about the well-being of children, families, and the older population to provide services to them. By responding to the American Community Survey questionnaire, you are helping your community to establish goals, identify problems and solutions, and measure the performance of programs.

The data are also used to decide where to locate new highways, schools, hospitals, and community centers; to show a large corporation that a town has the workforce the company needs; and in many other ways.

Frequently Asked Questions

Do I have to answer the questions on the American Community Survey?

Yes. Your response to this survey is required by law (Title 13, U.S. Code, Sections 141,193, and 221). Title 13, as changed by Title 18, imposes a penalty for not responding. We estimate this survey will take about 40 minutes to complete.

How will the Census Bureau use the information that I provide?

The Census Bureau can use the information you provide for statistical purposes only and cannot publish or release information that would identify you and your household. Your information will be used in combination with information from other households to produce data for your community. Similar data will be produced for communities across the United States.

We may combine your answers with information that you gave to other agencies to enhance the statistical uses of these data. This information will be given the same protections as your survey information. Based on the information that you provide, you may be asked to participate in other Census Bureau surveys that are voluntary.

Will the Census Bureau keep my information confidential?

Yes. All of the information the Census Bureau collects for this survey about you and your household is confidential by law (Titel 13, U.S. Code, Section 9). By law, every Census Bureau employee—including the Director as well as every field representative—has taken an oath and is subject to a jail term, a fine, or both if he or she discloses ANY information that could identify you or your household.

Where can I find more information about the American Community Survey or get assistance?

You may visit our Web site *census.gov/acs* or call 1-800-354-7271 if you need assistance or more information.

Control Treatment: Initial Mailing – Letter

ACS-13(L)(2017) (6-2016)



UNITED STATES DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. Census Bureau Washington, DC 20233-0001 OFFICE OF THE DIRECTOR

A message from the Director, U.S. Census Bureau ...

Your household has been randomly selected to complete a very important national survey, the American Community Survey. The U.S. Census Bureau conducts this survey to give our country an up-to-date picture of how we live—our education, employment, housing, and more. Using the enclosed instructions, please complete the survey online as soon as possible at:

https://respond.census.gov/acs

The Census Bureau is using the Internet to collect this information in an effort to conserve natural resources, save taxpayers' money, and process your data more efficiently. If you are unable to complete the survey online, there is no need to contact us. We will send you a paper questionnaire in a few weeks.

This survey collects critical information used to meet the needs of communities across the United States. For example, results from this survey are used to decide where new schools, hospitals, and fire stations are needed. This information also helps communities plan for the kinds of emergency situations that might affect you and your neighbors, such as floods and other natural disasters.

The Census Bureau chose your address, not you personally, as part of a randomly selected sample. You are required by U.S. law to respond to this survey. The Census Bureau is required by U.S. law to keep your answers confidential. The enclosed brochures answer frequently asked questions about the survey.

If you need help completing the survey, please call our toll-free number (1-800-354-7271).

Thank you.

Sincerely. h

John H. Thompson Director

Enclosures



census.gov

Control Treatment: Initial Mailing - Instruction Card



Control Treatment: Initial Mailing - Multilingual Brochure (backside when unfolded)

 The U.S. Census Bureau is conducting the American Community Survey
 La C Unit sobi

 In a few days you will receive an American Community Survey
 En u cuestionnaire in the mail. Because you are living in the United States, you are required by law to respond to this survey. If you have questions about the form, please call us toil-free at 1-800-354-7271.
 In a what is the American Community Survey?

 What is the American Community Survey?
 gou to this survey conducted by the Census Bureau. It is designed to give communities current information
 gou Le Fer

give communities current information about its people and housing. In order to make well-informed decisions, a community needs accurate and reliable information. By responding to this survey, you are helping your community to get this kind of information.

Will my answers to this survey be kept confidential?

Yes. All of the information the Census Bureau collects for this survey about you and your household is confidential by law (Title 13, United States Code). La Oficina del Censo de los Estados Unidos está realizando la Encuesta sobre la Comunidad Estadounidense

En unos días, recibirá por correo un cuestionario de la Encuesta sobre la Comunidad Estadounidense. Como usted esta viviendo en los Estados Unidos, la ley exige que usted responda a esta encuesta. Si tiene preguntas sobre el cuestionario, llámenos al 1-877-833-5625 para hablar con uno de nuestros empleados que habla español. La llamada es gratis. El empleado podrá contestar sus preguntas o usted podrá completar la encuesta por teléfono.

¿Qué es la Encuesta sobre la Comunidad Estadounidense?

La Encuesta sobre la Comunidad Estadounidense es una encuesta importante realizada por la Oficina del Censo de los Estados Unidos. Está diseñada para brindar información actual a las comunidades sobre las personas y las viviendas. Para poder tomar buenas decisiones, una comunidad necesita información precisa y confiable. Al responder a esta encuesta, usted está ayudando a su comunidad a obtener este tipo de información.

¿Serán confidenciales mis respuestas a esta encuesta?

Así es. Toda información que la Oficina del Censo de los Estados Unidos obtenga durante esta encuesta sobre usted y su vivienda es confidencial según la ley (Título 13, Código de los Estados Unidos).

Important Information From the U.S. Census Bureau Información Importante de la Oficina del Censo de los Estados Unidos 美国人口普查局 重要通知 Thông tin quan trọng từ Văn phòng Thống kê Dân số Hoa Kỳ Важная информация от Бюро переписи населения США 미국 인구조사국에서 전해드리는 중요한 정보 t of Commerce distics Administrat and August 2013 ACS-9 (2014) Census FF 💟 🔠 🚥

Reminder Letter - Outgoing Envelope

U.S. DEPARTMENT OF COMMERCE

Economics and Statistics Administration U.S. CENSUS BUREAU 1201 East 10th Street Jeffersonville IN 47132-0001 OFFICIAL BUSINESS Penalty for Private Use \$300

ACS-40(2012) (6-2011)

AN EQUAL OPPORTUNITY EMPLOYER





Control Treatment: Reminder Letter

ACS-20(L)(2015) (5-2015)



UNITED STATES DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. Census Bureau Washington, DC 20233-0001 OFFICE OF THE DIRECTOR

A message from the Director, U.S. Census Bureau ...

A few days ago, you should have received instructions for completing the **American Community Survey** online. Local communities depend on information from this survey to decide where schools, highways, hospitals, and other important services are needed. If you have not already responded, please do so now.



If we do not receive your response online, we will mail a paper questionnaire to your address.

Your response to this survey is required by law. Your response is critically important to your local community and your country. Responding promptly will prevent your receiving additional reminder mailings, phone calls, or personal visits from Census Bureau interviewers.

If you need help completing the survey or have questions, please call 1-800-354-7271.

Thank you in advance for your prompt response.

Sincerely,

h

John H. Thompson Director, U.S. Census Bureau

Control Treatment: Questionnaire Package – Outgoing Envelope

U.S. DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. CENSUS BUREAU 1201 East 10th Street Jeffersonville IN 47132-0001	AN EQUAL OPPORTUNITY EMPLOYER
OFFICIAL BUSINESS Penalty for Private Use \$300	
ACS-46(2012) (5-2011)	
The American Community Survey Form Enclosed YOUR RESPONSE IS REQUIRED BY LAW	

PRESORTED FIRST-CLASS MAIL POSTAGE & FEES PAID U.S. Census Bureau Permit No. G-58

Census

Questionnaire Package – Return Envelope

OFFICIAL BUSINESS Penalty for Private Use \$300 6385-47(2014) (10-2013)



FIRST-CLASS MAIL PERMIT NO. 16081 WASHINGTON DC

AN EQUAL OPPORTUNITY EMPLOYER

POSTAGE WILL BE PAID BY THE U.S. CENSUS BUREAU

DIRECTOR US CENSUS BUREAU PO BOX 5240 JEFFERSONVILLE IN 47199-5240

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Control Treatment: Questionnaire Package – Letter

ACS-14(L)(2017) (6-2016)



UNITED STATES DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. Census Bureau Washington, DC 20233-0001 OFFICE OF THE DIRECTOR

A message from the Director, U.S. Census Bureau...

About two weeks ago, the U.S. Census Bureau sent instructions for completing the American Community Survey to your address. We asked you to help us with this very important survey by completing it online. But we have not received your response yet.

If you have already completed the survey, thank you very much. If you have not, please complete the survey soon using ONE of the following two options.

Option 1: Go to **https://respond.census.gov/acs** to complete the survey online. **Option 2:** Fill out and mail back the enclosed questionnaire.

This survey is so important that a Census Bureau representative may attempt to contact you by telephone or personal visit if we do not receive your response.

The information collected in this survey will help decide where new schools, hospitals, and fire stations are needed. The information also is used to develop programs to reduce traffic congestion, provide job training, and plan for the health care needs of the elderly.

The Census Bureau chose your address, not you personally, as part of a randomly selected sample. You are required by U.S. law to respond to this survey. The Census Bureau is required by U.S. law to keep your answers confidential. The enclosed brochure answers frequently asked questions about the survey.

If you need help completing the survey, please call our toll-free number (1-800-354-7271).

Thank you.

Sincerely,

John H. Thompson Director

Enclosures



census.gov

Control Treatment: Questionnaire Package – Instruction Card



Control Treatment: Questionnaire Package–Page One of Questionnaire



Control Treatment: Questionnaire Package - FAQ Brochure (inside)



What is the American Community Survey?

The American Community Survey collects information about population and housing characteristics for the nation, states, cities, counties, metropolitan areas, and communities on a continuous basis. Based on the American Community Survey, the Census Bureau can provide up-to-date data about our rapidly changing country more often than once every 10 years when the census is conducted.

How do I benefit by answering the American Community Survey?

Communities need data about the well-being of children, families, and the older population to provide services to them. By responding to the American Community Survey questionnaire, you are helping your community to establish goals, identify problems and solutions, and measure the performance of programs.

The data are also used to decide where to locate new highways, schools, hospitals, and community centers; to show a large corporation that a town has the workforce the company needs; and in many other ways.

Frequently Asked Questions

Do I have to answer the questions on the American Community Survey?

Yes. Your response to this survey is required by law (Title 13, U.S. Code, Sections 141,193, and 221). Title 13, as changed by Title 18, imposes a penalty for not responding. We estimate this survey will take about 40 minutes to complete.

How will the Census Bureau use the information that I provide?

The Census Bureau can use the information you provide for statistical purposes only and cannot publish or release information that would identify you and your household. Your information will be used in combination with information from other households to produce data for your community. Similar data will be produced for community. Similar data will be produced for communities across the United States.

We may combine your answers with information that you gave to other agencies to enhance the statistical uses of these data. This information will be given the same protections as your survey information. Based on the information that you provide, you may be asked to participate in other Census Bureau surveys that are voluntary.

Will the Census Bureau keep my information confidential?

Yes. All of the information the Census Bureau collects for this survey about you and your household is confidential by law (Title 13, U.S. Code, Section 9). By law, every Census Bureau employee—including the Director as well as every field representative—has taken an oath and is subject to a jail term, a fine, or both if he or she discloses ANY information that could identify you or your household.

Where can I find more information about the American Community Survey or get assistance?

You may visit our Web site *census.gov/acs* or call 1-800-354-7271 if you need assistance or more information.

Control Treatment: Reminder Postcard

U.S. DEPARTMENT OF COMMERCE Economic and Statistics Administration Up1 E (19) Band Affenomelie IN 4732-0001 AGE-sequents (7-30-18) OFFFCH, RUDNESS Emails of Private Line Exco



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UNITED STATES DEPARTMENT OF COMMERCE Economics and Burlinics Administration U.S. Commercial Semantic Marcines N. Molecular Marcines N. Molecular Marcines N. Molecular Marcines N. Molecular

A message from the Director, U.S. Cansus Bureau . .

Within the last line weeks, the U.S. Careaus (bureau serier you serveral requests to complate the Amendian Community Survey New is the time to complete the servery if you have one laterady does so. Preses complete the questionnaire and return it now CRI go to https://respond.careaus.gov/acs to respond online.

Your response to this survey is required by U.S. law. If you do not respond, a Campan Bareau interviewer may contact you to complete the survey. Local and national leaders use the information term this survey for planning schools, hospitals, roads, and other community meeds.

If you need help completing the survey or have questions, please call our tal-tree number (1-800-358-7271).

3h

John H. Thompson

Control Treatment: Final Reminder Postcard

ACS-23(2015) (7-2015)



UNITED STATES DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. Census Bureau Washington, DC 20233-0001 OFFICE OF THE DIRECTOR

A message from the Director, U.S. Census Bureau . . .

Within the last few weeks, the U.S. Census Bureau mailed an American Community Survey questionnaire package to your address. **You are required by U.S. law to respond to this survey.** The Census Bureau is required by U.S. law to keep your answers confidential. If you have already responded, thank you. If you have not, please complete the questionnaire and send it now, or complete the survey online now at https://respond.census.gov/acs.

Your response is critically important to your local community and to your country. If you do not respond, a Census Bureau interviewer may contact you by personal visit to complete the survey.

If you would like to complete the survey by telephone or need assistance, please call our toll-free number (1–800–354–7271).

Thank you.

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John H. Thompson

Appendix B. Softened Revised Design Treatment Materials

Softened Revised Design Treatment: Initial Mailing – Outgoing Envelope





Softened Revised Design Treatment: Initial Mailing – Letter



U.S. Census Bureau Washington, DC 20233

A Message From John H. Thompson, Director of the U.S. Census Bureau:

Your address has been randomly selected by the U.S. Census Bureau to participate in the **American Community Survey**. The Census Bureau conducts this survey each year to give our country an up-to-date picture of how we live – including our education, housing, and jobs.

Communities across the country rely on information from this survey to decide where important services are needed, including:

- Improving roads and reducing traffic
- Building schools
- · Planning for the health care needs of the elderly

Respond now at https://respond.census.gov/acs

Because your household has been asked to participate on behalf of your community, it is vital that you complete this survey to help meet critical needs in your area. Your response is required by U.S. law.

If you are unable to complete the survey online, we will send you a paper questionnaire in a few weeks. The Census Bureau is using the Internet to collect this information to conserve natural resources, save taxpayers money, and process data more efficiently.

If you need help completing the survey or have questions, please call our toll-free number 1–800–354–7271.

Thank you in advance for your prompt response.

Sincerely,

John H. Thompson Director, U.S. Census Bureau

Enclosures

American community survey data help determine the annual distribution of more than **\$400 billion** in federal funds **to communities nationwide**.

ACS-13(LX)SMS (2-2017)

census.gov

Will my response be confidential?

Yes. The information you provide will help create a picture of your community, but it cannot be used to identify you. By law (Title 13, U.S. Code, Section 9), all of the information the Census Bureau collects for this survey is completely confidential, and millions of people securely participate in the survey each year. Census Bureau employees are subject to a \$250,000 fine and/or up to five years in prison if they disclose any information that could identify you.

Am I required to fill out this survey?

Yes. Your response to this survey is required by law (Title 13, U.S. Code, Sections 141, 193, and 221). As a randomly selected representative of your community, you are the voice of your neighbors and peers. To create an accurate picture of your community, it is critical that you respond.

How will the Census Bureau use the information I provide?

Your confidential response will be aggregated with information from other nearby households to produce a portrait of your community. This information is made freely accessible to government leaders, businesses, nonprofit organizations, and the public at large.

Based on the information you provide, you may be asked to participate in other Census Bureau surveys that are voluntary. We may combine your answers with information that you gave to other agencies to enhance the statistical uses of these data. This information will be given the same protection as your survey response.

Softened Revised Design Treatment: Initial Mailing – Instruction Card





Complete la Encuesta sobre la Comunidad Estadounidense en Internet.

https://respond.census.gov/acs

Si usted necesita ayuda o tiene preguntas acerca de la encuesta, por favor llame al **1-877-833-5625**.

Guarde esta tarjeta.

Necesitará la información de la etiqueta de dirección en el otro lado de esta tarjeta para iniciar la sesión en Internet.

See the other side for English.



Complete the American Community Survey online.



Keep this card. You will need information from the address label on this card to log in.

Vea el otro lado para español.

https://respond.census.gov/acs

If you need help or have questions, please call 1-800-354-7271. ACS-34IM(X)SM (05/2015)

Softened Revised Design Treatment: Initial Mailing – Multilingual Brochure (backside when unfolded)

The U.S. Census Bureau is conducting the American Community Survey

In a few days you will receive an American Community Survey questionnaire in the mail. Because you are living in the United States, you are required by law to respond to this survey. If you have questions about the form, please call us toll-free at 1-800-354-7271.

What is the American Community Survey?

The American Community Survey is an important survey conducted by the Census Bureau. It is designed to give communities current information about its people and housing. In order to make well-informed decisions, a community needs accurate and reliable information. By responding to this survey, you are helping your community to get this kind of information.

Will my answers to this survey be kept confidential?

Yes. All of the information the Census Bureau collects for this survey about you and your household is confidential by law (Title 13, United States Code). La Oficina del Censo de los Estados Unidos está realizando la Encuesta sobre la Comunidad Estadounidense

En unos días, recibirá por correo un cuestionario de la Encuesta sobre la Comunidad Estadounidense. Como usted esta viviendo en los Estados Unidos, la ley exige que usted responda a esta encuesta. Si tiene preguntas sobre el cuestionario, llámenos al 1-877-833-5625 para hablar con uno de nuestros empleados que habla español. La llamada es gratis. El empleado podrá contestar sus preguntas o usted podrá contestar sus preguntas o usted

¿Qué es la Encuesta sobre la Comunidad Estadounidense?

La Encuesta sobre la Comunidad Estadounidense es una encuesta importante realizada por la Oficina del Censo de los Estados Unidos. Está diseñada para brindar información actual a las comunidades sobre las personas y las viviendas. Para poder tomar buenas decisiones, una comunidad necesita información precisa y confiable. Al responder a esta encuesta, usted está ayudando a su comunidad a obtener este tipo de información.

¿Serán confidenciales mis respuestas a esta encuesta?

Así es. Toda información que la Oficina del Censo de los Estados Unidos obtenga durante esta encuesta sobre usted y su vivienda es confidencial según la ley (Título 13, Código de los Estados Unidos).



Softened Revised Design Treatment: Reminder Letter – Outgoing Envelope



Softened Revised Design Treatment: Reminder Letter



U.S. Census Bureau Washington, DC 20233

A Message From John H. Thompson, Director of the U.S. Census Bureau:

A few days ago, you should have received instructions for completing the **American Community Survey** online. Local communities depend on information from this survey to decide where schools, highways, hospitals, and other important services are needed. If you have not already responded, please do so now.

Respond now at https://respond.census.gov/acs Log in using this user ID:

If we do not receive your response online, we will mail a paper questionnaire to your address.

Your response is critically important to your local community and your country and is required by law. Responding promptly will prevent your receiving additional reminder mailings, phone calls, or personal visits from Census Bureau interviewers.

If you need help in completing the survey or have questions, please call our toll-free number 1–800–354–7271.

Thank you in advance for your prompt response.

Sincerely,

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John H. Thompson Director, U.S. Census Bureau

ACS-20(3)(SMS (2-2017)

census.gov

Softened Revised Design Treatment: Questionnaire Package – Outgoing Envelope





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Softened Revised Design Treatment: Questionnaire Package - Letter



U.S. Census Bureau Washington, DC 20233

A Message From John H. Thompson, Director of the U.S. Census Bureau:

The U.S. Census Bureau recently sent you a request to complete the **American Community Survey** online. If you have not already responded to this important survey, please do so now.

Complete the survey using ONLY ONE of the following options:

- Respond online at https://respond.census.gov/acs
- If you are unable to respond online, please fill out and mail back the enclosed questionnaire.

Your response is important to your community.

The Census Bureau has randomly selected your address to receive this survey as part of a nationally representative sample. You are required by U.S. law to respond to this survey. Because you will be providing important information on behalf of your community, it is vital that you complete this survey to help meet critical needs in your area – including determining where to locate new schools, hospitals, and fire stations.

If you do not respond promptly, a Census Bureau interviewer may contact you to complete the survey.

Your answers are completely confidential.

By law, the Census Bureau cannot publish or release information that would identify you or your household.

If you need help completing the survey or have questions, please call our toll-free number 1–800–354–7271.

Thank you for your prompt response.

Sincerely, MAM

John H. Thompson Director, U.S. Census Bureau

Enclosures

ACS-14(L)(SMS (2-2017)

census.gov

Softened Revised Design Treatment: Questionnaire Package – Instruction Card



Two ways to respond: Select only one.



Option One (recommended)

Go to https://respond.census.gov/acs

Important: You will need information from the address label on the enclosed questionnaire to log in.



Option Two

Complete and return the enclosed questionnaire.

Vea el otro lado para español.

If you need help or have questions about the American Community Survey, please call 1-800-354-7271.



Hay dos maneras de responder: Seleccione sólo una.



Opción Una (recomendada)

Vaya a https://respond.census.gov/acs

Importante: Usted necesitará la información de la etiqueta de dirección en el cuestionario adjunto para iniciar la sesión de Internet.



Opción Dos

Complete y devuelva el cuestionario adjunto.

See other side for English.

Si usted necesita ayuda o tiene preguntas acerca de la Encuesta sobre la Comunidad Estadounidense, por favor llame al 1-877-833-5625.

Softened Revised Design Treatment: Questionnaire Package - Page One of Questionnaire



Softened Revised Design Treatment: Reminder Postcard





Dear resident:

The U.S. Census Bureau has sent you repeated requests to complete the American Community Survey. If you have not already responded, it is imperative that you complete this survey now.

Complete and mail back your paper questionnaire now. Or respond at https://respond.census.gov/acs

If you do not respond now, a Census Bureau interviewer may contact you by personal visit to complete the survey. If you would like to complete the survey by telephone or need assistance, please call our toll-free number 1/800-354-7271.

Thank you. MA-Ma---

John H. Thompson Director, U.S. Census Bureau Softened Revised Design Treatment: Final Reminder Postcard



PRESORTED FIRST-CLASS MAIL POSTAGE & FEES PAID U.S. Census Bureau Permit No. G-58

U.S. Department of Commerce Economics and Statistics Administration U.S. Census Bureau National Processing Center 1201 E. 10th St. Jeffersonville, IN 47132-0001

OFFICIAL BUSINESS Penalty for Private Use: \$300



Now is the time to respond.

The U.S. Census Bureau has sent you several requests to complete the **American Community Survey**. If you have not already responded, it is imperative that you complete this survey now.

Complete and mail back your paper questionnaire now. Or respond at https://respond.census.gov/acs

If you do not respond promptly, a Census Bureau interviewer may contact you to complete the survey.

If you need help completing the survey or have questions, please call our toll-free number **1-800-354-7271**.

Thank you,

John H. Thompson Director, U.S. Census Bureau

Appendix C. Partial Redesign Treatment Materials

Partial Redesign Treatment: Initial Mailing – Outgoing Envelope





Partial Redesign Treatment: Initial Mailing – Why We Ask Brochure (front)

Census Rureau

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, inform businesses looking to add jobs and expand to new markets, and more. Respond at

https://respond.census.gov/acs today.

What we ask about	How your responses help
 Employment Unemployment Not in labor force Weeks and hours worked Industry and occupation 	 Develop programs to boost employment. Pinpoint areas of growth to help businesses choose new locations. Help governments plan unemployment programs and services.
 Education School enrollment, private vs. public Information on students, at all educational levels Completed level of education 	 Help communities measure how well educational resources are serving their populations. Identify the educational and training needs of adults. Bridge gaps between the levels of education completed by workers and educational requirements for employers.
 Veterans Military service Veteran period of service VA service-connected disability rating 	 Help the government and communities plan for the future health care of veterans. Plan and fund job training for veterans. Improve the home loan guarantee program for veterans.
Income and Housing Costs Income sources Living expenses	 Help gauge the need for economic and housing assistance. Provide the only source of community data on the population and characteristics of people who live in poverty. Provide a measure of housing affordability.

Partial Redesign Treatment: Initial Mailing – Why We Ask Brochure (back)

 Commuting Where people work Commuting time to work Mode of transportation 	 Provide precise data crucial for planning improvements to roads and mass transit. Help develop transportation networks and services. Create emergency response strategies.
 Disability and Health Insurance Difficulty with specific daily living tasks Health insurance enrollment and type 	 Help communities plan transportation, employment programs, and public service accessibility for people with disabilities. Attract businesses that serve people with disabilities. Show which groups are at risk for limited health care access and poor health outcomes.
 Housing Characteristics Plumbing, kitchen facilities, and other housing features Housing size and age 	 Help identify areas with substandard housing. Identify which communities are eligible for housing programs that help people afford decent, safe, and sanitary housing. Help communities plan recovery efforts after disasters.
Owners and Renters Own vs. rent home Amount of monthly rent Property value 	 Analyze housing affordability and allocate assistance programs. Help governments understand local housing market changes and monitor affordability. Supply businesses with data to design and market homes.
 People and Relationships Age Sex Race Hispanic origin Relationship to household members 	 Help monitor the well-being and discrimination of people. Administer funds and services to people needing assistance. Help businesses evaluate local market demands for products and services.
United States U.S. De	partment of Commerce ics and Statistics Administration



U.S. Department of Commerce Economics and Statistics Administration U.S. CENSUS BUREAU *CENSUS.GOV*

ACS-8IM(X)DTR (10-2016)



U.S. Census Bureau Washington, DC 20233

A Message From John H. Thompson, Director of the U.S. Census Bureau:

Your address has been randomly selected by the U.S. Census Bureau to participate in the **American Community Survey**. The Census Bureau conducts this survey each year to give our country an up-to-date picture of how we live – including our education, housing, and jobs.

Communities across the country rely on information from this survey to decide where important services are needed, including:

- Improving roads and reducing traffic
- Building schools
- Planning for the health care needs of the elderly

Respond now at https://respond.census.gov/acs

Because your household has been asked to participate on behalf of your community, it is vital that you complete this survey to help meet critical needs in your area. Your response is required by U.S. law.

If you are unable to complete the survey online, we will send you a paper questionnaire in a few weeks. The Census Bureau is using the Internet to collect this information to conserve natural resources, save taxpayers money, and process data more efficiently.

If you need help completing the survey or have questions, please call our toll-free number 1–800–354–7271.

Thank you in advance for your prompt response.

Sincerely,

John H. Thompson Director, U.S. Census Bureau

Enclosures

American community survey data help determine the annual distribution of more than **\$400 billion** in federal funds **to communities nationwide**.

ACS-13(LX)SMS2 (3-2017)

census.gov

Will my response be confidential?

Yes. The U.S. Census Bureau is required by law to protect this information. The Census Bureau is not permitted to publicly release your responses in a way that could identify you. We are conducting this survey under the authority of Title 13, United States Code, Sections 141 and 193. Federal law protects your privacy and keeps your answers confidential (Title 13, United States Code, Section 9). Per the Federal Cybersecurity Enhancement Act of 2015, your data are protected from cybersecurity risks through screening of the systems that transmit your data.

Am I required to fill out this survey?

Yes. Your response to this survey is required by law (Title 13, U.S. Code, Sections 141, 193, and 221). As a randomly selected representative of your community, you are the voice of your neighbors and peers. To create an accurate picture of your community, it is critical that you respond.

How will the Census Bureau use the information I provide?

Your confidential response will be aggregated with information from other nearby households to produce a portrait of your community. This information is made freely accessible to government leaders, businesses, nonprofit organizations, and the public at large.

Based on the information you provide, you may be asked to participate in other Census Bureau surveys that are voluntary. We may combine your answers with information that you gave to other agencies to enhance the statistical uses of these data. This information will be given the same protection as your survey response.

It is important that we hear from all respondents. If you would rather respond in a different language, please use the following resources:

Complete la Encuesta sobre la Comunidad Estadounidense en Internet: https://respond.census.gov/acs

Si tiene preguntas sobre el cuestionario, llámenos al 1-877-833-5625 para hablar con uno de nuestros empleados que habla español. La llamada es gratis.

这个调查问卷只有英文版。请拔打我们的免费电话: 1-800-638-5945、我们将有会说中文的工作人员回答您的问题、或者您能够在用中文回答调查的问题。

Nếu quý vị có thắc mắc về mẫu đơn, xin gọi chúng tôi theo số điện thoại miễn phí 1-877-221-9436. Bản câu hỏi khảo sát chỉ có bằng tiếng Anh.

Анкета составлена только на английском языке. Позвоните по бесплатному номеру 1-866-225-2297, и Вам ответит русскоговорящий сотрудник.

설문지 는 영어 로만 되어 있습니다 한국어 로 설문을 작성 하고 싶으 시거나 질문 이 있으시면,무료 전화 1-800-772-6728 직무 로 전화 를 주십시오. 한국어 당당 직원 과 통화 하실 수 있습니다.

ACS-13(LX)SMS2 (3-2017)

Partial Redesign Treatment: Initial Mailing – Instruction Card



Complete the American Community Survey online.



Keep this card.

You will need information from the address label on this card to log in.

Vea el otro lado para español.

https://respond.census.gov/acs

If you need help or have questions, please call our toll-free number 1-800-354-7271. ACS-34IMXX5M(08/2017)





Complete la Encuesta sobre la Comunidad Estadounidense en Internet.

https://respond.census.gov/acs

Si usted necesita ayuda o tiene preguntas acerca de la encuesta, por favor llame sin cargo al **1-877-833-5625**.

Guarde esta tarjeta.

Necesitará la información de la etiqueta de dirección en el otro lado de esta tarjeta para iniciar la sesión en Internet.

See the other side for English.
Partial Redesign Treatment: Reminder Letter – Outgoing Envelope



Partial Redesign Treatment: Reminder Letter



U.S. Census Bureau Washington, DC 20233

A Message From John H. Thompson, Director of the U.S. Census Bureau:

A few days ago, you should have received instructions for completing the **American Community Survey** online. Local communities depend on information from this survey to decide where schools, highways, hospitals, and other important services are needed. If you have not already responded, please do so now.

Respond now at https://respond.census.gov/acs Log in using this user ID:

If we do not receive your response online, we will mail a paper questionnaire to your address.

Your response is critically important to your local community and your country and is required by law. Responding promptly will prevent your receiving additional reminder mailings, phone calls, or personal visits from Census Bureau interviewers.

If you need help in completing the survey or have questions, please call our toll-free number 1–800–354–7271.

Thank you in advance for your prompt response.

Sincerely,

- %

John H. Thompson Director, U.S. Census Bureau

ACS-20(LX)SMS (3-2017)

Partial Redesign Treatment: Questionnaire Package – Outgoing Envelope





Questionnaire Package – Return Envelope

OFFICIAL BUSINESS Penalty for Private Use \$300 6385-47(2014) (10-2013)



BUSINESS REPLY MAIL FIRST-CLASS MAIL PERMIT NO. 16081 WASHINGTON DC

AN EQUAL OPPORTUNITY EMPLOYER

POSTAGE WILL BE PAID BY THE U.S. CENSUS BUREAU

DIRECTOR US CENSUS BUREAU PO BOX 5240 JEFFERSONVILLE IN 47199-5240

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Partial Redesign Treatment: Questionnaire Package - Letter



U.S. Census Bureau Washington, DC 20233

A Message From John H. Thompson, Director of the U.S. Census Bureau:

The U.S. Census Bureau recently sent you a request to complete the **American Community Survey** online. If you have not already responded to this important survey, please do so now.

Complete the survey using ONLY ONE of the following options:

- Respond online at https://respond.census.gov/acs
- If you are unable to respond online, please fill out and mail back the enclosed questionnaire.

Your response is important to your community.

The Census Bureau has randomly selected your address to receive this survey as part of a nationally representative sample. You are required by U.S. law to respond to this survey. Because you will be providing important information on behalf of your community, it is vital that you complete this survey to help meet critical needs in your area – including determining where to locate new schools, hospitals, and fire stations.

If you do not respond promptly, a Census Bureau interviewer may contact you to complete the survey.

Your answers are completely confidential.

By law, the Census Bureau cannot publish or release information that would identify you or your household.

If you need help completing the survey or have questions, please call our toll-free number 1–800–354–7271.

Thank you for your prompt response.

Sincerely,

John H. Thompson Director, U.S. Census Bureau

Enclosures

ACS-14(LX)SMS (2-2017)

Partial Redesign Treatment: Questionnaire Package – Page One of Questionnaire

Census The American C	U.S. DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. CENSUS BUREAU U.S. CENSUS BUREAU
ACS 919 990 097 0 SEQ003-000017 TO THE RESIDENT 0 123 ANY ST ANY TOWN US 00123	35 111 1601 10 80000-00110 80000-00110 111.11.11.11.11.11.11.11.11.11.11.11.11
How to respond to this survey: We wrote to you earlier with a request to respond online. We are sending this paper questionnaire to all households that have not yet responded because we realize not everyone can or wants to respond over the Internet. If you would rather complete this survey online, please go to https://respond.census.gov/acs If you need help or have questions about completing this form, please call toll-free 1-800-354-7271. Telephone Device for Deaf (TDD) call toll-free 1-800-582-8330. ¿Necesita ayuda? Llame sin cargo alguno al 1-877-833-5625.	 How this survey is done: Each month we survey thousands of randomly selected addresses in every region of the U.S. to learn how communities are changing. The American Community Survey (ACS) is one of only a few surveys for which all recipients are required to respond. The Census Bureau and its staff are also required by law to protect the confidentiality of responses, and no individual can be identified in the statistics produced from this survey. An explanation of the ACS is available at http://www.census.gov/acs/
Let's get started: First, please print the name and telephone number of the person who is filling out this form. We will only contact you if needed for official Census Bureau business. Last Name First Name MI Area Code + Number	 Next, tell us how many people are living or staying at this address. Include everyone who is living or staying here for more than 2 months. Include yourself if you are living here for more than 2 months. Include anyone else staying here who does not have another place to stay, even if they are here for 2 months or less. Do not include anyone who is living somewhere else for more than 2 months, such as a college student living away or someone in the Armed Forces on deployment. Number of people
	Fill out pages 2, 3, and 4 for everyone, including yourself, who is living or staying at this address for more than 2 months. Then complete the rest of the form.
	FORM ACS-1(X)DMM OMB NO. 0607-0810 09-26-2016) Draft 7 OMB NO. 0607-0936

Partial Redesign Treatment: Reminder Postcard



Partial Redesign Treatment: Final Reminder Letter



U.S. Census Bureau Washington, DC 20233

The U.S. Census Bureau has sent you several requests to complete the **American Community Survey**. If you have not already responded, it is important that you complete this survey now.

Complete and mail back your paper questionnaire now. Or respond at https://respond.census.gov/acs Log in using this user ID:

If you do not respond promptly, a Census Bureau interviewer may contact you to complete the survey.

If you need help completing the survey or have questions, please call our toll-free number **1–800–354–7271**.

Thank you.

Sincerely,

John H. Thompson Director, U.S. Census Bureau

Now is the time to respond.

ACS-23(LX)SM52 (2-2017)

Appendix D. Full Redesign Treatment Materials

Full Redesign: Initial Mailing – Outgoing Envelope





U.S. Department of Commerce Economics and Statistics Administration U.S. Census Bureau National Processing Center 1201 E. 10th St. Jeffersonville, IN 47132-0001

OFFICIAL BUSINESS Penalty for Private Use \$300 AN EQUAL OPPORTUNITY EMPLOYER ACS-46IM(X)DTR (10-2016)





Census Rureau

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, inform businesses looking to add jobs and expand to new markets, and more. Respond at

https://respond.census.gov/acs today.

What we ask about	How your responses help
 Employment Unemployment Not in labor force Weeks and hours worked Industry and occupation 	 Develop programs to boost employment. Pinpoint areas of growth to help businesses choose new locations. Help governments plan unemployment programs and services.
 Education School enrollment, private vs. public Information on students, at all educational levels Completed level of education 	 Help communities measure how well educational resources are serving their populations. Identify the educational and training needs of adults. Bridge gaps between the levels of education completed by workers and educational requirements for employers.
 Veterans Military service Veteran period of service VA service-connected disability rating 	 Help the government and communities plan for the future health care of veterans. Plan and fund job training for veterans. Improve the home loan guarantee program for veterans.
 Income and Housing Costs Income sources Living expenses 	 Help gauge the need for economic and housing assistance. Provide the only source of community data on the population and characteristics of people who live in poverty. Provide a measure of housing affordability.

MM

Full Redesign: Initial Mailing – Why We Ask Brochure (back)

United States" U.S. De Economi U.S. CENSI	partment of Commerce cs and Statistics Administration JS BUREAU	🗊 F 🛛 🐺 9 in
 People and Relationships Age Sex Race Hispanic origin Relationship to household members 	 Help monitor the well-being and discrimination of people. Administer funds and services to people needing assistance. Help businesses evaluate local market demands for products and services. 	
Owners and Renters Own vs. rent home Amount of monthly rent Property value 	 Analyze housing affordability and allocate assistance programs. Help governments understand local housing market changes and monitor affordability. Supply businesses with data to design and market homes. 	
 Housing Characteristics Plumbing, kitchen facilities, and other housing features Housing size and age 	 Help identify areas with substandard housing. Identify which communities are eligible for housing programs that help people afford decent, safe, and sanitary housing. Help communities plan recovery efforts after disasters. 	
 Disability and Health Insurance Difficulty with specific daily living tasks Health insurance enrollment and type 	 Help communities plan transportation, employment programs, and public service accessibility for people with disabilities. Attract businesses that serve people with disabilities. Show which groups are at risk for limited health care access and poor health outcomes. 	
 Commuting Where people work Commuting time to work Mode of transportation 	 Provide precise data crucial for planning improvements to roads and mass transit. Help develop transportation networks and services. Create emergency response strategies. 	
Commuting Where people work 	 Provide precise data crucial for 	

ACS-8IM(X)DTR (10-2016

Full Redesign: Initial Mailing – Letter



U.S. Census Bureau Washington, DC 20233

I am writing to request your help with the American Community Survey. The Census Bureau conducts this survey each year to give our country an up-to-date picture of how we live – including information about our education, housing, and jobs. Communities across the country rely on information from this survey to decide where important services are needed, including roads, schools, hospitals, and veterans' services. Your address has been selected to represent your community.

The Census Bureau would prefer that you answer this survey online using the secure website and User ID provided below. Answering online saves taxpayer money, conserves natural resources, and makes processing the results quicker and more efficient.

> Respond at https://respond.census.gov/acs Log in using this User ID:

I would appreciate you completing this survey for all people living at this address to help identify critical needs in your area. I realize that not everyone is comfortable responding online. If you are unable to complete the survey online, the Census Bureau will send you a paper questionnaire in about 3 weeks. Your response is required by law (Title 13, U.S. Code).

The enclosed brochure, "How Your Responses Help America," explains more about why particular questions are included in this survey. If you need help completing the survey or have questions, please call our toll-free number 1–800–354–7271.

Thank you in advance for your prompt response.

Sincerely,

John H. Thompson Director, U.S. Census Bureau

Enclosure

The American Community Survey helps determine the annual distribution of more than **\$400 billion** in federal funds **to communities nationwide**.

ACS-13(D)DTR (3-2017)

Will my response be confidential?

Yes. The U.S. Census Bureau is required by law to protect this information. The Census Bureau is not permitted to publicly release your responses in a way that could identify you. We are conducting this survey under the authority of Title 13, United States Code, Sections 141 and 193. Federal law protects your privacy and keeps your answers confidential (Title 13, United States Code, Section 9). Per the Federal Cybersecurity Enhancement Act of 2015, your data are protected from cybersecurity risks through screening of the systems that transmit your data.

Am I required to answer this survey?

Yes. Your response to this survey is required by law (Title 13, U.S. Code, Sections 141, 193, and 221). As a selected representative of your community, you are the voice of your neighbors and peers. To create an accurate picture of your community, it is critical that you respond.

How will the Census Bureau use the information I provide?

Your confidential response will be combined with information from other nearby households to produce a portrait of your community. This combined information is made freely accessible to government leaders, businesses, nonprofit organizations, and the public at large.

Based on the information you provide, you may be asked to participate in other Census Bureau surveys that are voluntary. We may combine your answers with information that you gave to other agencies to enhance the statistical uses of these data. This information will be given the same protection as your survey response.

It is important that we hear from all respondents. If you would rather respond in a different language, please use the following resources:

Complete la Encuesta sobre la Comunidad Estadounidense en Internet: https://respond.census.gov/acs Entre a su cuenta usando esta indentificación de usario:

Si tiene preguntas sobre el cuestionario, llámenos al 1–877–833–5625 para hablar con uno de nuestros empleados que habla español. La llamada es gratis.

这个调查问卷只有英文版。请拨打我们的免费电话: 1-800-638-5945、我们将有会说中文的工作人员回答您的 问题、或者您能够在用中文回答调查的问题。

Nếu quý vị có thắc mắc về mẫu đơn, xin gọi chúng tôi theo số điện thoại miễn phí 1-877-221-9436. Bản câu hỏi khảo sát chỉ có bảng tiêng Anh.

Анкета составлена только на английском языке. Позвоните по бесплатному номеру 1-866-225-2297, и Вам ответит русскоговорящий сотрудник.

설문지 는 영어 로만 되어 있습니다 한국어 로 설문 을 작성 하고 싶으 시거나 질문 이 있으시면, 무료 전화 1-800-772-6728 직무 로 전화 를 주십시오. 한국어 담당 직원 과 통화 하실 수 있습니다.

ACS-13(LX)DTR (3-2017)

Full Redesign: Reminder Letter – Outgoing Envelope





U.S. Department of Commerce Economics and Statistics Administration U.S. Census Bureau National Processing Center 1201 E. 10th St. Jeffersonville, IN 47132-0001 OFFICIAL BUSINESS Penalty for Private Use \$300 AN EQUAL OPPORTUNITY EMPLOYER ACS-40(X)DTR (10-2016)







Full Redesign: Reminder Letter



Respond at https://respond.census.gov/acs Log in using this User ID:

If you are not able to answer online or prefer to answer by mail, the Census Bureau will mail a paper guestionnaire to your address in about 10 days.

Just as people are required to respond to jury duty, get a driver's license, pay their taxes, and report their income, they also have the obligation to respond to this survey. The survey asks for information about your housing and each person living at this address.

I very much appreciate your help in completing this Census Bureau survey. If you have any questions about the survey, I invite you to call our toll-free number 1–800–354–7271, so a Census Bureau representative can answer them.

Sincerely,

John H. Thompson Director, U.S. Census Bureau

ACS-20(LX)DTR (2-2017)

Full Redesign: Questionnaire Package – Outgoing Envelope





Questionnaire Package – Return Envelope

OFFICIAL BUSINESS Penalty for Private Use \$300 6385-47(2014) (10-2013)



AN EQUAL OPPORTUNITY EMPLOYER

POSTAGE WILL BE PAID BY THE U.S. CENSUS BUREAU

DIRECTOR US CENSUS BUREAU PO BOX 5240 JEFFERSONVILLE IN 47199-5240

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NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

Full Redesign: Questionnaire Package – Letter



Washington, DC 20233

Dear Resident:

As promised, I am sending an American Community Survey questionnaire to you and others from whom a response has not yet been received. I hope this will make it easier for you to respond.

Those who receive this request are required by a national law (Title 13, U.S. Code) to complete the American Community Survey. Responses from people in every state provide an understanding of how communities differ with regard to housing, education, transportation, health, and other issues. Your answers assist in identifying local needs such as job training, highway construction, and the building of health care facilities.

I also want to let you know that if you prefer to respond online instead of sending back the paper questionnaire, you can do so by going to https://respond.census.gov/acs and using information from the cover of the enclosed questionnaire to log in. Some online respondents may find it helpful to see the questions before starting the online version. If you complete the survey online, please do not send back the paper questionnaire. Answering this survey online saves taxpayer money, but I appreciate receiving your response by whichever method is most convenient for you.

You will see in the questionnaire that questions are asked about your housing and each person living at this address.

If you need help completing this survey or have questions, please call our toll-free number 1–800–354–7271.

I look forward to receiving your response.

Sincerely

John H. Thompson Director, U.S. Census Bureau

Enclosures

ACS-14(LX)DTR (2-2017)

Full Redesign: Questionnaire Package – Page One of Questionnaire

<u>Census</u> The American C	U.S. DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. CENSUS BUREAU U.S. CENSUS BUREAU
ACS 919 990 097 0 SEQ003-000017 	B5 111 1601 10 B0000-00110 IIIIIIIIIIIIIIIIIIIII DF: 3-9999
How to respond to this survey: We wrote to you earlier with a request to respond online. We are sending this paper questionnaire to all households that have not yet responded because we realize not everyone can or wants to respond over the Internet. If you would rather complete this survey online, please go to https://respond.census.gov/acs If you need help or have questions about completing this form, please call toll-free 1-800-354-7271. Telephone Device for Deaf (TDD) call toll-free 1-800-582-8330. ¿Necesita ayuda? Llame sin cargo alguno al 1-877-833-5625.	 How this survey is done: Each month we survey thousands of randomly selected addresses in every region of the U.S. to learn how communities are changing. The American Community Survey (ACS) is one of only a few surveys for which all recipients are required to respond. The Census Bureau and its staff are also required by law to protect the confidentiality of responses, and no individual can be identified in the statistics produced from this survey. An explanation of the ACS is available at http://www.census.gov/acs/
Let's get started: First, please print the name and telephone number of the person who is filling out this form. We will only contact you if needed for official Census Bureau business. Last Name First Name	 Next, tell us how many people are living or staying at this address. Include everyone who is living or staying here for more than 2 months. Include yourself if you are living here for more than 2 months. Include anyone else staying here who does not have another place to stay, even if they are here for 2 months or less. Do not include anyone who is living somewhere else for more than 2 months, such as a college student living away or someone in the Armed Forces on deployment. Number of people
Area Code + Number	Fill out pages 2, 3, and 4 for everyone, including yourself, who is living or staying at this address for more than 2 months. Then complete the rest of the form.

Full Redesign: Questionnaire Package – Page Two of Questionnaire

	Person 1		Person 2
(Pe apa wit	rison 1 is the person living or staying here in whose name this house or artment is owned, being bought, or rented. If there is no such person, start by the name of any adult living or staying here)	D wi	hat is Person 2's name? t Name (Please print) First Name
D Ple	ase print today's date.		
Mo	nth Day Year	Ан	w is this person related to Person 1? Mark (X) ONE box.
		T c	Husband or wife Son-In-law or daug
			Biological son or daughter Other relative
) wi	nat is Person 1's name?		Adopted son or daughter Roomer or boarder
Las	t Name (Please print) First Name Mi		Stepson or stepdaughter Housemate or room
			Brother or sister Unmarried partner
	w is this person related to Person 17		Father or mother Foster child
	Percon 1		Grandchild Other nonrelative
			Parent-In-law
W	hat is Person 1's sex? Mark (X) ONE box.	e) w	hat is Person 2's sex? Mark (X) ONE box.
	Male 📙 Female		Male LI Female
W	hat is Person 1's age and what is Person 1's date of birth?	4) w	hat is Person 2's age and what is Person 2's date of birth?
rie	Print numbers in boxes.	rie	Print numbers in boxes.
Age	e (in years) Month Day Year of birth	Ag	e (In years) Month Day Year of birth
→ b	IOTE: Please answer BOTH Question 5 about Hispanic origin and Juestion 6 about race. For this survey, Hispanic origins are not races.	-	NOTE: Please answer BOTH Question 5 about Hispanic origin and Question 6 about race. For this survey, Hispanic origins are not rac
) Is I	Person 1 of Hispanic, Latino, or Spanish origin?	5 Isi	Person 2 of Hispanic, Latino, or Spanish origin?
	No, not of Hispanic, Latino, or Spanish origin	Τc	No, not of Hispanic, Latino, or Spanish origin
	Yes, Mexican, Mexican Am., Chicano		Yes, Mexican, Mexican Am., Chicano
	Yes, Puerto Rican		Yes, Puerto Rican
	Yes, Cuban		Yes, Cuban
	Yes, another Hispanic, Latino, or Spanish origin – Print origin, for example, Argentinesan, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. <i>g</i>		Yes, another Hispanic, Latino, or Spanish origin – Print origin, for examp Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on. Z
W	hat is Person 1's race? Mark (X) one or more boxes.	6) W	hat is Person 2's race? Mark (X) one or more boxes.
	White		White
	Black or African Am.		Black or African Am.
	American Indian or Alaska Native — Print name of enrolled or principal tribe. 📈		American Indian or Alaska Native — Print name of enrolled or principal
	Asian Indian Japanese Native Hawailan		Asian Indian Japanese Native Hawaila
	Asian Indian Japanese Native Hawaiian Chinese Korean Guamanian or Chamorro		Aslan Indian Japanese Native Hawailar Chinese Korean Guamanian or
	Asian Indian Japanese Native Hawailan Chinese Korean Guamanian or Chamorro Filipino Vietnamese Samoan		Asian Indian Japanese Native Hawalian Chinese Korean Guamanian or Filipino Vietnamese Samoan
	Asian Indian Japanese Native Hawalian Chinese Korean Guamanian or Chamorro Filipino Vietnamese Samoan Other Asian – Print race, for example, Hmong,		Asian Indian Japanese Native Hawalia Chinese Korean Guamanian or Filipino Vietnamese Samoan Other Asian – Print race, for example, Himong, Other Pacific Isl
	Asian Indian Japanese Native Hawailan Chinese Korean Guamanian or Chamorro Filipino Vietnamese Samoan Other Asian – Print race, for example, Hmong Laotian, Thai, Pakistani, Cambodian, and so on, π		Asian Indian Japanese Native Hawalia Chinese Korean Guamanian or Filipino Vietnamese Samoan Other Asian – Print race, for example, Hmong, Laottan, thai, Pakistani, Cambodian, and so on Other Pacific Isi Print race, for example, Samoan
	Asian Indian Japanese Native Hawalian Chinese Korean Guamanian or Chamorro Filipino Vietnamese Samoan Other Asian – Print race, for example, Hmong, Laotan, Thai, Pakistant, Cambodian, and so on. R Other Pacific Islander – Print race, for example, Filian, Tongan, and so on. R		Asian Indian Japanese Native Hawalia Chinese Korean Guamanian or Filipino Vietnamese Samoan Other Asian – Print race, for example, Himong, Laotan, Thai, Pakistani, Cambodian, and so on. Z Other Asian – Rith race, for example, Samoan
	Asian Indian Japanese Native Hawaiian Chinese Korean Guamanian or Chamorro Filipino Vietnamese Samoan Other Asian – Print race, for example, Hmong, Laotian, Har, Pakitani, caribodian, and so on. r Other Pacific Islander – Print race, for example, Filian, Tongan, and so on. r		Asian Indian Japanese Native Hawalia Chinese Korean Guamanian or Filipino Vietnamese Samoan Other Asian – Print race, for example, Himong, Laotan, Thai, Pakistani, Cambodian, and so on. pr Other Asian – Rift race, for example, Himong, so on. pr
	Asian Indian Japanese Native Hawailan Chinese Korean Guamanian or Chamorro Filipino Vietnamese Samoan Other Asian – Print race, for example, Hrmong, Laotan, That, Pakistani, Cambodian, and so on. R Other race – Print race, race Some other race – Print race, R Some other race – Print race, R		Asian Indian Japanese Native Hawalia Chinese Korean Guamanian or Filipino Vietnamese Samoan Other Asian – Print race, for example, Himong, Laottan, that, Pakifani, Cambodian, and so on. Z Other Pacific Isl Some other race – Print race. Z

Full Redesign: Reminder Postcard



Final Reminder Letter – Outgoing Envelope



Full Redesign: Final Reminder Letter



Soon, Census Bureau interviewers will be attempting to contact households who have not yet responded to the American Community Survey. We do this in-person follow-up as part of our effort to produce the most accurate results possible. There is still time to respond online, and I would appreciate it if you would respond now because it saves the cost of sending someone to your home.

Respond at https://respond.census.gov/acs Log in using this User ID:

Responding to the survey helps national, state and local officials make informed decisions with timely and accurate data. Your response is critically important to your local community and your country and is required by law (Title 13, U.S. Code).

If you are unable to respond online, please call our toll-free number 1–800–354–7271 to complete the survey.

Thank you for your cooperation.

Sincerely,

- %

John H. Thompson Director, U.S. Census Bureau

ACS-23(LX)DTR (2-2017)