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MEMORANDUM FOR American Community Survey Research and Evaluation

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Subject: Assessment of Messaging in the

2018 American Community Survey

Mail Contact Materials

Attached is the American Community Survey (ACS) Research and Evaluation report, "Assessment of Messaging in the 2018 American Community Survey Mail Contact Materials." This report provides a comprehensive assessment of English-language messaging in the ACS mail contact materials and provides recommendations for improvement.

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



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# Assessment of Messaging in the 2018 American Community Survey Mail Contact Materials

FINAL REPORT



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### **EXECUTIVE SUMMARY**

The U.S. Census Bureau primarily communicates with people in housing units sampled for participation in the American Community Survey (ACS) through five mail communications. This process produces a self-response rate of about 57 percent (Baumgardner, 2020). The Census Bureau has been proactive in maintaining this relatively high self-response rate through continuous research and experiments (U.S. Census Bureau, 2017).

Research suggests that messaging contained in the mail contact materials (such as letters and brochures) can motivate potential respondents to participate and therefore improve self-response rates (Dillman, Smyth, Christian, 2014). In 2017, the Census Bureau began the *Strategic Framework Project*, a long-term project to update the messaging in the ACS mail materials as a means of increasing self-response. The first phase of this project, the *Strategic Framework Report*, identified best practices for survey communications and developed recommendations for ACS messaging (Oliver, Heimel, and Schreiner, 2017).

In this paper, the second phase of the project, we leverage the best practices outlined in the *Strategic Framework Report* to evaluate English-language messaging in the 2018 ACS mail materials. The results of this evaluation describe how some of the ACS messaging aligns with best practices and highlights ways the messaging can be improved.

To evaluate the messaging in the ACS mail materials, we independently coded the messages (including all text, logos, and graphics), using codes pertaining to four categories of messaging: trust, benefits, burden reduction, and other. The coded messages were then examined to determine what messages are being conveyed and the quality of these messages. We also conducted word count analyses and readability assessments.

Our evaluation produced the following recommendations:

### Reduce the number of messages per mailing

The Census Bureau might be conveying too many messages to ACS recipients. In total, 358 messages were identified across the five ACS mailings. Too many messages can overwhelm potential respondents, making it difficult for them to understand the messages and to take action by responding to the ACS.

### Reduce repetitious messaging

Much of the messaging across the ACS mailings is repetitious. For example, 75 percent of the words in the four letters and postcard are repeated in at least three of these mail pieces. Some repetition is by design and is useful; however, some repetition is unnecessary. In particular, the legal obligation and data security messages take up a sizeable portion of the text in multiple mail pieces, although Census Bureau policy does not require these messages in each mailing.

### Use new appeals

Using a variety of appeals may be a useful way to motivate potential respondents to participate in a survey (Groves, Singer, and Corning, 2000; Dillman, Smyth, and Christian 2014). However, after the first mailing only five new messages are communicated to convert ACS nonrespondents. Some potentially useful messages that could influence potential respondents are not communicated in any of the ACS materials. We recommend testing new messages in the ACS mail materials built on the following constructs: conformity, consistency, civic responsibility, scarcity, commitment, deadlines, authority, personalization, and unity.

### Use messages that are justified by research

There is a limited amount of space in each mail piece to convey messages. There are messages used in the mail materials that lack justification or may not be the strongest at gaining survey cooperation; for example, messages about corporate use of ACS data or messages about how responding online conserves natural resources. There are messages that have been proven in the literature to be more effective than some of the messages currently being used in the ACS mail materials. The Census Bureau should replace messages (not justified by research) with those proven to work or should research the effectiveness of these messages if used in the future.

### Make a clear connection to the well-known Census Bureau brand

Connecting the ACS to the Census Bureau can potentially increase survey participation, as 90 percent of respondents are familiar with the decennial census, but only 11 percent have heard of the ACS (Hagedorn, Green, and Rosenblatt, 2014). Messages that communicate that the Census Bureau is the sponsor of the ACS were found in all of the ACS mail materials. However, the placement of these references are often not ideal (e.g., the logo is located at the bottom of the letter). Additionally, references to other federal entities, such as the Department of Commerce and Economic and Statistics Administration, may confuse respondents about who the mail materials are from. We recommend using consistent branding and strategic placement of branding to clearly connect the ACS to the Census Bureau.

### Increase the readability of the materials

About one-third of American adults read at the fourth-to-fifth grade level (National Center for Education Statistics, 2014). Our analysis shows that the reading level of some ACS mail pieces is too high, with some written at the high school and college level. We recommend writing messages at a lower reading level and using plain language to improve the ease with which text can be read and understood by more potential respondents.

### 1. INTRODUCTION

The U.S. Census Bureau primarily communicates with potential respondents for participation in the American Community Survey (ACS) through mail communications. These mailings communicate a variety of messages to elicit self-response. The Census Bureau engages in continuous research in an effort to improve the ACS self-response rates because self-response is the cheaper, more efficient mode of response. One way to improve the rate of self-response is to update the messages that motivate survey participation (Dillman, Smyth, Christian, 2014).

In 2017, the Census Bureau began the multi-phase *Strategic Framework Project* to update the messaging in the ACS mail materials as a means of increasing self-response. For the *Strategic Framework Project*, a *message* is defined as the information a sender wants to communicate to a receiver, or in this case, the information the Census Bureau wants to communicate to residents of the sampled addresses (Oliver, Heimel, and Schreiner, 2017).

The first phase of this project, the *Strategic Framework Report*, identified best practices for survey communications and developed general recommendations for messaging in ACS mail contact materials (Oliver, Heimel, and Schreiner, 2017).

In this second phase of the project, we leverage the best practices outlined in the *Strategic Framework Report* to evaluate English-language messaging in the 2018 ACS mail contact materials. This comprehensive content analysis describes how some of the ACS messaging aligns with best practices and highlights ways the messaging can be improved.

### 2. BACKGROUND

This section of the report provides background information on the ACS and its data collection operations and provides an overview of the *Strategic Framework Project*.

### 2.1 Overview of ACS Data Collection

The ACS is an ongoing, nationwide survey conducted by the Census Bureau to produce detailed social, economic, housing, and demographic information.<sup>2</sup> Each month, the Census Bureau

We evaluated the September 2018 English mail materials sent to sampled housing units. Beginning with the September 2018 panel, the ACS mail materials changed to include a pressure seal mailer in some mailings. Materials sent to Group Quarters and Puerto Rico were excluded from this study, as were Spanish materials sent to stateside addresses.

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

sends requests for survey participation to about 290,000 randomly selected housing unit addresses, which is about 3.5 million addresses per year.<sup>3</sup>

Data collection for housing units is conducted in two phases: a self-response phase, which lasts up to nine weeks, followed by a nonresponse follow-up phase, which lasts about four weeks. In the self-response phase, the Census Bureau employs a mail contact strategy to encourage residents in sampled addresses to self-respond. See **Error! Reference source not found.** for a synopsis of the 2018 ACS mail contact strategy. See Appendix A for copies of the mail pieces.<sup>4</sup>

All mailable sampled addresses Nonresponders Nonresponders First Second Third Fourth Fifth 7 days 14 days 4 days 18 days Mailing Mailing Mailing Mailing Mailing Outgoing Envelope Pressure Seal Mailer Outgoing Envelope Reminder Postcard Pressure Seal Mailer Letter Paper Questionnaire Instruction Card Letter FAQ Brochure Instruction Card Multilingual Brochure FAQ Brochure Return Envelope

Figure 1. Overview of the 2018 ACS Mail Contact Strategy

The first and second mailings are sent to all mailable sampled addresses.<sup>5</sup> The initial mailing package (*first mailing*) includes five items: the outgoing envelope, a letter that invites households to participate in and complete the survey online or wait a few weeks for a paper questionnaire, an instruction card that provides instructions to go online to complete the survey, a Frequently Asked Questions (FAQ) Brochure, and a Multilingual Brochure that provides support in five non-English languages.<sup>6</sup> About seven days later, the Census Bureau mails a pressure seal mailer (*second mailing*) to all mailable sampled addresses to remind the recipients to respond online or wait for a paper questionnaire.<sup>7</sup>

<sup>&</sup>lt;sup>3</sup> In addition to collecting data from residents of housing units, data are also collected from a sample of group quarters (GQ) facilities and residents. This report focuses on housing unit data collection. The term "addresses" in this report refers to housing unit addresses.

<sup>&</sup>lt;sup>4</sup> The materials used in this project were ACS production materials used in September 2018.

<sup>&</sup>lt;sup>5</sup> The requirement for a "mailable" address is met if there is either a complete city-style address (includes a house number, street name, and ZIP Code) or rural-route address (includes a rural-route number, box number, and ZIP Code).

<sup>&</sup>lt;sup>6</sup> Potential respondents can also complete the survey by telephone by calling Telephone Questionnaire Assistance (TQA).

A pressure seal mailer is a one-page document that contains a pre-applied adhesive that is folded and sealed with pressure. When folded, the outside part of the pressure sealed mailer contains the addressee information, while the inside contains printed content, such as a letter. Pressure seal mailers are opened by removing perforated edges from the sides of the mailings so it can be unfolded to show the printed content on the inside.

About two weeks after the second mailing is sent, addresses from which we have received a response are removed from the sample address file to create a new mailing universe of nonresponders. The Census Bureau sends these addresses a paper questionnaire package (third mailing) that includes six items: the outgoing envelope, a paper questionnaire, a letter that describes the ACS survey and provides instructions for responding online or by mail, an instruction card that provides instructions to go online or to return the completed paper questionnaire, an FAQ Brochure, and a pre-paid return envelope. The paper questionnaire package is followed by a reminder postcard (fourth mailing), mailed four days later reminding households to complete the survey online or mail back the questionnaire.

About eighteen days later, addresses from which we have received a response are again removed from the sample address file to create a new mailing universe of nonresponders. The Census Bureau mails these remaining addresses a pressure seal mailer (*fifth mailing*) to remind the recipients to respond to the ACS. The self-response rate for a monthly panel is about 57 percent on average (Baumgardner, 2020).

The nonresponse followup operation commences between 17-24 days after the fifth mailing. Census Bureau representatives visit a sample of the remaining addresses and attempt to obtain a survey response through Computer-Assisted Personal Interviewing (CAPI). The CAPI operation lasts about four weeks. During this period, the Census Bureau still accepts forms completed through the self-response modes.

The ACS mail contact strategy and CAPI followup operation produce an overall response rate each month ranging from 93 to 98 percent (U.S. Census Bureau, 2019).

### 2.2 Overview of the Strategic Framework Project

The goal of the *Strategic Framework Project* is to develop and implement new messaging that improves self-response to the ACS. There are five phases to this project, as depicted in Figure 2.



Figure 2. Phases of the Strategic Framework Project

The first phase of the *Strategic Framework Project* was the development of a framework to guide new ACS messaging. During the 2016 National Academies of Sciences (NAS) Committee on National Statistics (CNSTAT) expert meetings, panelist Nancy Mathiowetz recommended that the Census Bureau develop a strategic communication plan for the ACS that is grounded in

both communications theory as well as theories from survey methodology.<sup>8</sup> The resulting strategic communication plan, best practice recommendations for survey messaging, and supporting cross-disciplinary literature review are presented in the *Strategic Framework Report* (see Oliver, Heimel, and Schreiner, 2017).

This paper is the second phase of the *Strategic Framework Project*. In this research, we use the best practice recommendations developed in the *Strategic Framework Report* to guide the evaluation of messaging in the 2018 ACS mail materials. This report identifies what the Census Bureau does well in terms of messaging and also identifies areas where the messaging can improve.

In the third phase of the project, we will employ what we have learned from the first two phases to develop newly designed ACS mail materials from scratch. These newly designed materials will contain content changes to the mail materials but maintain the current mail contact strategy. In the fourth phase of the project, the proposed designs will undergo iterative rounds of cognitive testing to refine the materials. The refined designs will be field tested in the fifth phase.

### 3. LITERATURE REVIEW

While a single theory on holistic survey messaging does not exist, many fields of study provide insight into how specific elements of survey messaging can be used to increase survey response propensity (Dillman, 2019). The *Strategic Framework Report* (Oliver, Heimel, and Schreiner, 2017) summarizes cross-disciplinary research on effective communication and develops recommendations for survey messaging. These recommendations, summarized here, are organized in four categories: trust, benefits, burden, and design.<sup>9</sup>

### 3.1 Trust Messages

Messages that help respondents believe that the survey request is official may increase survey participation. Recommendations for types of messages that establish trust include:

 Credibility: Establishing the credibility of the survey request is an important task of survey messaging. Respondents may not feel comfortable responding if they do not find the survey request credible. By establishing that the survey request is real, subsequent

In 2016, the Census Bureau contracted with the CNSTAT to conduct a two-day public workshop on ways of reducing respondent burden in the ACS. In addition to the public workshop, CNSTAT also held four one-day meetings with the Census Bureau and experts from a variety of fields who provided recommendations for improving ACS communications (National Academies of Sciences, Engineering, and Medicine, 2016).

<sup>&</sup>lt;sup>9</sup> We organized the recommendations into three groups based on Social Exchange theory, which argues that people are more likely to comply with any request if they "believe and trust the rewards for complying with that request [benefits] will eventually exceed the costs of complying [burden]" (Dillman, Smyth, and Christian, 2014). We added a fourth category to capture additional recommendations on design.

- statements are more likely to be believed and can increase survey response (Dillman, Smyth, and Christian, 2014).
- Awareness and Sponsorship: Research shows that survey sponsorship can increase
  response rates if respondents know and trust the survey organization (Presser, Blair,
  and Triplett, 1992; Groves et al., 2012). However, only about 11 percent of the public is
  familiar with the ACS (Hagedorn, Green, and Rosenblatt, 2014). The Census Bureau is a
  known and trusted agency (Schwede, 2013). The ACS messaging should make a clear
  connection to the Census Bureau brand.
- *Personalization*: Survey requests should be sent from a real person within an organization and include that person's signature. Potential respondents should be able to verify the authenticity of the person and organization making the survey request (Dillman, Smyth, and Christian, 2014).
- Confidentiality: Recent events such as data breaches and leaks have heightened concerns about privacy and data security (Dillman, Smyth, and Christian, 2014).
   Messaging needs to assure confidentiality without overstating it, which could raise fear or alarm (Singer, Hippler, and Schwartz, 1992; Singer, von Thurn, and Miller, 1995).
   Communicating simple confidentiality statements may be more effective than detailed confidentiality statements (Fobia, Holzberg, and Childs, 2017).

### 3.2 Benefits Messages

Messaging that communicates the benefits of survey participation to the respondent can increase survey response. Recommendations regarding benefits messages include:

- Community Benefits: Particular benefits to one's community have been shown to be more effective (including people who are distrustful of the federal government) than framing benefits at the national level (Reingold, 2014b; Hagedorn and Green, 2014).
   Messaging should communicate the positive social benefits of survey participation at the community level.
- Personal Benefits: Survey communication can also highlight personal benefits of survey participation, such as the pride a potential respondent may feel when fulfilling a civic duty or helping others, or the enjoyment someone feels when completing an interesting or important task (Groves, Singer, and Corning, 2000; Reingold, 2014b; Dillman, Smyth, and Christian, 2014).
- Variety of Benefits: Potential respondents weigh all of the perceived benefits of survey participation against the perceived burden of participating (Groves, Singer, and Corning, 2000; Dillman, Smyth, and Christian, 2014). Communicating a variety of benefits

messages, not just repeating the same benefit statement, may increase the chances of convincing more or different households to participate.

### 3.3 Messages that Reduce Burden

Messages that reduce the perceptions of burden associated with the task of completing the survey request can be effective at encouraging response. Recommendations regarding burden reduction messages include:

- Communicate Norms: Framing an action as a normal activity can make people feel more comfortable with the task, increase a sense of self-efficacy, and raise a potential respondent's confidence that they can easily comply with the request (World Bank, 2010). Framing a request as an action that is consistent with one's previous behavior or beliefs and as conforming with the actions of those in one's community can increase compliance with the request (Cialdini, 2009; Misra, Stokols, and Marino, 2012).
- Civic Responsibility: Potential respondents likely have completed other surveys and some may regularly comply with civic requests—for example, serving on a jury (Reingold, 2014b). Framing survey participation as a civic responsibility, especially if framed as consistent with their own previous civic behaviors or the civic behaviors of those in their community, may make the decision to participate easier for some potential respondents. In addition, some potential respondents may feel a sense of pride as they fulfill their civic obligations and a sense of reward when fulfilling a patriotic duty to help their country (Groves, Singer, and Corning, 2000; Reingold, 2014b).
- Response Options: The message that there are multiple ways to respond to the ACS is consistently well received by research participants (Hagedorn, Green, and Rosenblatt, 2014; Fulton, Morales, and Childs, 2016). Respondents may be more likely to respond if they can do so in a mode they prefer, rather than being forced to use a mode they do not know or trust (Dillman, Smyth, and Christian 2014).
- Mandatory Participation: Mentioning that a response task is mandatory can significantly increase self-response rates (Dillman et al., 1996; Barth et al., 2016; Oliver, Risley, and Roberts, 2016). Communicating that a survey is mandatory may reduce the cognitive burden of making a decision on the part of some respondents who are motivated to comply with the law.
- Commitment: Asking for a potential participant's commitment to an action can increase the chance that an action is taken (Shephard and Bowers, 2016). Linking a desired behavior with a concrete plan to complete the behavior can increase the chance of that

<sup>&</sup>lt;sup>10</sup> We have classified civic responsibility as a message that reduces burden but depending on how the civic responsibility is framed it could be used as a benefit message (i.e., the respondent may feel a sense of pride).

behavior being completed (Milkman et al., 2011; Feygina, Foster, and Hopkins, 2015). For example, using a commitment device to help respondents envision the task of completing the survey or by establishing a positive expectation that the survey will be completed may help a potential respondent make a commitment to completing the survey.

- Nonresponse Followup Messaging: People generally want to avoid negative consequences of their actions or inactions (Fishbein and Ajzen, 2011). Some respondents may feel that a visit from the Census Bureau during the nonresponse followup CAPI operation is a negative consequence of inaction. Communicating that the Census Bureau may visit someone's home if they do not respond may increase self-response as people attempt to avoid the burden of the Census Bureau visit. However, it is possible that some people may want or need assistance to respond and prefer to respond in a mode they are comfortable with (Millar and Dillman, 2011). Communicating that responding in person is possible may also reduce burden felt by those who feel uncomfortable self-responding online or by mail.
- Due Date: Providing a due date respects a potential respondent's time by conveying a clear expectation for the task, rather than leaving the task deadline ambiguous or unstated (Dillman, 2016). Similar to commitment devices, providing a due date helps potential respondents plan their response by giving them clear instructions on when the task is due. This allows a respondent to better fit the survey task into a respondent's mail prioritization process. In a mail package focus group, participants volunteered that a due date would motivate them to respond promptly (Reingold, 2014a).

### 3.4 Design Elements

Some recommendations regarding the design of the mail materials include:

- Governmental Design: For government surveys, the public expects clean, official, and generally plain materials (Dillman, et al. 1996; Leslie, 1997). Materials that are graphic or flashy may resemble marketing materials and "junk mail" from a private corporation. These designs may result in lower self-response rates compared to "official" government-looking mailings.
- Unified Design: Messages sent across multiple mail contacts, as well as the overall
  design of graphics, need to look and feel as if they came from the same place and should
  feel like a continuous conversation (Dillman, Smyth, and Christian, 2014; Whitcomb and
  Porter, 2004; Reingold, 2014a; Hagedorn, Panek, and Green, 2014). To hold a
  conversation across written mailings, communications should present information in a
  sequenced manner, anticipate questions, and respond to those expected questions in

follow-up communications similar to how communication flows in a face-to-face conversation (Koehler, 2001; King, 2006).

### 4. METHODOLOGY

This section of the report discusses the methodologies we employed to evaluate the messaging in the ACS mail materials and assess the readability of the messages.

### 4.1 Procedure for Evaluating ACS Messaging

Our search of the literature did not locate studies where researchers systemically evaluated the messaging in the mail materials of a large-scale survey. There is, however, a large body of literature on content analysis, a research method that allows text data to be analyzed systematically and reliably so generalizations can be made from them in relation to the categories of interest to the researcher (Haggarty, 1996). In this method, the text is systematically coded to uncover the existence of underlying themes and concepts that would otherwise be difficult to discern (Auerbach and Silverstein, 2003). The process we employed to code messaging in the ACS mail materials is presented in Sections 4.1.1 through 4.1.3.

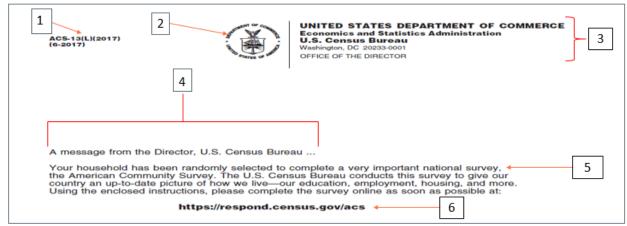
### 4.1.1 Defining the messaging elements to be coded

The first step in the evaluation of ACS messaging was to define the term *message*. The *Strategic Framework Report* defines a *message* as information the Census Bureau wants to communicate to the ACS recipients via the mail contact materials (Oliver, Heimel, and Schreiner, 2017). Effective communication occurs when the recipient understands the message as intended by the sender (Munodawafa, 2008). Messages can be communicated through a variety of *messaging elements*, including sentences, phrases, addresses, web addresses, logos, and symbols, etc.

Figure 3 provides examples of six different types of messaging elements found in the introductory letter in the first mailing. <sup>11</sup>

<sup>&</sup>lt;sup>11</sup> See Appendix A for the complete version of this letter, as well as the other mail materials.

Figure 3. Examples of Messaging Elements in the Letter in the First Mailing



- Element 1 is a form identifier.
- Element 2 is a seal in the letterhead.
- Element 3 is an endorsement in the letterhead.
- Element 4 is a salutation.
- Element 5 is a sentence.
- Element 6 is a web address.

### 4.1.2 Developing a codebook

To create the codebook to classify ACS messages, we used the *a priori* approach to coding. This approach assumes a pre-existing theoretical framework to guide the development of codes (Saldaña, 2015). The initial list of messaging that could potentially appear in the ACS came from three places:

- Recommendations from the *Strategic Framework Report*.
- Messages from studies cited in the Strategic Framework Report that were not recommended.
- Messages from the ACS mail contact materials that were not referenced in the Strategic Framework Report.

After compiling an initial list of potential messages, we organized the messages into categories to provide structure for the messaging codes. The basis for the organizational structure came from Dillman, Smyth, and Christian (2014), which organized messaging that can affect survey response into three main categories: *trust*, *benefits*, and *burden reduction*. <sup>12</sup>

A fourth category, *other*, was added to code messages that did not fall into any of these three categories (e.g., scientific statements, required information, and elements customary in a

Dillman, Smyth, and Christian (2014) use the phrase "lower the costs associated with survey response" to describe what other methodologists and those at the Census Bureau refer to as "burden" or "perceptions of burden". We use the word "burden" instead of "cost" throughout this paper.

business letter). We refined the codebook by adding subcategories under each main category. A condensed codebook is presented in Table 1. The complete codebook with all 76 codes, including an additional level of subcategories, is presented in Appendix B.

**Table 1. Condensed ACS Messaging Codebook** 

Code	Code Description		
Number			
1.0	TRUST: Messages that increase trust or credibility of the survey request		
1.1	Establish Credibility		
1.2	Confidentiality/Data Security		
1.3	Token Pre-Incentives		
2.0	BENEFITS: Messages that communicate a benefit of survey response		
2.1	Community-Level Benefits		
2.2	National-Level Benefits		
2.3	Personal/Interpersonal Benefits		
2.4	Incentive		
2.5	Business Use of ACS Data		
3.0	<b>BURDEN REDUCTION</b> : Messages that decrease response burden or perception of burden		
3.1	Social Norms		
3.2	Civic Responsibility or Duty		
3.3	Ask for a Commitment		
3.4	Offer Multiple Response Modes		
3.5	Responding Online is Quick or Easy		
3.6	Mandatory Message – Legally Obligated to Respond to ACS		
3.7	Providing a Deadline Date or Some Similar Indication		
3.8	Nonresponse Followup Messaging		
3.9	Providing a Way for Respondents to Get Help		
3.10	Communicating in a Language Other than English		
3.11	Paying for Return Postage		
4.0	OTHER: Messages that may influence an individual's decision to participate in a survey		
4.1	Scientific Statements		
4.2	Cost or Environmental Savings or Efficiency		
4.4 <sup>13</sup>	Instructions or Information		
4.5	Required Information		
4.6	Common Elements of a Business Letter		

<sup>&</sup>lt;sup>13</sup> Code number 4.3 does not exist. Originally, code 4.3 was "Business Uses of ACS Data" but this code was moved to code number 2.5 under "Benefits."

### 4.1.3 Coding the messages in the ACS mail materials

Two coders, using the coding table shown in Appendix B, independently coded all English-language messaging elements in the ACS mail contact materials.<sup>14</sup> The *mail materials* consist of five sequential *mailings* described in Section 2.1. Each mailing is comprised of one or more *mail pieces*. For example, the first mailing consists of five mail pieces: 1) outgoing envelope; 2) invitation letter; 3) FAQ Brochure; 4) Multilingual Brochure; 5) instruction card.

, an annotated excerpt of the cover letter in the first mailing, provides examples of how the coders assigned codes to messaging elements. Beginning in the upper left-hand corner, the first messaging element identified was the form identifier, which was coded as required information. Then, moving linearly across the page, the next messaging element identified was the endorsement in the letterhead, which contained sponsorship information. The salutation which followed contained a reference to the Census Bureau which communicated sponsorship information.

Next, two codes (4.1.1 and 2.3.7) were assigned to the sentence, "Your household has been randomly selected to complete a very important national survey, the American Community Survey." As shown, a single messaging element, such as a sentence, can contain multiple phrases that communicate more than one code, in this case, communicating information about sampling (code 4.1.1) and that the ACS is an important national survey (code 2.3.7). A similar coding process was used to code each messaging element identified in the other mail pieces.

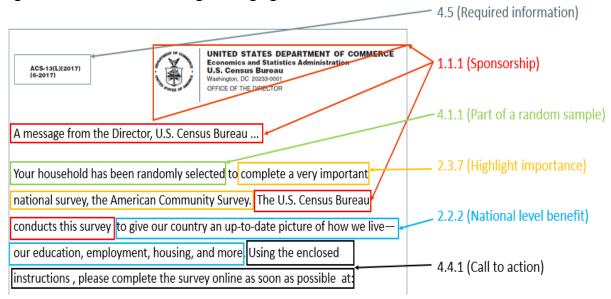
<sup>-</sup>

We coded non-English messages using the "languages other than English" code (3.10 in Table 1). The presence of another language on an English-text document is something that readers may process on sight, even if they cannot read the text. Non-English messages in the Multilingual Brochure were excluded from this coding. Coding the text of each of the six non-English language messages would have artificially inflated the number of messages communicated in this mailing. We assumed that the ACS recipient who needed assistance in one language would not attempt to read the messages written in the other languages.

<sup>&</sup>lt;sup>15</sup> For illustration purposes, we did not display all of the codes assigned to the messaging elements in Figure 4.

<sup>&</sup>lt;sup>16</sup> The pressure seal mailers include a security "bar" as well as instructions on how to open the pressure seal mailer. These elements were not coded.

Figure 4. Illustration of Coding Messaging Elements



After the coders independently coded the mail pieces, the level of agreement was assessed by an inter-rater reliability (IRR) measure. There are several forms of this measure. One such measure discussed in Miles and Huberman (1994) is provided below:

$$reliability = \frac{number\ of\ agreements}{number\ of\ agreements + disagreements}$$

The IRR provides a quantitative measure of the degree of agreement between two or more coders who code independently. Values of at least 75 percent demonstrate an acceptable level of agreement (Hartmann, 1977; Stemler, 2004).

Of the 13 mail pieces coded, nine had an IRR score of 80 percent or higher. The two instruction cards, internet and choice, had the lowest IRR scores: 75.0 and 71.4 percent, respectively. Both instruction cards had relatively few messaging elements. Consequently, a few disagreements between coders had a larger impact on the IRR. See Appendix C for all IRR scores.

### 4.2 Evaluating ACS Readability

Readability refers to the ease with which text can be read and understood. Readability formulas are often used to assess the reading difficulty of text (Kutner, Greenberg, and Baer, 2005). To assess the readability of the ACS mail materials, we employed the widely used *Flesch–Kincaid readability tests*. Flesch-Kincaid is comprised of two tests: the *Flesch Reading Ease test* (FRE) and the *Flesch–Kincaid Grade Level test* (FKG) (Flesch, 1979; Kincaid et al., 1975).

The FRE provides a score that indicates the level of difficulty of a reading passage. The FKG provides a score representing a U.S. grade level (from 5<sup>th</sup> grade to college graduate). <sup>17</sup> Although these tests use the same core measures (word length and sentence length), they have different weighting factors. The rationale behind these algorithms is that sentences that contain many words are more difficult to follow than shorter sentences and words that contain many syllables are more difficult to read than words that use fewer syllables. The Flesch-Kincaid readability tests require a minimum of 100 words of text to produce scores. <sup>18</sup>

The algorithm for each of these scores is provided below:

### Where:

- ASL = average sentence length (i.e., the number of words divided by the number of sentences)
- ASW = average number of syllables per word (i.e., the number of syllables divided by the number of words)

The FRE score ranges from 0-100. Short sentences and small words receive a higher score. The higher the FRE score, the easier the passage is to read. The FRE and FKG scores correlate approximately inversely—a text with a comparatively high FRE score should have a low FKG score (see Table 2) (Onwuegbuzie et al., 2013).

Table 2. Flesch Reading Ease Score and Flesch-Kincaid Grade Level

FRE Score	U.S. Grade Level	Interpretation
90 – 100	5 <sup>th</sup> grade	Very easy to read—easily understood by an average 11-year-old
80 – 90	6 <sup>th</sup> grade	Easy to read—conversational English for consumers
70 – 80	7 <sup>th</sup> grade	Fairly easy to read
60 – 70	8 <sup>th</sup> - 9 <sup>th</sup> grade	Easily understood by 13- to 15-year-old students
50 – 60	10 <sup>th</sup> - 12 <sup>th</sup> grade	Fairly difficult to read
30 – 50	College	Difficult to read
0 – 30	College graduate	Very difficult to read—best understood by university graduates

Source: Flesch, 1949; Kincaid, 1975.

<sup>&</sup>lt;sup>17</sup> The FKG assesses reading level starting at the 5<sup>th</sup> grade level because the measure was originally developed under contract by the U.S. Navy to make it easier for the Navy to assess the readability of its training manuals. The resulting FKG formula was derived from the test results of enlisted personnel (Kincaid et al., 1975).

<sup>&</sup>lt;sup>18</sup> Details of which text was included in the scoring of each mail piece can be found in Section 6.5.

### 5. ASSUMPTIONS AND LIMITATIONS

There is an underlying assumption that the research presented in the *Strategic Framework Report* (Oliver, Heimel, and Schreiner, 2017) is sufficient for developing the codebook used in this research. Although the *Strategic Framework Report* is cross-disciplinary and extensive, it is not exhaustive. The purpose of this research was to develop a set of systematic rules to gain insights about messaging in the ACS mail materials. The analysis presented is a product of the codebook used and should be thought of in this context.

There is also an assumption that the *Flesch-Kincaid readability tests* are sufficient for evaluating the readability of the English-language ACS mail materials. These tests have been used by organizations in both the public and private sectors for years. The *Flesch-Kincaid readability tests* provide a relatively simple means for gaining insight into the readability of reading passages. The resulting scores are not a substitute for a comprehensive assessment conducted by an expert in reading.

### 6. ASSESSMENT OF ACS MESSAGING

Section 6 of this report provides an evaluation of the English-language messaging in the ACS mail contact materials. Our analysis suggests the following:

- The ACS mail contact strategy may communicate too many messages (Section 6.1)
- ACS messaging is repetitious (Section 6.2)
- Some ACS messaging lacks justification (Section 6.3)
- Sponsor information is not communicated clearly (section 6.4)
- Some ACS messaging does not follow plain language guidelines (Section 6.5)
- There are missed opportunities in ACS messaging (Section 6.6)

### 6.1 The ACS Mail Contact Strategy May Communicate Too Many Messages

A single communication should contain a limited number of messages. Too many messages can overload the reader, making it difficult for the reader to understand and remember messages (McCormack, 2014; Poldre, 2017). If a message contains information that is new to the reader, including processes or concepts that are not familiar, the chance of "information overload" increases greatly (Gross, 1964).

In total, we assigned 358 codes to the English-language messaging elements across all mail pieces. <sup>19</sup> As discussed in this section, the Census Bureau may be communicating too many messages to ACS recipients in mailings (Section 6.1.1.) and mail pieces (Section 6.1.2).

<sup>&</sup>lt;sup>19</sup> Some codes were assigned multiple times on the same mail piece as well as across mail pieces. Not all of the 76 codes listed in Appendix B were used.

### 6.1.1 Some mailings may communicate too many messages

Per our coding strategy, we counted the following number of messages per mailing:

Table 3. Count of the Assigned Codes by Mailing

Mailing	Description	Number of
iviaiiiig	Description	Messages
1	Package comprised of multiple mail pieces	129
2	Pressure seal reminder mailer	31
3	Package comprised of multiple mail pieces	146
4	Reminder postcard	21
5	Pressure seal final reminder mailer	31
		358

Every mailable sampled address is sent the first mailing. Research suggests that a first contact with a potential survey responder should make an introduction, establish a relationship, build trust, and should not overwhelm the reader with details. This approach allows subsequent interactions to include more details, which increases the chance that the messaging is effective (Cialdini, 1984; Cialdini, 2016).

The volume of messages communicated in the first mailing is illustrated in Figure 5.<sup>20</sup> The five mail pieces that comprise this initial mail package (outgoing envelope, letter, instruction card, Multilingual Brochure, and FAQ Brochure) contain 129 messages, communicated using 39 messaging codes. These 39 codes are displayed by frequency of occurrence in Table 4.

Figure 5. Images of the Five Mail Pieces in the First Mailing



<sup>&</sup>lt;sup>20</sup> See Appendix A for clearer images of these materials.

Table 4. Messaging Codes in the First Mailing\*

Connection to a known sponsor  Way to verify authenticity (website, phone number)  14 Required information  Other information  8 Messaging that meets a cultural expectation  Providing a way for respondents to get help  Mandatory legal obligation to complete the survey  4 by law, Census Bureau must protect your data  Census Bureau won't release data in a way that identifies you  4 Mention or reference the Federal Cyber Security Act  3 Secure website, encrypted browser, screening system transmit data  Data used for planning development  3 Highlighting survey topic or questions as interesting or entertaining  Appeal to patriotism  Call to action  3 Informational instruction  Community-level benefits  Provides community-level data on education, housing, employment, etc.  Highlighting survey importance to build intrigue  Languages other than English**  2 Your response needed for data accuracy  Another response mode is available later  Sampling (i.e., mention that respondent is part of a random sample)  General confidentiality/data security statement  Response benefits others in need  Used for emergency preparation  Used for emergency preparation  Used for data driven and well informed decisions  Provides national-level data on education, housing, employment etc.  General national-level data on education, housing, employment etc.  General national-level benefit statement  Personal/interpersonal-level benefits to survey response  1 Establishing positive expectations  1 ACS is a continuous survey  1 Businesses use of ACS data  Providing a (vague, non-specific) deadline  ACS data used to track changes over time  ACS is better than other sources of data  Cost and environmental savings to responding online	Messaging Codes  Messaging Codes	Frequency
Way to verify authenticity (website, phone number)  Required information  Other information  Messaging that meets a cultural expectation  Providing a way for respondents to get help  Sandatory legal obligation to complete the survey  By law, Census Bureau must protect your data  Census Bureau won't release data in a way that identifies you  Mention or reference the Federal Cyber Security Act  Secure website, encrypted browser, screening system transmit data  Data used for planning development  Highlighting survey topic or questions as interesting or entertaining  Appeal to patriotism  Call to action  Informational instruction  Community-level benefits  Provides community-level data on education, housing, employment, etc.  Highlighting survey importance to build intrigue  Languages other than English**  Your response needed for data accuracy  Another response mode is available later  Sampling (i.e., mention that respondent is part of a random sample)  General confidentiality/data security statement  Response benefits others in need  Used for emergency preparation  Used for emergency preparation  Used for data driven and well informed decisions  Provides national-level data on education, housing, employment etc.  General national-level benefit statement  Personal/interpersonal-level benefits to survey response  Establishing positive expectations  ACS is a continuous survey  Businesses use of ACS data  Providing a (vague, non-specific) deadline  ACS data used to track changes over time  ACS is better than other sources of data  Cost and environmental savings to responding online		
Required information 8  Messaging that meets a cultural expectation 6  Providing a way for respondents to get help 5  Mandatory legal obligation to complete the survey 4  By law, Census Bureau must protect your data 4  Census Bureau won't release data in a way that identifies you 4  Mention or reference the Federal Cyber Security Act 3  Secure website, encrypted browser, screening system transmit data 3  Data used for planning development 3  Highlighting survey topic or questions as interesting or entertaining 3  Appeal to patriotism 3  Call to action 3  Informational instruction 2  Community-level benefits 7  Provides community-level data on education, housing, employment, etc. 2  Highlighting survey importance to build intrigue 2  Languages other than English** 2  Your response needed for data accuracy 2  Another response mode is available later 2  Sampling (i.e., mention that respondent is part of a random sample) 2  General confidentiality/data security statement 1  Response benefits others in need 1  Used for emergency preparation 1  Used for data driven and well informed decisions 1  Provides national-level data on education, housing, employment etc. 1  General national-level data on education, housing, employment etc. 1  General national-level benefit statement 1  Personal/interpersonal-level benefits to survey response 1  Establishing positive expectations 1  ACS is a continuous survey 1  Businesses use of ACS data 1  Providing a (vague, non-specific) deadline 1  ACS data used to track changes over time 1  ACS is better than other sources of data 1  Cost and environmental savings to responding online 1	·	14
Messaging that meets a cultural expectation Providing a way for respondents to get help S Mandatory legal obligation to complete the survey By law, Census Bureau must protect your data Census Bureau won't release data in a way that identifies you Mention or reference the Federal Cyber Security Act Secure website, encrypted browser, screening system transmit data Data used for planning development Highlighting survey topic or questions as interesting or entertaining Appeal to patriotism Call to action Informational instruction Community-level benefits Provides community-level data on education, housing, employment, etc. Highlighting survey importance to build intrigue Languages other than English** Your response needed for data accuracy Another response mode is available later Sampling (i.e., mention that respondent is part of a random sample) General confidentiality/data security statement Response benefits others in need Used for data driven and well informed decisions Provides national-level data on education, housing, employment etc. General national-level benefit statement Personal/interpersonal-level benefits to survey response  Establishing positive expectations ACS is a continuous survey Businesses use of ACS data Providing a (vague, non-specific) deadline ACS data used to track changes over time ACS is better than other sources of data Cost and environmental savings to responding online	Required information	11
Providing a way for respondents to get help  Mandatory legal obligation to complete the survey  By law, Census Bureau must protect your data  Census Bureau won't release data in a way that identifies you  Mention or reference the Federal Cyber Security Act  Secure website, encrypted browser, screening system transmit data Data used for planning development  Highlighting survey topic or questions as interesting or entertaining Appeal to patriotism  Call to action  Informational instruction  Community-level benefits Provides community-level data on education, housing, employment, etc.  Highlighting survey importance to build intrigue  Languages other than English**  Your response needed for data accuracy Another response mode is available later  Sampling (i.e., mention that respondent is part of a random sample)  General confidentiality/data security statement  Response benefits others in need  Used for emergency preparation  Used for data driven and well informed decisions  Provides national-level data on education, housing, employment etc.  General national-level benefit statement  Personal/interpersonal-level benefits to survey response  Establishing positive expectations  1 Personal/interpersonal-level benefits to survey response  1 Establishing positive expectations  ACS is a continuous survey  Businesses use of ACS data  Providing a (vague, non-specific) deadline  ACS data used to track changes over time  ACS is better than other sources of data  Cost and environmental savings to responding online	Other information	8
Mandatory legal obligation to complete the survey By law, Census Bureau must protect your data Census Bureau won't release data in a way that identifies you Mention or reference the Federal Cyber Security Act Secure website, encrypted browser, screening system transmit data Data used for planning development Highlighting survey topic or questions as interesting or entertaining Appeal to patriotism Call to action Informational instruction Community-level benefits Provides community-level data on education, housing, employment, etc. Highlighting survey importance to build intrigue Languages other than English** 2 Your response needed for data accuracy Another response mode is available later Sampling (i.e., mention that respondent is part of a random sample) General confidentiality/data security statement Response benefits others in need Used for emergency preparation Used for data driven and well informed decisions Provides national-level data on education, housing, employment etc. General national-level benefit statement Personal/interpersonal-level benefits to survey response 1 Establishing positive expectations 1 ACS is a continuous survey Businesses use of ACS data Providing a (vague, non-specific) deadline ACS data used to track changes over time 1 ACS is better than other sources of data Cost and environmental savings to responding online	Messaging that meets a cultural expectation	6
By law, Census Bureau must protect your data Census Bureau won't release data in a way that identifies you 4 Mention or reference the Federal Cyber Security Act 3 Secure website, encrypted browser, screening system transmit data 3 Data used for planning development 4 Highlighting survey topic or questions as interesting or entertaining 3 Appeal to patriotism 3 Call to action Informational instruction 2 Community-level benefits Provides community-level data on education, housing, employment, etc. 4 Highlighting survey importance to build intrigue 4 Languages other than English** 7 Your response needed for data accuracy 4 Another response mode is available later 5 Sampling (i.e., mention that respondent is part of a random sample) 6 General confidentiality/data security statement 7 Response benefits others in need 7 Used for data driven and well informed decisions 7 Provides national-level data on education, housing, employment etc. 7 General national-level data on education, housing, employment etc. 7 General national-level benefit statement 7 Personal/interpersonal-level benefits to survey response 7 Establishing positive expectations 7 ACS is a continuous survey 7 Businesses use of ACS data 7 Providing a (vague, non-specific) deadline 7 ACS data used to track changes over time 7 ACS and environmental savings to responding online	Providing a way for respondents to get help	5
Census Bureau won't release data in a way that identifies you  Mention or reference the Federal Cyber Security Act  Secure website, encrypted browser, screening system transmit data  Data used for planning development  Highlighting survey topic or questions as interesting or entertaining  Appeal to patriotism  Call to action  Informational instruction  Community-level benefits  Provides community-level data on education, housing, employment, etc.  Highlighting survey importance to build intrigue  Languages other than English**  Your response needed for data accuracy  Another response mode is available later  Sampling (i.e., mention that respondent is part of a random sample)  General confidentiality/data security statement  Response benefits others in need  Used for emergency preparation  Used for data driven and well informed decisions  Provides national-level data on education, housing, employment etc.  General national-level benefit statement  Personal/interpersonal-level benefits to survey response  Establishing positive expectations  ACS is a continuous survey  Businesses use of ACS data  Providing a (vague, non-specific) deadline  ACS data used to track changes over time  ACS is better than other sources of data  Cost and environmental savings to responding online	Mandatory legal obligation to complete the survey	4
Mention or reference the Federal Cyber Security Act Secure website, encrypted browser, screening system transmit data Data used for planning development  Highlighting survey topic or questions as interesting or entertaining Appeal to patriotism  Call to action Informational instruction Community-level benefits Provides community-level data on education, housing, employment, etc. Highlighting survey importance to build intrigue Languages other than English** 2 Your response needed for data accuracy Another response mode is available later Sampling (i.e., mention that respondent is part of a random sample) General confidentiality/data security statement Response benefits others in need Used for emergency preparation Used for data driven and well informed decisions Provides national-level data on education, housing, employment etc. General national-level benefit statement Personal/interpersonal-level benefits to survey response Establishing positive expectations ACS is a continuous survey Businesses use of ACS data Providing a (vague, non-specific) deadline ACS data used to track changes over time ACS is better than other sources of data Cost and environmental savings to responding online	By law, Census Bureau must protect your data	4
Secure website, encrypted browser, screening system transmit data Data used for planning development  Highlighting survey topic or questions as interesting or entertaining Appeal to patriotism  Call to action Informational instruction  Community-level benefits Provides community-level data on education, housing, employment, etc. Highlighting survey importance to build intrigue Languages other than English**  Your response needed for data accuracy Another response mode is available later Sampling (i.e., mention that respondent is part of a random sample) General confidentiality/data security statement Response benefits others in need Used for emergency preparation Used for data driven and well informed decisions Provides national-level data on education, housing, employment etc. General national-level benefit statement Personal/interpersonal-level benefits to survey response Establishing positive expectations ACS is a continuous survey Businesses use of ACS data Providing a (vague, non-specific) deadline ACS data used to track changes over time ACS is better than other sources of data Cost and environmental savings to responding online	Census Bureau won't release data in a way that identifies you	4
Data used for planning development  Highlighting survey topic or questions as interesting or entertaining  Appeal to patriotism  Call to action  Informational instruction  Community-level benefits  Provides community-level data on education, housing, employment, etc.  Highlighting survey importance to build intrigue  Languages other than English**  Your response needed for data accuracy  Another response mode is available later  Sampling (i.e., mention that respondent is part of a random sample)  General confidentiality/data security statement  Response benefits others in need  Used for emergency preparation  Used for data driven and well informed decisions  Provides national-level data on education, housing, employment etc.  General national-level benefit statement  Personal/interpersonal-level benefits to survey response  Establishing positive expectations  ACS is a continuous survey  Businesses use of ACS data  Providing a (vague, non-specific) deadline  ACS data used to track changes over time  ACS is better than other sources of data  Cost and environmental savings to responding online	Mention or reference the Federal Cyber Security Act	3
Highlighting survey topic or questions as interesting or entertaining Appeal to patriotism Call to action Informational instruction Community-level benefits Provides community-level data on education, housing, employment, etc. Highlighting survey importance to build intrigue Languages other than English** 2 Your response needed for data accuracy Another response mode is available later Sampling (i.e., mention that respondent is part of a random sample) General confidentiality/data security statement Response benefits others in need 1 Used for emergency preparation Used for data driven and well informed decisions Provides national-level data on education, housing, employment etc. General national-level benefit statement Personal/interpersonal-level benefits to survey response 1 Establishing positive expectations ACS is a continuous survey 1 Businesses use of ACS data Providing a (vague, non-specific) deadline ACS data used to track changes over time ACS is better than other sources of data Cost and environmental savings to responding online	Secure website, encrypted browser, screening system transmit data	3
Appeal to patriotism Call to action 3 Informational instruction 2 Community-level benefits 2 Provides community-level data on education, housing, employment, etc. 2 Highlighting survey importance to build intrigue 2 Languages other than English** 2 Your response needed for data accuracy 2 Another response mode is available later 3 Sampling (i.e., mention that respondent is part of a random sample) 2 General confidentiality/data security statement 1 Response benefits others in need 1 Used for emergency preparation 1 Used for data driven and well informed decisions 1 Provides national-level data on education, housing, employment etc. 1 General national-level benefit statement 1 Personal/interpersonal-level benefits to survey response 1 Establishing positive expectations ACS is a continuous survey 1 Businesses use of ACS data 1 Providing a (vague, non-specific) deadline ACS data used to track changes over time ACS is better than other sources of data Cost and environmental savings to responding online 1	Data used for planning development	3
Call to action Informational instruction Community-level benefits Provides community-level data on education, housing, employment, etc. Highlighting survey importance to build intrigue Languages other than English** 2 Your response needed for data accuracy Another response mode is available later Sampling (i.e., mention that respondent is part of a random sample) General confidentiality/data security statement Response benefits others in need Used for emergency preparation Used for data driven and well informed decisions Provides national-level data on education, housing, employment etc. General national-level benefit statement Personal/interpersonal-level benefits to survey response 1 Establishing positive expectations ACS is a continuous survey Businesses use of ACS data Providing a (vague, non-specific) deadline ACS data used to track changes over time ACS is better than other sources of data Cost and environmental savings to responding online	Highlighting survey topic or questions as interesting or entertaining	3
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Community-level benefits  Provides community-level data on education, housing, employment, etc.  Highlighting survey importance to build intrigue  Languages other than English**  2 Your response needed for data accuracy  Another response mode is available later  Sampling (i.e., mention that respondent is part of a random sample)  General confidentiality/data security statement  Response benefits others in need  Used for emergency preparation  Used for data driven and well informed decisions  Provides national-level data on education, housing, employment etc.  General national-level benefit statement  Personal/interpersonal-level benefits to survey response  1  Establishing positive expectations  ACS is a continuous survey  Businesses use of ACS data  Providing a (vague, non-specific) deadline  ACS data used to track changes over time  ACS is better than other sources of data  Cost and environmental savings to responding online	Call to action	3
Provides community-level data on education, housing, employment, etc.  Highlighting survey importance to build intrigue  Languages other than English**  Your response needed for data accuracy  Another response mode is available later  Sampling (i.e., mention that respondent is part of a random sample)  General confidentiality/data security statement  Response benefits others in need  Used for emergency preparation  Used for data driven and well informed decisions  Provides national-level data on education, housing, employment etc.  General national-level benefit statement  Personal/interpersonal-level benefits to survey response  Establishing positive expectations  ACS is a continuous survey  Businesses use of ACS data  Providing a (vague, non-specific) deadline  ACS data used to track changes over time  ACS is better than other sources of data  Cost and environmental savings to responding online	Informational instruction	2
Highlighting survey importance to build intrigue  Languages other than English**  Your response needed for data accuracy  Another response mode is available later  Sampling (i.e., mention that respondent is part of a random sample)  General confidentiality/data security statement  Response benefits others in need  Used for emergency preparation  Used for data driven and well informed decisions  Provides national-level data on education, housing, employment etc.  General national-level benefit statement  Personal/interpersonal-level benefits to survey response  1  Establishing positive expectations  ACS is a continuous survey  Businesses use of ACS data  Providing a (vague, non-specific) deadline  ACS data used to track changes over time  ACS is better than other sources of data  Cost and environmental savings to responding online	Community-level benefits	2
Languages other than English**  Your response needed for data accuracy  Another response mode is available later  Sampling (i.e., mention that respondent is part of a random sample)  General confidentiality/data security statement  Response benefits others in need  Used for emergency preparation  Used for data driven and well informed decisions  Provides national-level data on education, housing, employment etc.  General national-level benefit statement  Personal/interpersonal-level benefits to survey response  Establishing positive expectations  ACS is a continuous survey  Businesses use of ACS data  Providing a (vague, non-specific) deadline  ACS data used to track changes over time  ACS is better than other sources of data  Cost and environmental savings to responding online	Provides community-level data on education, housing, employment, etc.	2
Your response needed for data accuracy Another response mode is available later 2 Sampling (i.e., mention that respondent is part of a random sample) 2 General confidentiality/data security statement 1 Response benefits others in need 1 Used for emergency preparation 1 Used for data driven and well informed decisions 1 Provides national-level data on education, housing, employment etc. 1 General national-level benefit statement 1 Personal/interpersonal-level benefits to survey response 1 Establishing positive expectations 1 ACS is a continuous survey 1 Businesses use of ACS data 1 Providing a (vague, non-specific) deadline 1 ACS data used to track changes over time 1 ACS is better than other sources of data Cost and environmental savings to responding online 1	Highlighting survey importance to build intrigue	2
Another response mode is available later  Sampling (i.e., mention that respondent is part of a random sample)  General confidentiality/data security statement  Response benefits others in need  Used for emergency preparation  Used for data driven and well informed decisions  Provides national-level data on education, housing, employment etc.  General national-level benefit statement  Personal/interpersonal-level benefits to survey response  Establishing positive expectations  ACS is a continuous survey  Businesses use of ACS data  Providing a (vague, non-specific) deadline  ACS data used to track changes over time  ACS is better than other sources of data  Cost and environmental savings to responding online  1	Languages other than English**	2
Sampling (i.e., mention that respondent is part of a random sample)  General confidentiality/data security statement  Response benefits others in need  Used for emergency preparation  Used for data driven and well informed decisions  Provides national-level data on education, housing, employment etc.  General national-level benefit statement  Personal/interpersonal-level benefits to survey response  Establishing positive expectations  ACS is a continuous survey  Businesses use of ACS data  Providing a (vague, non-specific) deadline  ACS data used to track changes over time  ACS is better than other sources of data  Cost and environmental savings to responding online  1	Your response needed for data accuracy	2
General confidentiality/data security statement  Response benefits others in need  Used for emergency preparation  Used for data driven and well informed decisions  Provides national-level data on education, housing, employment etc.  General national-level benefit statement  Personal/interpersonal-level benefits to survey response  Establishing positive expectations  ACS is a continuous survey  Businesses use of ACS data  Providing a (vague, non-specific) deadline  ACS data used to track changes over time  ACS is better than other sources of data  Cost and environmental savings to responding online  1	Another response mode is available later	2
Response benefits others in need  Used for emergency preparation  Used for data driven and well informed decisions  1  Provides national-level data on education, housing, employment etc.  General national-level benefit statement  Personal/interpersonal-level benefits to survey response  1  Establishing positive expectations  1  ACS is a continuous survey  1  Businesses use of ACS data  1  Providing a (vague, non-specific) deadline  ACS data used to track changes over time  1  ACS is better than other sources of data  Cost and environmental savings to responding online  1	Sampling (i.e., mention that respondent is part of a random sample)	2
Used for emergency preparation 1 Used for data driven and well informed decisions 1 Provides national-level data on education, housing, employment etc. 1 General national-level benefit statement 1 Personal/interpersonal-level benefits to survey response 1 Establishing positive expectations 1 ACS is a continuous survey 1 Businesses use of ACS data 1 Providing a (vague, non-specific) deadline 1 ACS data used to track changes over time 1 ACS is better than other sources of data 1 Cost and environmental savings to responding online 1	General confidentiality/data security statement	1
Used for data driven and well informed decisions  Provides national-level data on education, housing, employment etc.  General national-level benefit statement  Personal/interpersonal-level benefits to survey response  Establishing positive expectations  ACS is a continuous survey  Businesses use of ACS data  Providing a (vague, non-specific) deadline  ACS data used to track changes over time  ACS is better than other sources of data  Cost and environmental savings to responding online  1	Response benefits others in need	1
Provides national-level data on education, housing, employment etc.  General national-level benefit statement  Personal/interpersonal-level benefits to survey response  1  Establishing positive expectations  1  ACS is a continuous survey  1  Businesses use of ACS data  Providing a (vague, non-specific) deadline  ACS data used to track changes over time  ACS is better than other sources of data  Cost and environmental savings to responding online  1	Used for emergency preparation	1
General national-level benefit statement  Personal/interpersonal-level benefits to survey response  Establishing positive expectations  ACS is a continuous survey  Businesses use of ACS data  Providing a (vague, non-specific) deadline  ACS data used to track changes over time  ACS is better than other sources of data  Cost and environmental savings to responding online  1	Used for data driven and well informed decisions	1
Personal/interpersonal-level benefits to survey response 1 Establishing positive expectations 1 ACS is a continuous survey 1 Businesses use of ACS data 1 Providing a (vague, non-specific) deadline 1 ACS data used to track changes over time 1 ACS is better than other sources of data 1 Cost and environmental savings to responding online 1	Provides national-level data on education, housing, employment etc.	1
Establishing positive expectations 1  ACS is a continuous survey 1  Businesses use of ACS data 1  Providing a (vague, non-specific) deadline 1  ACS data used to track changes over time 1  ACS is better than other sources of data 1  Cost and environmental savings to responding online 1	General national-level benefit statement	1
ACS is a continuous survey  Businesses use of ACS data  Providing a (vague, non-specific) deadline  ACS data used to track changes over time  ACS is better than other sources of data  Cost and environmental savings to responding online  1	Personal/interpersonal-level benefits to survey response	1
Businesses use of ACS data 1 Providing a (vague, non-specific) deadline 1 ACS data used to track changes over time 1 ACS is better than other sources of data 1 Cost and environmental savings to responding online 1	Establishing positive expectations	1
Providing a (vague, non-specific) deadline 1 ACS data used to track changes over time 1 ACS is better than other sources of data 1 Cost and environmental savings to responding online 1	ACS is a continuous survey	1
ACS data used to track changes over time 1 ACS is better than other sources of data 1 Cost and environmental savings to responding online 1	Businesses use of ACS data	1
ACS is better than other sources of data 1 Cost and environmental savings to responding online 1	Providing a (vague, non-specific) deadline	1
Cost and environmental savings to responding online 1	ACS data used to track changes over time	1
	ACS is better than other sources of data	1
Audience-based, single-conversation messaging 1	Cost and environmental savings to responding online	1
	Audience-based, single-conversation messaging	1
Length of survey estimate 1	Length of survey estimate	1
Total *These messaging codes are based off of the full list of codes found in Annuadix B		129

<sup>\*</sup>These messaging codes are based off of the full list of codes found in Appendix B.

\*\*Non-English messages in the Multilingual Brochure were excluded from this tally.

### 6.1.2 Some mail pieces may communicate too many messages

Individual mail pieces may contain too many messages. Table 5 presents the distribution of the 358 codes assigned to the English-language messaging elements for each mail piece.

Table 5. Count of the Assigned Codes by Mail Piece

		Number of	Number of	
		Assigned	Unique	Percent
Mailing	Mail Piece	Codes	Codes	Unique
1	Outgoing Envelope	9	5	55.6
	Instruction Card (internet)	12	9	75.0
	Letter	39	22	56.4
	FAQ Brochure	42	25	59.5
	Multilingual Brochure	27	19	70.4
2	Pressure Seal Mailer	31	14	45.2
3	Outgoing Envelope	10	5	50.0
	Instruction Card (choice)	13	9	69.2
	ACS Questionnaire	30	13	43.3
	Letter	42	23	54.8
	Return Envelope	9	5	55.6
	FAQ Brochure	42	25	59.5
4	Postcard	21	13	61.9
5	Pressure Seal Mailer	31	18	58.1
Total		358		

Source: U.S. Census Bureau, American Community Survey Office

The Frequently Asked Questions (FAQ) Brochure (sent in both the first and third mailings) and the letter in the third mailing contain the most codes, with 42 each. Of the 42 codes assigned to the messaging elements in the FAQ Brochure, 25 (59.5 percent) are unique. Of the 42 codes assigned to the messaging elements in the letter in the third mailing, 23 (54.8 percent) are unique. Table 6 presents the 23 messaging codes communicated in this letter, with the frequency with which they were used.

Table 6. Messaging Codes in the Letter in the Third Mailing\*

Messaging Codes	Frequency
Connection to a known sponsor	8
Audience-based, single conversation messaging	6
Required messaging or messaging that meets a cultural expectation	4
Way to verify authenticity (website, phone number)	3
Highlighting the survey importance to build intrigue	2
Providing a way for respondents to get help	2
By law, Census Bureau must protect your data	1
Mention or reference the Federal Cyber Security Act	1
Secure website, encrypted browser, screening system transmit data	1
Census Bureau will not release data in a way that identifies you	1
Survey benefits those in need	1
Survey data used for planning and developing roads, hospitals, schools, etc.	1
You are part of a random sample	1
Ask the respondent for help (to convey unity)	1
Thank respondents (to build reciprocity)	1
Offer multiple response modes	1
Mandatory message - response is required by law	1
Providing a (vague) deadline	1
If you don't respond, Census Bureau staff may contact you in person	1
Call to action (request to complete the survey)	1
Required information not intended to send a message to the respondent	1
Instructional information	1
Other information	1
Total	42

<sup>\*</sup> These messaging codes are based off of the full list of codes found in Appendix B.

### 6.2 ACS Messaging is Repetitious

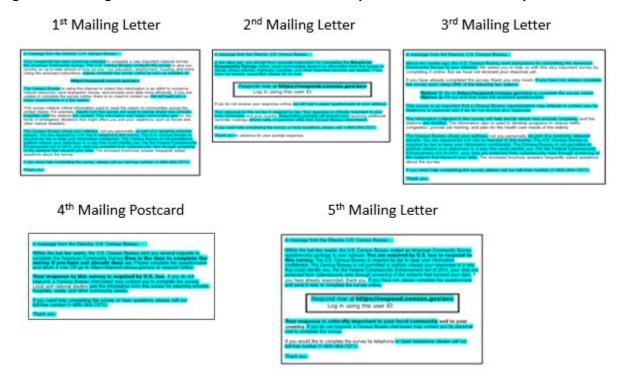
In a multi-contact communication strategy, survey methodologists acknowledge that certain critically important messages may need to appear in multiple mailings. However, repetition can be overused and lead to respondents not reading a communication if it appears to be something they have already read (Dillman, Smyth, and Christian, 2014; Dillman, 2016).

### 6.2.1 Repetition in letters and postcards

Figure 6 highlights phrases repeated verbatim or paraphrased in at least three of the following nine ACS mail pieces—the letters in the first, second, third, and fifth mailings, the postcard, plus the two instruction cards, Multilingual Brochure, and FAQ Brochure. Analysis of the latter four mail pieces is provided in Section 6.2.2.<sup>21</sup>

<sup>&</sup>lt;sup>21</sup> Appendix D contains a full description of all phrases identified as verbatim or paraphrased.

Figure 6. Messages in the ACS Letters and Postcard Repeated Verbatim or Paraphrased



A word-count analysis shows that 75 percent of the body text in the postcard and the four letters is repeated (either verbatim or paraphrased) three or more times. <sup>22</sup> The purpose of some of this repetition, by design, is to provide similar information in each mailing in the event the recipient did not read or could not recall information from the previous mailing. Each letter and postcard:

- States that the correspondence is from the Director of the Census Bureau
- Contains instructions for responding to the survey
- Mentions that the survey is the American Community Survey
- Provides a number to call for help
- Includes a "thank you" message

These are common sense and important pieces of information to repeat consistently across all of the materials.

Additionally, all mailings indicate that the respondent is legally obligated to respond to the survey. This type of messaging has been shown in ACS field tests to increase response rates (see Barth et al., 2016; Oliver, Risley, and Roberts, 2016).

<sup>&</sup>lt;sup>22</sup> Words from the letterhead were excluded from this analysis.

However, there are many instances of repetition that may not be necessary. The cybersecurity and confidentiality messages take up a sizeable portion of text in some mail pieces. As shown in Table 7, in the five mail pieces where the cybersecurity and confidentiality messages are found, at least 19 percent of the text is devoted to these messages.<sup>23</sup>

**Table 7. Proportion of Words Devoted to Cybersecurity and Confidentiality Statements** 

	Cybersecurity and	•	
	Confidentiality	<b>Total Word</b>	
Mail Material	<b>Word Count</b>	Count	Percent
Letter in the first mailing	55	279	19.7%
Multilingual Brochure in the first mailing*	65	182	35.7%
FAQ Brochure in first and third mailings	108	411	26.3%
Instruction Card in the first mailing*	0	42	0%
Pressure seal mailer in the second mailing	0	137	0%
Letter in the third mailing	55	268	20.5%
Instruction Card in the third mailing*	0	76	0%
Postcard in the fourth mailing	0	113	0%
Final reminder mailer in the fifth mailing	55	174	31.6%

Source: U.S. Census Bureau, American Community Survey Office

Confidentiality and data security statements are intended to build trust; however, statements that are too strong may be off-putting to respondents (Singer, von Thurn, and Miller, 1995). Cognitive research suggests that simple statements that assure security, but do not overstate problems, may be more effective (Fobia, Holzberg, and Childs, 2017). The statements that are repeated in the ACS materials are lengthy and take up a lot of space in letters and brochures, and it is possible these statements raise more fears than they alleviate.<sup>24</sup>

The ACS is obligated by Census Bureau policy to tell respondents how their data will be secured, but it is not required to repeat those statements in each mailing or repeatedly in one mailing. Yet the same cybersecurity and confidentiality messages are used in three of the five ACS mailings and multiple times in the first and third mailings. There is no evidence that repeated mentions of the same cybersecurity and confidentiality messages increase respondent trust that data will be kept secure. The Census Bureau should consider how these phrases are worded and when they are necessary to repeat, if at all.

<sup>\*</sup>Only text written in English was included in this analysis.

<sup>&</sup>lt;sup>23</sup> For this word-count analysis, all words in the body of each mail piece (between the salutation and closing) were included in the denominator and all words devoted to the cybersecurity and confidentiality were included in the numerator. Microsoft Word was used to determine word counts.

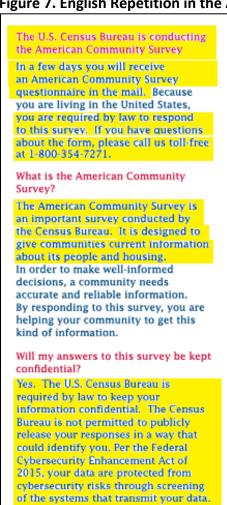
<sup>&</sup>lt;sup>24</sup> The wording of confidentiality and data security statements was dictated by Census Bureau policy.

### **6.2.2** Repetition in Brochures and Instruction Cards

The Census Bureau developed the mail materials such that the primary means of communication to a respondent is contained in the letters and the postcard. The FAQ Brochure, Multilingual Brochure, and two instruction cards are supplemental materials.

Each of these supplemental mail pieces has a specific purpose. Messages contained in these mail pieces should align with that purpose. For example, the Multilingual Brochure should communicate how ACS recipients who need assistance in a non-English language can receive help. The brochure communicates this information in English and five other languages (Spanish, Chinese, Vietnamese, Russian, and Korean). Figure 7 highlights English phrases in other mail pieces that are repeated verbatim or paraphrased in the Multilingual Brochure.<sup>25</sup>

Figure 7. English Repetition in the ACS Multilingual Brochure



<sup>&</sup>lt;sup>25</sup> Highlighted text was found in at least three of the following mail pieces: first mailing letter, second mailing letter, third mailing letter, fourth mailing postcard, fifth mailing letter, the two instruction cards, Multilingual Brochure, and FAQ Brochure.

More than half of the English-language messages in the Multilingual Brochure are repeated in at least two other mail pieces. This makes sense, as necessary information that is communicated in English would also need to be communicated to non-English speakers. The Multilingual Brochure also contains unique English-language messages such as, "Because you are living in the United States, you are required by law to respond to this survey." This message is strategic to this mail piece because it communicates that everyone living in the U.S., including non-citizens, legal permanent residents, and temporary residents must complete this survey. This message is particularly relevant to the segment of the ACS audience that is inclined to seek help in a foreign language.

The FAQ Brochure also contains phrases repeated verbatim or paraphrased, as highlighted in Figure 8.<sup>26</sup>

Frequently Asked Questions What is the American Community Survey? Do I have to answer the questions on the American Community Survey? Will the Census Bureau keep my The American Community Survey collects information 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 U.S. 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. 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? How do I benefit by answering the American Community Survey? Where can I find more information about By law, the Census Bureau can only use your responses the American Community Survey or get assistance? 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. to produce statistics. Your information will be used in combination with information from other households to produce data for your community. Similar data will b produced for communities across Puerto Rico and the You may visit our Web site at census.gov/acs or 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. The data also are 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.

Figure 8. Repetition in the Frequently Asked Questions (FAQ) Brochure

Beyond the repeated legal obligation and data security statements, the FAQ Brochure contains only three repeated sentences. Most of the messages in the brochure are unique and either answer questions or provide more details than communicated in other materials. The messaging in the FAQ Brochure is an example of messaging that is appropriate.

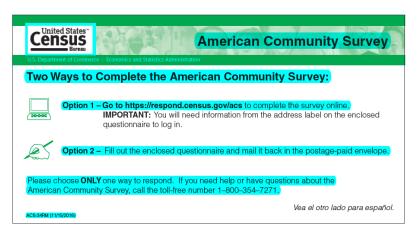
The instruction cards also contain phrases repeated verbatim or paraphrased, as highlighted in Figure 9.<sup>26</sup>

22

Repetition highlighted indicates the phrase was found in at least three of the following mail pieces: first mailing letter, second mailing reminder letter, third mailing letter, fourth mailing reminder postcard, fifth mailing reminder letter, two instruction cards, Multilingual Brochure, and FAQ Brochure.

Figure 9. Repetition in the First and Third Mailing Instruction Cards





The instruction cards, found in the first mailing and the third mailing, contain few messages. The instruction cards primarily provide instructions for how to complete the survey. The only new English-language message in the instruction cards is a statement that indicates that information from the address label is needed to respond online.<sup>27</sup>

A recent study showed that removing the instruction card from the third mailing does not hurt self-response rates (Clark et al., 2015). This is particularly important since some survey methodologists believe that too many inserts can potentially distract and confuse respondents (Dillman, 2016).

### 6.2.3 Few new messages added after the first mailing

Survey methodologists suggest that different people may be motivated by different reasons to respond to a survey request (Groves, Singer, Corning, 2000; Groves et al. 2006; Dillman, Smyth, and Christian 2014). Using a variety of appeals to encourage nonrespondents to participate, rather than repeating the same appeals, may convince different types of people to respond

<sup>&</sup>lt;sup>27</sup> The back of the instruction card in the third mailing repeats the English messages in Spanish. These Spanish-language messages were not coded for this project.

(Oliver, Heimel, and Schreiner, 2017). However, after the first mailing, only five new messaging codes of the 76 codes are used in the ACS mail materials as shown in Table 8.

Table 8. New Messaging Codes Used After the First Mailing

New Messaging	Message	Mail Material(s)
Code*		
2.3.6 (Reciprocity -	"If you have already responded, thank you"	Fifth mailing letter (similarly
thanking respondents)		coded messages are also in the
		2 <sup>nd</sup> and 3 <sup>rd</sup> mailing)
3.4 (Offer multiple	"Please complete the questionnaire and return	Fourth mailing postcard
response modes)	it now OR go to https://respond.census.gov/acs	(similarly coded messages are
	to respond online"	also in the 3 <sup>rd</sup> and 5 <sup>th</sup> mailings)
3.11 (Census will pay	"Postage will be paid by the U.S. Census	Third mailing business reply
for return postage)	Bureau"	envelope
2.3.2 (Establish unity –	"We asked you to help us with this very	Third mailing letter
ask the respondent for	important survey by completing it online. But	
help)	we have not received your response yet."	
3.8 (Nonresponse	"If you do not respond, a Census Bureau	Fifth mailing letter (similarly
Followup messaging)	interviewer may contact you by personal visit	coded messages also are in the
	to complete the survey."	2 <sup>nd</sup> , 3 <sup>rd</sup> , and 4 <sup>th</sup> mailings)

<sup>\*</sup>Messages listed in this table were also coded using other codes. Only the codes not used in the first mailing are described here.

These messages are pragmatic and logical messages to send after the first mailing. However, other messages that add a new appeal to respond may be useful to include as well (see Section 6.6 for additional details). Repeating messages in ACS materials takes up space that could be used for other potentially useful messages. The materials should balance the need for repeating messages for new readers against including new appeals that can possibly encourage nonrespondents to participate in the survey.

### 6.3 Some ACS Messaging Lacks Justification

The mail pieces sent to potential respondents are limited in the space available to communicate messages. Hence, it is critically important that each message has an expressed purpose and plays an integral role in gaining survey cooperation. Our analysis found that most messages sent in ACS materials are justified by the literature outlined in the *Strategic Framework Report* (Oliver, Heimel, and Schreiner, 2017). However, we could not find research to justify some messages contained in the mail contact materials. This section of the report highlights messaging that lacks justification as well as examples of alternate messaging suggested by the literature.

### 6.3.1 Scientific statements

Statistical agencies like the Census Bureau may think it necessary to include scientific messaging in the mail materials to promote the importance, utility, and accurate use of the data. However, there is little evidence in the literature suggesting that scientific messaging is influential in gaining survey cooperation, which is the ultimate goal of survey messaging. In one study, researchers asked participants to read and rank if a statement was more or less likely to convince them to respond. Among the 11 statements tested, statistical statements such as, "The ACS is the most reliable of statistical information," were ranked among the lowest (Hagedorn, Green, and Rosenblatt, 2014). In another study with similar methodology, statistical statements like, "The American Community Survey is often the most reliable source of accurate and timely statistical information essential for decision-making," were again ranked the lowest (Fulton, Morales, and Childs, 2016).

The FAQ Brochure contains four sentences with scientific messages:

- "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 ACS, the U.S. 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."
- "In order to make well-informed decisions, a community needs accurate and reliable information."
- "We may combine your answers with information that you gave to other agencies to enhance the statistical uses of these data."

Each message contains scientific phrasing that may or may not influence self-response rates. Moreover, including all four sentences in a single mail piece may be overwhelming to potential respondents, especially those at lower reading levels or levels of education.

Two additional scientific statements appear in the mail materials. The purpose of these statements may be to alleviate a recipient's fear that their household was singled out by the Census Bureau. However, the use of the word "randomly" in both sentences may be problematic.

- "Your household has been randomly selected to complete a very important national survey, the American Community Survey." First mailing letter
- "The Census Bureau chose your address, not you personally, as part of a randomly selected sample." – First mailing letter, Third mailing letter

The term "randomly selected" is intended to communicate to potential respondents that they were not singled out by the Census Bureau (i.e., sampled with an equal probability of selection). However, the term "random" could also be interpreted to mean "lacking a plan or purpose."

This misinterpretation may make recipients feel that their personal participation and the survey request are less important. Survey methods, communications, and marketing literature all suggest that the potential respondent should feel that their participation is special and that the survey represents a rare opportunity to make a difference (Oliver, Heimel, and Schreiner, 2017). This is rooted in the scarcity principle that states people are drawn to things that are exclusive and hard to come by (Cialdini, 2009).

### **6.3.2** Benefit statements

Research suggests that statements framing the benefit of survey participation at the community or local level may motivate people to participate in the survey better than national-level benefits statements (ICF Macro, 2009). However, not all benefits messages in the ACS mail materials are framed this way.

There are multiple instances of national-level benefits messages in the ACS mail materials. For example, this statement in the first mailing letter:

 "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."

Highlighting that the ACS is an important national survey may be useful for making the survey request appear important. However, the benefits of participating in the survey would be best communicated at the community level.

Another example, in the first mailing, of a benefit message that is not communicated at the community level:

• "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."

This message, located in the first mailing letter, is designed to promote internet response over paper questionnaire response, as a means of conserving natural resources and saving [the government] taxpayer money. Qualitative research conducted by the Census Bureau indicates that appealing to the conservation of natural resources and taxpayer dollars may motivate some respondents to reply, however other statements tested worked better (Nichols, 2012; ICF Macro, 2009).

Research also suggests that if you mention a benefit to businesses, that benefit should reference a local or small business rather than a benefit to a large corporation (Orrison and Ney, 2014). Across all mail materials, the ACS only communicates one business-level benefit (located in the FAQ Brochure):

 "The data also are 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."

With limited space, it may not be optimal to communicate national and corporate level benefits at the expense of community or local business-level benefits, or other useful messages.

### 6.3.3 Outdated statements

When communicating with the public, information should be accurate and up-to-date. However, due to the incremental changes to the ACS mail materials, some messaging in some mail pieces that was once accurate is now outdated. For example,

"In a few days you will receive an American Community Survey questionnaire in the mail."
 First mailing Multilingual Brochure

In January 2013, the internet was introduced as a mode of self-response for the ACS. Prior to that, the Multilingual Brochure was sent in the first mailing, four days before a paper questionnaire was mailed. However, beginning in January 2013 the paper questionnaire has been sent in the third mailing, 21 days after the Multilingual Brochure is sent in the first mailing. It appears that the message in the Multilingual Brochure is a remnant of the ACS mail contact strategy prior to January 2013 and needs to be updated to reflect the current mail strategy.

Another example of an inaccurate statement is,

• "We asked you to help us with this very important survey by completing it online. But we have not received your response yet." – Third mailing letter

This sentence appears to be a simple "call-back" message to something communicated in a previous mailing. However, the first and second mailings do not explicitly ask the respondent for help. There is a difference between asking someone to complete a task and asking for his or her help with a task.<sup>28</sup> This statement was accurate when the ACS mail strategy contained a pre-notice letter that included the phrase, "Thank you in advance for your help."

Numerous research studies have led to changes in the ACS mail contact strategy, resulting in increased self-response and other positive changes to the mail materials (U.S. Census Bureau, 2017). However, incremental changes to the ACS mail materials have generated some inconsistencies in messaging across mailings. While it is unlikely that a respondent would notice

<sup>&</sup>lt;sup>28</sup> By asking for help, the relationship between the asker and the asked communicates that equals are trying to accomplish a task together, rather than the asker treating the asked as a subordinate. Avoiding subordinating language is an important aspect covered in the strategic framework report (Oliver, Heimel, and Schreiner, 2017).

either discrepancy, as the mailings are sent days or weeks apart, it is still a best practice for messages to be accurate and up-to-date so that the five mailings feel as though they are a part of a cohesive, single conversation (Oliver, Heimel, and Schreiner, 2017).

#### 6.4 Sponsor Information is Not Communicated Clearly

The recipient of a survey solicitation must trust that the survey is legitimate before responding (Dillman, Smyth, and Christian, 2014; Groves et al., 2012). Lack of familiarity with the ACS may be a barrier to gaining survey cooperation. Only 11 percent of potential respondents have heard of the ACS (Hagedorn, Green, and Rosenblatt, 2014). About 90 percent of respondents are familiar with the decennial census (Hagedorn, Green, and Rosenblatt, 2014). Connecting the ACS to the Census Bureau, a known federal agency, with consistent messaging across multiple mailings, may help establish trust and that the ACS request is legitimate and important (Herberlein and Baumgartner, 1978; Presser, Blair, and Triplett, 1992; Groves et al., 2012; Oliver, Heimel, Schreiner, 2017).

The ACS letters reference the Census Bureau multiple times in text, the letterhead, logo, and web addresses. Nearly one out of every six messages (16.5 percent) that the ACS communicates attempts to connect the ACS to the U.S. Census Bureau as a survey sponsor. However, the ACS materials may confuse potential respondents by referencing multiple federal entities, communicating different addresses, inconsistently using logos, and having inconsistent design elements (see sections 6.4.1 through 6.4.4).

#### 6.4.1 The mention of multiple federal entities may confuse respondents

In addition to mentioning the Census Bureau, each mail piece mentions additional federal entities that can be interpreted as the survey sponsor, obscuring the link between the ACS and the Census Bureau. As shown in Figure 10, the United States Department of Commerce, Economic and Statistics Administration, and Office of the Director, are all referenced along with the U.S. Census Bureau in the letterhead used on ACS invitation letters and postcards.

Figure 10. ACS Mailings Letterhead

ACS-23(L)(2018) (6-13-2018)



UNITED STATES DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. Census Bureau

Washington, DC 20233-0001 OFFICE OF THE DIRECTOR Communicating multiple sponsors in this way may confuse potential respondents.<sup>29</sup> Including the Department of Commerce seal (rather than the Census Bureau logo) and placing the Census Bureau third on the letterhead (in a smaller font and not in all caps) does not clearly communicate that the Census Bureau is the agency that conducts this survey.<sup>30</sup>

Table 9 shows how each ACS mail piece uses a different combination of seals, logos, and text references to communicate potential sponsorship.

Table 9. Application of Sponsorship in ACS Mail Materials

	U.S. Census Bureau	U.S. Department of Commerce	(U.S.) Census Bureau	U.S. Department of Commerce	Economics and Statistics Administration	Office of the Director
Mail Piece	Logo	Seal	Text	Text	Text	Text
Outgoing Envelopes	✓		✓	✓	✓	✓
Return Envelope			✓			<b>√</b> *
Letters	✓	✓	✓	✓	✓	✓
FAQ Brochure	✓		✓	✓	✓	
Multilingual Brochure	✓		✓	✓	✓	
Paper Questionnaire		✓	✓	✓	✓	
Instruction Card	✓			✓	✓	
Postcard		✓	✓	✓	✓	✓

A ✓ means the logo, seal, or text is present in the mail piece.

The use of multiple sponsorship seals, logos, and text references in different combinations in separate mail pieces may not be the best way to leverage the familiarity people have with the Census Bureau as the sponsor of the ACS. We have no evidence that referencing the Department of Commerce or the Economics and Statistics Administration is meaningful to respondents, or any evidence that referencing multiple agencies adds to legitimacy. Removing the additional sponsors may communicate more clearly the connection between the ACS and the Census Bureau.

### 6.4.2 Placement of Census Bureau sponsorship messaging is not prominent

It is important that ACS recipients understand that the mail materials and the request to complete the survey come from the Census Bureau. One way to accomplish this is to prominently feature the Census Bureau logo and text references in optimal locations. In this section, we highlight the placement of census messaging on the ACS envelopes, letters, and on the paper questionnaire.

<sup>\*</sup>The return envelope for the paper questionnaire is addressed to the "DIRECTOR".

<sup>&</sup>lt;sup>29</sup> For example, recent eye-tracking research appears to show that this complex letterhead with multiple sponsors took more time for readers to process than a simpler letterhead with a single sponsor, the U.S. Census Bureau (Tuttle et al., 2019).

<sup>&</sup>lt;sup>30</sup> The last line of the letterhead reads, the "Office of the Director;" however, it is not clear which agency this is referring to, or if this is a fourth agency or organization conducting this survey.

#### **Envelopes**

Survey methodologists note many barriers to gaining a survey response. One of the first barriers is that mail materials need to be opened in order for the messaging inside to be read (Dillman, 2016). The envelopes that are used to send respondents letters, brochures, and paper questionnaires present an opportunity to connect the ACS with the Census Bureau sponsor that may help overcome this first barrier and increase the chance that a recipient opens the ACS mailing.

Marketing professor Siegfried Vögele's research on how people process visual elements on an envelope suggests that the respondent first observes their own address in the middle of the envelope before their eye tracks to the left and then up to the corner to read the return address to see who sent the piece of mail. Next, the reader may glance to the right to view the postage stamp. In all, this process takes about seven seconds and can determine if an envelope is opened or ignored (Vögele as cited in Chewning, 2019).

As shown in Figure 11, the ACS envelope does not place a Census Bureau logo in the pathway that most people's eyes follow when processing the content of an envelope – i.e., either in near the middle, or the upper-left, or between those two locations. Instead, the top left of the envelope contains a multi-sponsor return address (similar to the letterhead discussed in section 6.4.1) that lists the U.S. Department of Commerce first (in larger font) and the U.S. Census Bureau third. The Census Bureau logo is located on the bottom left of the envelope, in similar location as it is in the letter (shown in **Error! Reference source not found.**).

Figure 11. Placement of Census Bureau Logo on Envelope



Also as shown in Figure 12, ACS envelopes contain a "callout box" to communicate that response to the ACS is required by law.

Figure 12. Envelope Callout Box Features the American Community Survey

The American Community Survey
Form Enclosed

# YOUR RESPONSE IS REQUIRED BY LAW

This box presents an opportunity to connect the mailing to the Census Bureau, rather than mention the lesser-known ACS, which may lead to more people opening the envelope.

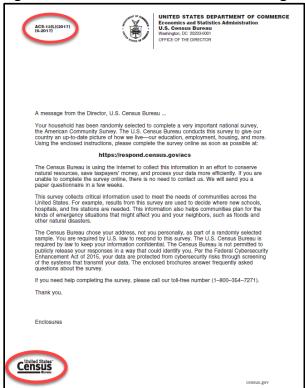
#### Letters

Readers process documents like the ACS letters by starting in the top left of the page and then moving across and down the page (Lidwell, Holden, and Butler, 2003).<sup>31</sup> Based on this reading pattern, the top left of a text-dense page is likely to be noticed by a reader, making the top left an ideal location for the Census Bureau logo. However, the logo is placed in the lower left corner of the letter. The top left of the letter contains a form identifier, as shown in Figure 13, used by the Census Bureau's National Processing Center when printing and assembling the mail materials.<sup>32</sup> The form identifier is not relevant to respondents; therefore, it could be relocated to a less prominent position making room for the Census Bureau logo.

<sup>&</sup>lt;sup>31</sup> This reading process applies to documents with heavy text that is evenly distributed and homogenous (Lidwell, Holden, and Butler, 2003).

<sup>&</sup>lt;sup>32</sup> Each mail piece must have a form identifier for tracking, storage, and to ensure that the correct mail piece is sent in the correct mailing. This does not have to be in the top left. The location of this form identifier is flexible.

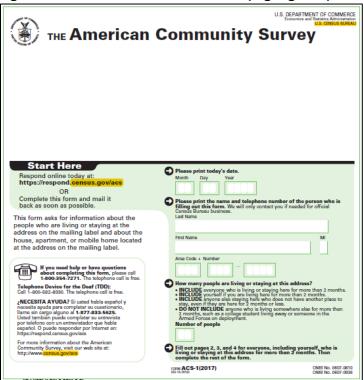
Figure 13. Placement of Census Bureau Logos on Letter



#### Paper Questionnaire

The third mailing sent to respondents contains the 28-page, 2018 ACS questionnaire. This mailing is critical to gain responses from households that either cannot, or choose not to, respond by the internet. Though this mailing also contains a letter, instruction card, FAQ Brochure, and a pre-paid return envelope, research suggests that the only mail piece some ACS recipients look at after they open the third mailing is the paper questionnaire (Schwede, 2013). Therefore, it is necessary that the ACS questionnaire connect the survey to the Census Bureau in a meaningful and prominent way. To make this connection, the front cover of the paper questionnaire mentions the Census Bureau three times, as shown highlighted in Figure 14.

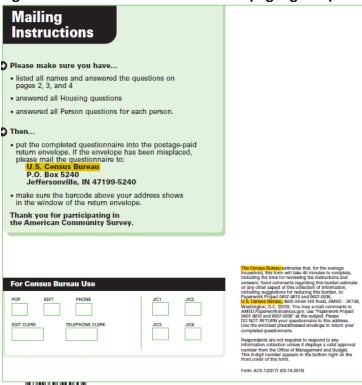
Figure 14. Census Bureau References (highlighted) on the Front of the ACS Questionnaire



The "U.S. Census Bureau" is mentioned once in small type in the top right hand corner below the "U.S. Department of Commerce" and "Economic and Statistics Administration." The Census Bureau is indirectly mentioned two more times, both times within web addresses. No statement on the front of the paper questionnaire communicates directly that the Census Bureau conducts the ACS. The ACS questionnaire does not include a Census Bureau logo.

The back of the questionnaire suffers from a similar problem – a lack of connection between the ACS to the Census Bureau – as shown in the highlighted text in Figure 15.

Figure 15. Census Bureau References (highlighted) on the Back of the ACS Questionnaire



The Census Bureau is mentioned in the return address. This message is only needed for people who discarded the enclosed pre-paid envelope, which makes it unlikely to be read by most recipients. There are two additional mentions of the Census Bureau contained in the fine print text in the lower right hand corner, which may also go unnoticed. Similar to the front of the paper questionnaire, the Census Bureau logo is not used on the back of the questionnaire nor is there a statement that directly communicates that the Census Bureau conducts the ACS. 33

# 6.4.3 The use of multiple addresses may be confusing respondents and are difficult to verify for authenticity

Survey methodologists recommend providing recipients multiple ways to easily verify the authenticity of a survey request (Dillman, Smyth, and Christian, 2014). Potential respondents may search online for the survey sponsor and the sponsor's physical location for verification purposes. However, the ACS mail materials provide four different addresses:

1. 1201 E 10th Street, Jeffersonville, IN 47132-0001: Return address used on the outside of envelopes and postcard.

<sup>&</sup>lt;sup>33</sup> While we did not code the interior pages of the paper questionnaire, there is no mention of the Census Bureau on those pages.

- 2. P.O. Box 5240, Jeffersonville IN, 47199-5240: Address on the back of the paper questionnaire and the pre-paid return envelope where respondents mail paper questionnaires.
- 3. 4600 Silver Hill Road, AMSD-3K138, Washington, D.C. 20233: on the back of the paper questionnaire for recipients to send comments about the survey.
- 4. Washington, DC 20233-0001: contained in the letterhead under, "UNITED STATES DEPARTMENT OF COMMERCE", "Economic and Statistics Administration", and "U.S. Census Bureau" but above "OFFICE OF THE DIRECTOR".

While having multiple addresses may be unavoidable in a complex survey operation like the ACS, communicating multiple addresses, especially in different states, may cause confusion and distrust, and it may obscure the connection of the ACS to the Census Bureau. It is important that each address is communicated clearly and strategically, and that addresses are easily verifiable.

Therefore, it may be problematic that none of the addresses listed in ACS materials communicate the actual, physical location of the Census Bureau headquarters, which is located at 4600 Silver Hill Road in Suitland, Maryland (not in Washington, D.C. as shown in address number three above). <sup>34</sup> In an attempt to simulate what a respondent might do to verify the address of the Census Bureau, our research team conducted multiple internet searches and consistently found that the Census Bureau is located in Jeffersonville, Indiana, and Suitland, Maryland. <sup>35</sup> Only one search returned a location in Washington, D.C., but it was a different address than those communicated in the ACS mailings (see Appendix E for examples).

Some additional messaging may help clear up any confusion, for example, labeling the Silver Hill Road address as the location of the Census Bureau Headquarters and the two Jeffersonville, Indiana, addresses as the location of the Census Bureau's National Processing Center. If possible, the address communicated in the materials should be easily verifiable in common web searches, as conflicting addresses may signal that the survey request is a scam from someone pretending to be from the Census Bureau.

#### 6.4.4 Design elements need to be consistent

Survey methodologists note that all mail materials should appear to come from the same sponsor organization (Dillman, Smyth, and Christian, 2014). In addition to using the Census Bureau logo and referencing the Census Bureau in text, all materials should have a consistent look-and-feel using similar design elements such as color, graphics, and font. Although beyond

<sup>&</sup>lt;sup>34</sup> It is possible that people may assume that the U.S. government is located in Washington D.C. In the internet age, where all details can be verified quickly and easily, using this non-existent forwarding address may be problematic. More research on this is required.

<sup>&</sup>lt;sup>35</sup> This was not a scientific analysis. We used multiple browsers, search engines, and common search phrases an ACS recipient may use to verify that the addresses in the ACS mailings were real. Additional research on this issue is necessary.

the scope of this project, when reviewing the ACS materials we found the following inconsistencies across mail materials:

- Color: Materials are in blue and varying green shades; some are colorless.
- Graphics: Use of full color flags, background pictures, and icons is inconsistent.
- Font: The font used across the mail materials is inconsistent.

To ensure that all mailings and mail pieces are seen as being sent from the same sponsor and that this sponsor is the Census Bureau, we recommend simplifying the sponsorship information by removing references to other federal entities. In addition, we recommend placing sponsor information in optimal locations and consistent use of design elements, including the Census Bureau logo, text references, formatting, font, color, and style.

#### 6.5 Some ACS Messaging does not Follow Plain Language Guidelines

Even if ACS mail materials limit the number of messages in each mailing, reduce repetition, communicate justified messages, and link the ACS to the Census Bureau sponsor, messages may not be understood as intended. About 34 percent of American adults (ages 16-65) read and write at a fourth-to-fifth grade level (basic level). About 14 percent read and write at a first-to-third grade level (below basic level [National Center for Education Statistics, 2014]). Table 10 presents readability scores and corresponding grade-levels for select text-dense Englishlanguage ACS mail materials.

**Table 10. Flesch Reading Ease Scores of ACS Mail Materials** 

Mailing	Mail Piece	FRE Score	Interpretation of Text	Grade Level
1	Letter <sup>36</sup>	54.6	"fairly difficult to read"	10 <sup>th</sup> -12 <sup>th</sup>
	Multilingual Brochure <sup>37</sup>	48.6	"difficult to read"	College
	FAQ Brochure <sup>38</sup>	44.0	"difficult to read"	College
2	Pressure Seal Mailer <sup>39</sup>	56.9	"fairly difficult to read"	10 <sup>th</sup> -12 <sup>th</sup>
3	Letter <sup>40</sup>	60.6	"easily understood by 13-15 year old students"	8 <sup>th</sup> - 9 <sup>th</sup>
	FAQ Brochure	44.0	"difficult to read"	College
4	Postcard <sup>41</sup>	70.7	"fairly easy to read"	7 <sup>th</sup>
5	Pressure Seal Mailer <sup>25</sup>	62.7	"easily understood by 13-15 year old students"	8 <sup>th</sup> - 9 <sup>th</sup>

Source: U.S. Census Bureau, American Community Survey Office

<sup>&</sup>lt;sup>36</sup> We scored the text minus the form identifier, Department of Commerce logo, header information, and all words and logos that follow the words "Thank you."

<sup>&</sup>lt;sup>37</sup> The messages are located on the backside of the brochure when unfolded.

<sup>&</sup>lt;sup>38</sup> The same brochure is also located in Mailing 3.

<sup>&</sup>lt;sup>39</sup> We scored the text minus the form identifier, Department of Commerce logo, header information, and any text that follows the words "Thank you in advance for your prompt response."

<sup>&</sup>lt;sup>40</sup> We scored the text minus the form identifier, Department of Commerce logo, header information, and any text that follows the words "Thank You."

<sup>&</sup>lt;sup>41</sup> We scored the text minus the form identifier, Department of Commerce logo, and header information.

The introductory mailing seems particularly problematic, with three mail pieces rated as fairly difficult to read (the letter in the first mailing, rated on the  $10^{th}$ - $12^{th}$  grade level) or difficult to read (the FAQ and the Multilingual Brochures, rated on the college level). The pressure seal mailer in the second mailing was also rated fairly difficult to read and written at the  $10^{th}$  –  $12^{th}$  grade level—above the average reading level of Americans.

The use of plain language can help improve the readability of the ACS mail materials. In fact, federal law mandates the use of plain language in public facing documents. The Plain Writing Act of 2010 (2010) requires writing that is "clear, concise, well-organized, and follows other best practices appropriate to the subject or field and intended audience." 42

It is important to note that there are other factors that affect readability, including organization of information, graphic design, and relevance (Kutner, Greenberg, and Baer, 2005; Kimble, 2014). The Flesch-Kincaid Readability tests do not measure these constructs. However, our readability analysis suggests that ACS materials could be improved by making the reading levels lower and thus more accessible to more Americans. Ideally, a fifth grade reading level would be optimal. Individuals reading below this level might be better served by the CAPI mode of response.

#### 6.6 There are Missed Opportunities in ACS Messaging

For this project, we created a codebook for messaging based on an extensive multi-disciplinary literature review (see Oliver, Heimel, and Schreiner, 2017). After coding, we noticed that some potentially useful messaging codes that the ACS could communicate were not used in any of the mail contact materials.<sup>43</sup>

Survey methodologists argue that people are motivated by different factors when they choose to participate in a survey (Groves, Singer, and Corning, 2000; Groves et al., 2006; Dillman, Smyth, and Christian, 2014). Using a variety of appeals in mail communication materials may be a useful way to engage more potential respondents and increase response rates as well as reduce nonresponse bias (Oliver, Heimel, and Schreiner, 2017).

The Census Bureau should consider communicating the following appeals identified by the *Strategic Framework Report*. These appeals may be able to convince more, or different, potential respondents to participate in the ACS.

#### 6.6.1 Conformity

Psychologists have shown that people can be motivated by a desire to conform and follow the lead of others similar to themselves. For example, Cialdini (2009) showed that when a hotel

<sup>&</sup>lt;sup>42</sup> See the U.S. Food and Drug Administration (2011) for examples of plain language principles.

<sup>&</sup>lt;sup>43</sup> Some messaging codes not used in any of the mail materials were determined to not be feasible to implement in the ACS (such as the use of a real stamp, code 1.1.6).

told their guests that the majority of people staying in the hotel reuse their sheets and towels, reuse rates of these items increased. This increase was greater than when the hotel told guests that reusing sheets and towels helped the environment. Because over two million households each year participate in the ACS, messaging in ACS materials could frame survey participation as conforming to the normal actions of others.

#### 6.6.2 Consistency

Psychologists also have shown that people can be motivated by a desire to be consistent with their own previous, similar behaviors and values (Cialdini, 2009). Interestingly, sometimes people may need to be reminded of their previous actions and values to activate this motivation. For example, a common strategy to increase voter turnout is for members of a party to call known registered voters to ask if the voter will vote during an upcoming election. This strategy has been shown to increase turnout, likely because the voter is reminded they are a voter and have voted in the past, which motivates them to take action. If the ACS can frame survey participation as consistent with a potential respondent's previous behavior or values, the communication materials can activate that motivation to respond.

#### 6.6.3 Civic responsibility

Civic responsibility is active participation in the public life of a community in an informed, committed, and constructive manner, with a focus on the common good—for example, voting or serving on a parent-teacher association (Gottlieb and Robinson, 2002). Participation in these civic activities gives some people a sense of pride and empowerment. Civic-minded people may be motivated to participate in the ACS if participation in the survey is framed as a civic responsibility.

#### 6.6.4 Scarcity

Research has shown that people desire items and opportunities more if the item or opportunity is scarce or perceived to be scarce (Cialdini, 2009). Some may recall the "Cabbage Patch Kids" consumer frenzy in 1983 created by manufacturer-induced scarcity (Buck, 2016). The ACS is a sample survey, where each month a small percent of the U.S. population is asked to participate. Participation in the ACS can be framed as a rare or unique opportunity to be the voice of their community. Also, while ACS materials have to be careful not to communicate too many scientific messages, it may be beneficial to note that the ACS is a unique survey in the U.S., which may make the opportunity feel more scarce and important.

#### 6.6.5 Commitment

Asking people to actively commit to completing a task can increase task completion propensity. For example, vaccination rates increased by 4.2 percentage points when recipients of a flu mailer were asked to write down the date, time, and location at which they planned to be vaccinated (Milkman et al., 2011). By writing down their planned action, a potential respondent

is actively committing to completing this task. In another study, a psychologist found that research participants were 42 percent more likely to achieve their goals by writing them down first (Matthews, 2015). Asking ACS recipients to actively commit to completing the survey by writing down how and when they plan to respond may prove similarly effective.

#### 6.6.6 Deadline

In a recent focus group on the ACS mail packages, several participants stated that a deadline or due date would be a strong motivator for them to respond in a timely fashion, especially when coupled with the "required by law" message (Reingold, 2014a). This conforms to theoretical insights and practical research findings. In business, when assigning a task it is recommended to attach a due date to the task to set clear expectations and to reduce confusion (Allen and Richardson, 2019). Though there is some debate on the best way to implement or communicate the due date to potential respondents, due dates have been shown to be effective in the decennial census settings and may prove effective in increasing self-response in the ACS (Martin, 2009; Stokes et al., 2011).

#### 6.6.7 Community-level benefits

The ACS materials communicate some benefits of ACS participation, but more variety can be added to the benefits that are communicated. Communicating that the survey helps small and local business as well as non-profit organizations has been shown to resonate with respondents better than statements about large corporation or federal government uses of the survey data (Orrison and Ney, 2014; Hagedorn and Green, 2014). Communicating that ACS data are used to distribute more than \$675 billion in federal funds each year to communities may communicate that responding to the ACS is important.

#### 6.6.8 Leverage authority

Research suggests that people are more likely to follow the lead of credible experts (Cialdini, 2009). The Census Bureau is the nation's leading provider of quality data about its people and economy. Communicating or projecting the expertise of the Census Bureau may be a powerful way to gain survey compliance – for example, communicating the long history of the Census Bureau conducting surveys, like the ACS.

#### 6.6.9 Send mailings from a real person

Sending survey invitation letters from a real person with authority is hypothesized to increase response rates by making the requests seem important and less generic (Oliver, Heimel, and Schreiner, 2017). To personalize the ACS survey request, the survey invitation letters could be sent from the director of the Census Bureau or the Chief of the ACS Office.<sup>44</sup> Potential

<sup>&</sup>lt;sup>44</sup> At the time of this analysis, the Census Bureau had an acting director and therefore did not cite the acting director by name nor use a signature on mailings.

respondents should be able to verify that the person sending the survey is a real person in the sending organization. All letters should also include the sender's signature (Dillman, 2007).

#### 6.6.10 Unity

People are more likely to agree and comply with a request if they feel a sense of unity with the requestor (Cialdini, 2016). To the extent possible, messages that make the potential respondent feel included in the same group as the requestor may be effective to gain compliance. Research recommends avoiding language that makes a potential respondent feel subordinate to the survey requestor (Dillman, Smyth, and Christian, 2014; Oliver, Heimel, and Schreiner, 2017). One way to do this is to ask for help, rather than assigning a task to the potential respondent. This would put the Census Bureau in the subordinate role, needing the assistance of the survey recipient, but also asking for help would put both the survey requestor and the recipient on the same team solving a problem together. The ACS materials could do a better job clearly setting this tone.

#### 7. CONCLUSIONS

This report took a critical look at every messaging element (e.g., sentences, phrases, addresses, web addresses, logos, and symbols) in the ACS mail materials and evaluated them against best practices in survey communication identified in the *Strategic Framework Report* (Oliver, Heimel, and Schreiner, 2017). This evaluation resulted in the following recommendations for improving ACS messaging:

#### Reduce the number of messages per mailing

The Census Bureau might be conveying too many messages to ACS recipients. In total, 358 messages were identified across the five ACS mailings. Too many messages can overwhelm potential respondents, making it difficult for them to understand the messages and to take action by responding to the ACS.

#### Reduce repetitious messaging

Much of the messaging across the ACS mailings is repetitious. For example, 75 percent of the words in the four letters and postcard are repeated in at least three of these mail pieces. Some repetition is by design and is useful; however, some repetition is unnecessary. In particular, the legal obligation and data security messages take up a sizeable portion of the text in multiple mail pieces, although Census Bureau policy does not require these messages in each mailing.

#### • Use new appeals

Using a variety of appeals may be a useful way to motivate potential respondents to participate in a survey (Groves, Singer, and Corning, 2000; Dillman, Smyth, and Christian 2014). However, after the first mailing only five new messages are communicated to convert ACS nonrespondents. Some potentially useful messages that could influence

potential respondents are not communicated in any of the ACS materials. We recommend testing new messages in the ACS mail materials built on the following constructs: conformity, consistency, civic responsibility, scarcity, commitment, deadlines, authority, personalization, and unity.

#### Use messages that are justified by research

There is a limited amount of space in each mail piece to convey messages. There are messages used in the mail materials that lack justification or may not be the strongest at gaining survey cooperation; for example, messages about corporate use of ACS data or messages about how responding online conserves natural resources. There are messages that have been proven in the literature to be more effective than some of the messages currently being used in the ACS mail materials. The Census Bureau should replace messages (not justified by research) with those proven to work or should research the effectiveness of these messages if used in the future.

#### Make a clear connection to the well-known Census Bureau brand

Connecting the ACS to the Census Bureau can potentially increase survey participation, as if respondents are familiar with the decennial census, but only 11 percent have heard of the ACS (Hagedorn, Green, and Rosenblatt, 2014). Messages that communicate that the Census Bureau is the sponsor of the ACS were found in all of the ACS mail materials. However, the placement of these references are often not ideal (e.g., the logo is located at the bottom of the letter). Additionally, references to other federal entities, such as the Department of Commerce and Economic and Statistics Administration, may confuse respondents about who the mail materials are from. We recommend using consistent branding and strategic placement of branding to clearly connect the ACS to the Census Bureau.

#### • Increase the readability of the materials

About one-third of American adults read at the fourth-to-fifth grade level (National Center for Education Statistics, 2014). Our analysis shows that the reading level of some ACS mail pieces is too high, with some written at the high school and college level. We recommend writing messages at a lower reading level and using plain lanaguge to improve the ease with which text can be read and understood by more potential respondents.

These recommendations address three concerns that are often barriers to survey cooperation: the legitimacy of the survey, the benefits of survey participation, and the burden associated with completing the survey (Dillman, Smyth, and Christian, 2014). These recommendations can aid the development of ACS messaging that is more focused, purposeful, and easier to process. ACS messaging that considers these recommendations can potentially increase self-response.

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  <a href="mailto:B236E588B?doi=10.1.1.631.6688&rep=rep1&type=pdf">B236E588B?doi=10.1.1.631.6688&rep=rep1&type=pdf</a>
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### Appendix A. September 2018 ACS Mail Contact Materials

First Mailing: Instruction Card (internet)

Front: English Language



Back: Spanish Language



#### First Mailing: Introductory Letter

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



#### 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 U.S. Census Bureau is required by law to keep your information confidential. The Census Bureau is not permitted to publicly release your responses in a way that could identify you. Per the Federal Cybersecurity Enhancement Act of 2015, your data are protected from cybersecurity risks through screening of the systems that transmit your data. The enclosed brochures answer frequently asked questions about the survey.

If you need help completing the survey, please call our toll-free nu
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Thank you.

Enclosures



census.gov

### First Mailing: Multilingual Brochure

#### 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

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?

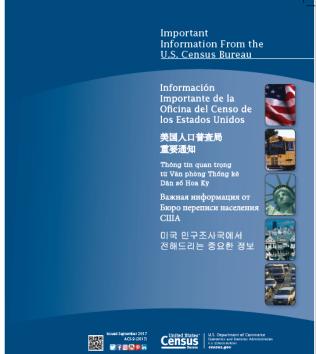
Yes. The U.S. Census Bureau is required by law to keep your information confidential. The Census Bureau is not permitted to publicly release your responses in a way that could identify you. Per the Federal Cybersecurity Enhancement Act of 2015, your data are protected from cybersecurity risks through screening of the systems that transmit your data.

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 lev 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 competar la encuesta por teléfono. Qué es la Encuesta sobre la Comunidad Estadounidense?

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? Sí. La Oficina del Censo de los Sí. La Oficina del Censo de los ELUU, está obligada por ley a mantener confidencial su información. A la Oficina del Censo no se le permite divulgar sus respuestas de manera que este hogar pudiera ser identificado. En conformidad con la Ley para el Fortalecimiento de la Seguridad Cibernética Federal del 2015, sus datos están protegidos contra los riesgos de seguridad cibernética mediante los controles aplicados a los sistemas que trasmiten su información.



### 美国人口普查局正在进行美国社区问卷

您将在几天内收到一份邮寄的美国社区问 悉将在几天內收到一份即可的美国社区问 卷调查。由于您目前居住在美国,因此根 据法律规定,您必须答复此问卷调查。这 个调查问卷只有英文版。请按打我们的免 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 能够在电话上用中文回答调查的问题。

#### 什么是美国社区问券调查?

美国社区问券调查由美国人口普查局主 持,是一项重要的调查。目的是为了向各 个社区提供有关居民和住房方面的最新信 个社区要做出明智的决策,需要真 实准确的信息。您答复此问卷调查,就是 在帮助您所在社区获取这样的信息。

#### 我对这次调查的回答, 人口普查局是否会

是的。 根据法律规定,美国人口普查 局将对您的信息保密。人口普查局不得 以可识别您的身份的方式公开发布您的 回复。依据2015年联邦增强网络安全法 案,通过监察传输您资料的系统,来确 保您个人资料受到保护, 避免网络安全

#### Văn phòng Thống kê Dân số Hoa Kỳ đang thực hiện cuộc Khảo sát Cộng đồng tại Mỹ.

Trong một vài ngày nữa quý vị sẽ nhân được bản câu hỏi Khảo sát Cộng đồng tại Mỹ qua thư tín. Vì quý vị đang sống ở Hoa Kỳ, nên luật bát buộc quý vị phải trả lời cuộc khảo sát này. Nếu quý vị có thác mác về mẫu đơn, xin gọi chúng tội theo số điện thoại miễn phí 1-877-221-9436. Bản câu hỏi khảo sát chỉ có bằng tiếng Anh.

#### Cuộc Khảo sát Cộng đồng tại Mỹ là gi?

Cuộc Khảo sát Cộng đồng tại Mỹ là một cuộc khảo sát quan trọng được Văn phòng Thống kẻ Dân số Hoa Kỳ thực hiện. Nó được thiết kế để cung cấp cho cộng đồng thông tin hiện tại về người dân và nhà cửa Nhằm có được những quyết định thức thời có ích lợi trực tiếp cho những nhu cầu của cộng đồng quý vị, những thông tin cần được chính xác và đáng tin cây. Bằng cách trả lời cuộc khảo sát này, quý vị đang giún cộng đồng minh lấy được loại thông tin này

#### Liêu các câu trả lời khảo sát của tôi có được

Có. Cục Thống Kê Dân Số Hoa Kỳ được pháp luật yêu cầu bảo mật thông tin của quý vị. Cục Thống kê không được phép công bố công khai các phản hồi của quý vi theo cách có thể nhân diện quý vị. Theo Luật Tăng Cường An Ninh Mạng của Liên Bang 2015, số liệu của quí vị sẽ được bảo vệ để tránh khỏi các nguy cơ về an ninh mạng qua cách kiểm duyệt các hệ thống chuyển số liệu của quí vị.

#### Бюро переписи населения проводит Анкетирование населения США по месту жительства

жительства
Через несколько дней Вы получите по почте 
анкету Анкетирование населения США по 
месту жительства. Так как Вы проживаете 
в США, Вы обязаны в соответствие с 
законом дать ответы на вопросы данного 
иссперования. Анкета со-ставлена только на 
английском языке. Позвощите по бесплатному номеру 1-866-225-2297, и Вам ответит русскоговорящий сотрудник. Вы смог пожеру 1-востабраций согрудник. Вы сможете получить ответы на Ваши вопросы и Вам помогут заполнить анкету по телефону.

#### Что представляет собой Анкетирование ения США по месту жит

Анкетирование населения США по месту жительства – это важнейшее исследование, проводимое Бюро переписи населения США. Его цель – обеспечить общество актуальной информацией о населении и жилищных информацией о населении и жилипциых условиях. Для приятил в обс-нованных решений на местах необходимо иметь точную и достоверную информацию. Отвечая по вопросы данного исследования, Вы помогаете своему району получить такую информацию.

#### Будет ли сохранена конфиденциальность моих ответов?

Да. По закону Бюро переписи населения США обязано соблюдать конфиденциальность ваших данных. Ему запрещено публично разглашать Ваши ответы таким образом, чтобы по ним можно было установить Вашу личность Защиту Ваших данных от кибер-рисков регулирует федеральный закон «О повышении кибербезопасности» от 2015 года, в соответствии с которым регулярно проводится проверка систем передачи

#### 미국 인구조사국에서는 미국 지역사회조사를 실시하고 있습니다.

며칠 안으로 미국 지역사회조사 설문지를 우편으로 받으실 것 입니다. 미국에 사시는 모든 분은 법에 의해 이 설문에 응답하셔야 합니다. 설문지는 영어로만 되어있습니다. 한국어로 설문을 작성하고 싶으시거나 질문이 있으시면, 무료전화 1-800-772-6728 로 전화를 주십시오. 한국어 담당직원과

#### 미국 지역사회조사란 무엇인가요?

미국 지역사회조사는 미국 인구조사국에서 시행하는 중요한 설문조사입니다. 이 설문조사는 지역사회 주민들과 주택에 관한 최근 정보를 알려드리고자 계획되었습니다. 지역사회가 정보에 기초한 합리적인 결정을 내리기 위해서 정확하고 믿을 수 있는 정보가 필요합니다. 귀하의 설문응답은 지역사회가 이런 정보를 수집하는 데 도움을 줍니다

#### 설문조사에 대한 답변은 보호됩니까?

네. 미국 인구조사국은 법에 따라 귀하의 정보를 비밀로 유지해야 할 의무가 있습니다. 미국 인구조사국은 귀하가 응답한 정보를 귀하의 신상을 알 수 있는 형태로 일반에 공개할 수 없으며, 2015년 연방 사이버보안강화법에 따라, 귀하의 데이터는 데이터 전송 시스템의 철저한 검사를 통해 사이버 보안의 위험으로부터 보호됩니다.

#### First Mailing: FAQ Brochure (Front and Back)





### **Frequently Asked Questions**

#### 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 U.S. 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 also are 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.

### 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?

By law, the Census Bureau can only use your responses to produce statistics. 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 Puerto Rico and 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. The Census Bureau is required by law to protect your information. The Census Bureau is not permitted to publicly release your responses in a way that could identify you. Per the Federal Cybersecurity Enhancement Act of 2015, your data are protected from cybersecurity risks through screening of the systems that transmit your data.

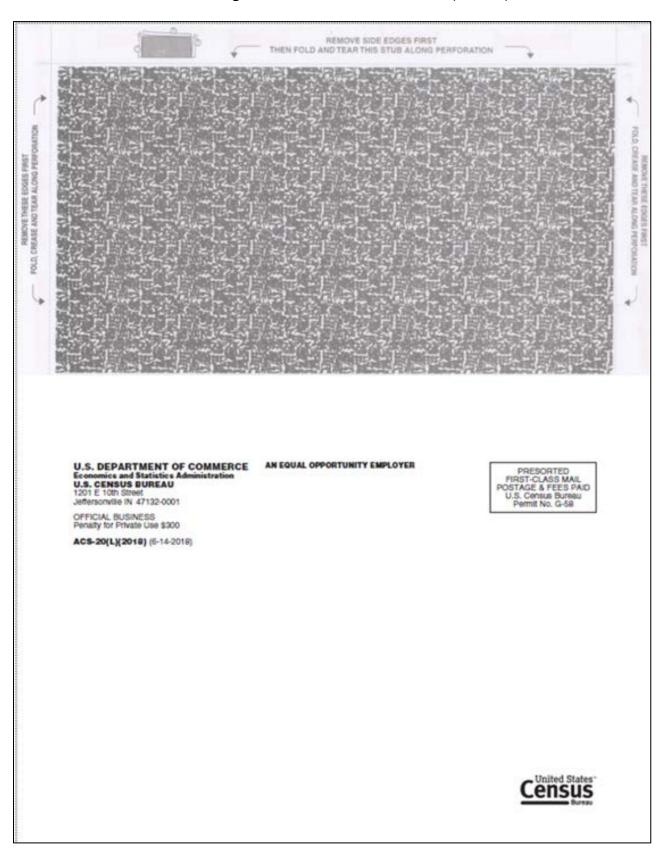
Where can I find more information about the American Community Survey or get assistance?

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

### First Mailing: Outgoing Envelope

U.S. DEPARTMENT OF COMMERCE	AN EQUAL OPPORTUNITY EMPLOYER	L
U.S. DEPARTMENT OF COMMERCE Economics and Statistics Administration U.S. CENSUS BUREAU 1201 East 10th Street Jeffersonville IN 47132-0001 OFFICIAL BUSINESS	PRESORTED FIRST-CLASS MAIL POSTAGE & FEES PAID U.S. Census Bureau Permit No. G-58	
Penalty for Private Use \$300  ACS-46IM(2013) (12-2012)		
The American Community Survey  YOUR RESPONSE IS  REQUIRED BY LAW		
Cunited States -		

#### **Second Mailing:** Pressure Seal Reminder Mailer (outside)



#### **Second Mailing:** Pressure Seal Reminder Mailer (inside)

ACS-20(L)(2018) (6-14-2018)



# 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.

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 to this survey is required by law. Your response is critically important to your local community and your country. Responding promptly will prevent you from 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.

**Security Security Security Security** 

census.gov

13197017

U.S. CENSUS BUREAU

U.S. DEPARTMENT OF COMMERCE



## THE American Community Survey

#### Start Here

Respond online today at: https://respond.census.gov/acs

Complete this form and mail it back as soon as possible.

This form asks for information about the people who are living or staying at the address on the mailing label and about the house, apartment, or mobile home located at the address on the mailing label.



If you need help or have questions about completing this form, please call 1-800-354-7271. The telephone call is free.

Telephone Device for the Deaf (TDD): Call 1-800-582-8330. The telephone call is free.

NECESITA AYUDA? Si usted habla español y necesita ayuda para completar su cuestionario, llame sin cargo alguno al 1-877-833-5625. Usted también puede completar su entrevista por teléfono con un entrevistador que habla español. O puede responder por Internet en: https://respond.census.gov/acs

For more information about the American Community Survey, visit our web site at: http://www.census.gov/acs

D	Please	print today	y's date.
_	Month	Day	Year

	1 Car	
The second		

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

Area Code + Number

- How many people are living or staying at this address?

INCLUDE everyone who is living or staying at this address?

 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(2017)

OMB No. 0607-0810 OMB No. 0607-0936



#### Third Mailing: Instruction Card (choice)

Front: English Language



### **American Community Survey**

U.S. Department of Commerce | Economics and Statistics Administration

### Two Ways to Complete the American Community Survey:



Option 1 – Go to https://respond.census.gov/acs to complete the survey online.

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



Option 2 - Fill out the enclosed questionnaire and mail it back in the postage-paid envelope.

Please choose **ONLY** one way to respond. If you need help or have questions about the American Community Survey, call the toll-free number 1–800–354–7271.

Vea el otro lado para español.

ACS-34RM (11/15/2016)

Back: Spanish Language



### **American Community Survey**

U.S. Department of Commerce | Economics and Statistics Administration

## Hay dos maneras para completar la Encuesta sobre la Comunidad Estadounidense:



Opción 1 – Vaya a https://respond.census.gov/acs para completar la encuesta por Internet en español. ATENCIÓN: Necesitará información que aparece en la etiqueta del cuestionario adjunto para iniciar la sesión.



Opción 2 – Llene y devuelva por correo el cuestionario adjunto en el sobre de envío incluido.

Por favor, escoja **SOLAMENTE** una manera de responder. Si usted necesita ayuda para llenar la encuesta o tiene preguntas acerca de la Encuesta sobre la Comunidad Estadounidense, llame sin cargo al 1-877-833-5625.

See other side for English.

ACS-34RM (11/15/2016)

#### Third Mailing: Letter

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



#### 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 U.S. Census Bureau is required by law to keep your information confidential. The Census Bureau is not permitted to publicly release your responses in a way that could identify you. Per the Federal Cybersecurity Enhancement Act of 2015, your data are protected from cybersecurity risks through screening of the systems that transmit your data. The enclosed brochure answers frequently asked questions about the survey.

lf	you	need	help	completing	the survey,	please cal	our toll-free	number (1	-800-354-7	7271	).
----	-----	------	------	------------	-------------	------------	---------------	-----------	------------	------	----

Thank you.

**Enclosures** 



census.gov

#### Third Mailing: FAQ Brochure (Front and Back)





#### 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 U.S. 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 also are 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.

### 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?

By law, the Census Bureau can only use your responses to produce statistics. 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 Puerto Rico and 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.

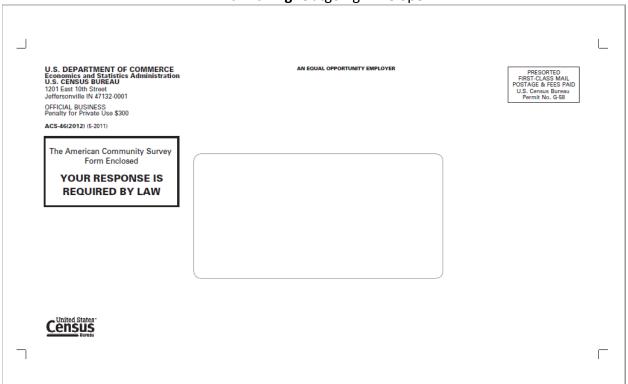
### Will the Census Bureau keep my information confidential?

Yes. The Census Bureau is required by law to protect your information. The Census Bureau is not permitted to publicly release your responses in a way that could identify you. Per the Federal Cybersecurity Enhancement Act of 2015, your data are protected from cybersecurity risks through screening of the systems that transmit

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

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

### Third Mailing: Outgoing Envelope



### Third Mailing: Return Envelope



#### Fourth Mailing: Reminder Postcard

#### Front

U.S. DEPARTMENT OF COMMERCE Economic and Statistics Administration U.S. Census Bureau

1201 E 10<sup>th</sup> Street Jeffersonville IN 47132-0001 ACS-29(2017) (6-2017)

OFFICIAL BUSINESS Penalty for Private Use \$300 PRESORTED FIRST-CLASS MAIL POSTAGE & FEES PAID U.S. Census Bureau Permit No. G-58

#### Back

ACS-29(2017) (6-2017)



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 . . .

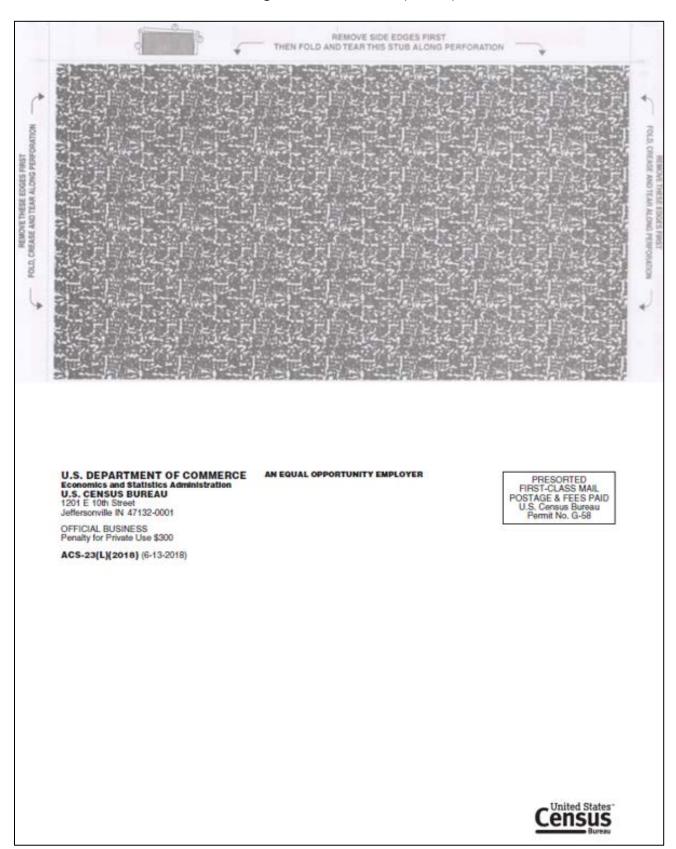
Within the last few weeks, the U.S. Census Bureau sent you several requests to complete the American Community Survey. **Now is the time to complete the survey if you have not already done so.** Please complete the questionnaire and return it now OR go to https://respond.census.gov/acs to respond online.

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

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

Thank you.

#### Fifth Mailing: Pressure Seal Mailer (outside)



ACS-23(L)(2018) (6-13-2018)



#### 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 law to keep your information 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.

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

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.

**Security Security Security Security** 

census.gov

## **Appendix B. ACS Messaging Codebook**

Code	Code Description
Number	
1.0	TRUST: Messages that increase trust or credibility of the survey request
1.1	Establish Credibility
1.1.1	Connection to a sponsor (known and trusted)
1.1.2	Leverage authority (e.g., messages that highlight Census expertise)
1.1.3	Sender is a real person (not an organization)
1.1.4	Provide a way to verify authenticity (e.g., a website, telephone number, address)
1.1.5	Use of a real signature
1.1.6	Use of a real stamp
1.1.7	Audience-based, single conversation across mailings
1.1.8	Census is an apolitical research agency
1.1.9	History (e.g., Census has been conducted since 1790, ACS type surveys since 1850s)
1.2	Confidentiality/Data Security
1.2.1	By law, Census must protect your data
1.2.2	Census employees face fines and imprisonment if they violate your confidentiality
1.2.3	Federal Cyber Security Act
1.2.4	Census cannot share your data
1.2.5	Secure website, encrypted browser, screening system transit data
1.2.6	Oath of disclosure statement
1.2.7	Will not release data in a way that identifies you (i.e., data are aggregated)
1.3	Token Pre-Incentives
2.0	BENEFITS: Messages that communicate a benefit of survey response
2.1	Community-Level Benefits
2.1.1	Specific mention that the survey benefits others in need (e.g., allocation of services)
2.1.2	ACS data used by non-profits and non-government agencies to provide aid
2.1.3	Not filling out ACS may hinder your community's ability to gain resources
2.1.4	
	Distribute \$675 billion in federal funds to communities
2.1.5	Distribute \$675 billion in federal funds to communities Used for planning and developing roads, hospitals, schools etc. in communities
	·
2.1.5	Used for planning and developing roads, hospitals, schools etc. in communities
2.1.5 2.1.6	Used for planning and developing roads, hospitals, schools etc. in communities  Emergency preparation
2.1.5 2.1.6 2.1.7	Used for planning and developing roads, hospitals, schools etc. in communities Emergency preparation Provides communities data on education, housing, employment etc.
2.1.5 2.1.6 2.1.7 2.1.8	Used for planning and developing roads, hospitals, schools etc. in communities Emergency preparation Provides communities data on education, housing, employment etc. Data driven or well-informed decisions
2.1.5 2.1.6 2.1.7 2.1.8	Used for planning and developing roads, hospitals, schools etc. in communities Emergency preparation Provides communities data on education, housing, employment etc. Data driven or well-informed decisions  National-Level Benefits
2.1.5 2.1.6 2.1.7 2.1.8 <b>2.2</b> 2.2.1	Used for planning and developing roads, hospitals, schools etc. in communities  Emergency preparation  Provides communities data on education, housing, employment etc.  Data driven or well-informed decisions  National-Level Benefits  Provides country data on education, housing, employment, etc.
2.1.5 2.1.6 2.1.7 2.1.8 <b>2.2</b> 2.2.1 2.2.2	Used for planning and developing roads, hospitals, schools etc. in communities  Emergency preparation  Provides communities data on education, housing, employment etc.  Data driven or well-informed decisions  National-Level Benefits  Provides country data on education, housing, employment, etc.  Allocate \$675 billion in federal dollars (no mention of communities)
2.1.5 2.1.6 2.1.7 2.1.8 <b>2.2</b> 2.2.1 2.2.2 <b>2.3</b>	Used for planning and developing roads, hospitals, schools etc. in communities  Emergency preparation  Provides communities data on education, housing, employment etc.  Data driven or well-informed decisions  National-Level Benefits  Provides country data on education, housing, employment, etc.  Allocate \$675 billion in federal dollars (no mention of communities)  Personal/Interpersonal Benefits
2.1.5 2.1.6 2.1.7 2.1.8 <b>2.2</b> 2.2.1 2.2.2 <b>2.3</b> 2.3.1	Used for planning and developing roads, hospitals, schools etc. in communities  Emergency preparation  Provides communities data on education, housing, employment etc.  Data driven or well-informed decisions  National-Level Benefits  Provides country data on education, housing, employment, etc.  Allocate \$675 billion in federal dollars (no mention of communities)  Personal/Interpersonal Benefits  Scarcity (rare opportunity)
2.1.5 2.1.6 2.1.7 2.1.8 2.2 2.2.1 2.2.2 2.3 2.3.1 2.3.2	Used for planning and developing roads, hospitals, schools etc. in communities  Emergency preparation  Provides communities data on education, housing, employment etc.  Data driven or well-informed decisions  National-Level Benefits  Provides country data on education, housing, employment, etc.  Allocate \$675 billion in federal dollars (no mention of communities)  Personal/Interpersonal Benefits  Scarcity (rare opportunity)  Ask the respondent for help, establish unity
2.1.5 2.1.6 2.1.7 2.1.8 <b>2.2</b> 2.2.1 2.2.2 <b>2.3</b> 2.3.1 2.3.2 2.3.3	Used for planning and developing roads, hospitals, schools etc. in communities  Emergency preparation  Provides communities data on education, housing, employment etc.  Data driven or well-informed decisions  National-Level Benefits  Provides country data on education, housing, employment, etc.  Allocate \$675 billion in federal dollars (no mention of communities)  Personal/Interpersonal Benefits  Scarcity (rare opportunity)  Ask the respondent for help, establish unity  Establish positive expectations
2.1.5 2.1.6 2.1.7 2.1.8 <b>2.2</b> 2.2.1 2.2.2 <b>2.3</b> 2.3.1 2.3.2 2.3.3 2.3.4	Used for planning and developing roads, hospitals, schools etc. in communities  Emergency preparation  Provides communities data on education, housing, employment etc.  Data driven or well-informed decisions  National-Level Benefits  Provides country data on education, housing, employment, etc.  Allocate \$675 billion in federal dollars (no mention of communities)  Personal/Interpersonal Benefits  Scarcity (rare opportunity)  Ask the respondent for help, establish unity  Establish positive expectations  Likability

Code	Code Description
Number	Code Description
2.3.8	Highlight the survey topic or questions as interesting or entertaining
2.3.9	Patriotism
2.4	Incentive (monetary or non-monetary pay for participation)
2.5	Business Use of ACS Data
2.5.1	Economic indicators used by business industry
2.5.2	Specific mention of small business
3.0	BURDEN REDUCTION: Messages that decrease the burden, or perception of burden, to respond
3.1	Social Norms
3.1.1	Consistency (e.g., completing ACS is similar to actions the respondent already does)
3.1.2	Conformity (e.g., others have responded to the ACS)
3.2	Civic Responsibility or Duty
3.3	Ask for a Commitment
3.4	Offer Multiple Response Modes
3.4.1	Another response mode is available later (a push for the first response mode offered)
3.5	Responding Online is Quick or Easy
3.6	Mandatory Message – Legally Obligated to Respond to ACS (Title 18/Title 13)
3.7	Providing a Deadline Date or Some Similar Indication (e.g., return as soon as possible)
3.8	Nonresponse Followup Messaging (e.g., If you don't respond, the Census Bureau will contact
	you by telephone or in person)
3.9	Providing a Way for Respondents to Get Help
3.10	Communicating in a Language Other than English
3.11	Paying for Return Postage
4.0	OTHER Messages that may influence an individual's decision to participate in a survey, but are
	not classified as trust, a benefit, or burden reduction
4.1	Scientific Statements
4.1.1	Sampling (e.g., mention of a random sample)
4.1.2	Data accuracy
4.1.3	ACS data can track change over time
4.1.4	ACS data are made available to the public
4.1.5	ACS data are better than alternative sources of data
4.1.6	ACS is a unique source of data
4.1.7	Continuous data collection
4.2	Cost or Environmental Savings or Efficiency
4.2.1	Benefits of ACS participation outweigh the cost of participation
4.4 <sup>45</sup>	Instructions or Information
4.4.1	Call to action – request to complete the survey
4.4.2	Informational instructions (e.g., see enclosures)
4.4.3	Estimated time to complete survey
4.4.4	Information
4.5	Required Information Not Intended to Send Messages to ACS Audience (e.g., form identifier)
4.6	Common Elements of a Business Letter (e.g., salutations, letterhead, thank you)

 $<sup>^{45}</sup>$  Originally, "Business Uses" was classified as category 4.3. This was later moved to category 2.5 under "Benefits."

### Appendix C. Inter-Rater Reliability Ratings for ACS Mail Pieces

Mailing	Mail Piece	Notes	IRR Score
1	Letter	Enclosed in a package	87.2%
2	Letter	Pressure sealed reminder mailer	85.3%
3	Letter	Enclosed in a package	77.8%
5	Letter	Pressure seal reminder mailer	77.1%
4	Postcard	Reminder postcard	92.3%
1	Instruction Card (internet)	Enclosed in a package	75.0%*
3	Instruction Card (choice)	Enclosed in a package	71.4%*
1	Multilingual Brochure	Enclosed in a package	86.7%
1 and 3	FAQ Brochure	Enclosed in a package	86.4%
3	Paper Questionnaire	Enclosed in a package	87.0%
1	Outgoing Envelope	Package mail	91.7%
3	Outgoing Envelope	Package mail	91.7%
3	Return Envelope	For return of paper questionnaire	90.0%

<sup>\*</sup> Note that the instruction cards have relatively few messaging elements; hence, it takes fewer disagreements between coders to lower the IRR.

## Appendix D. Messages Repeated Verbatim or Paraphrased across the Five Mailings

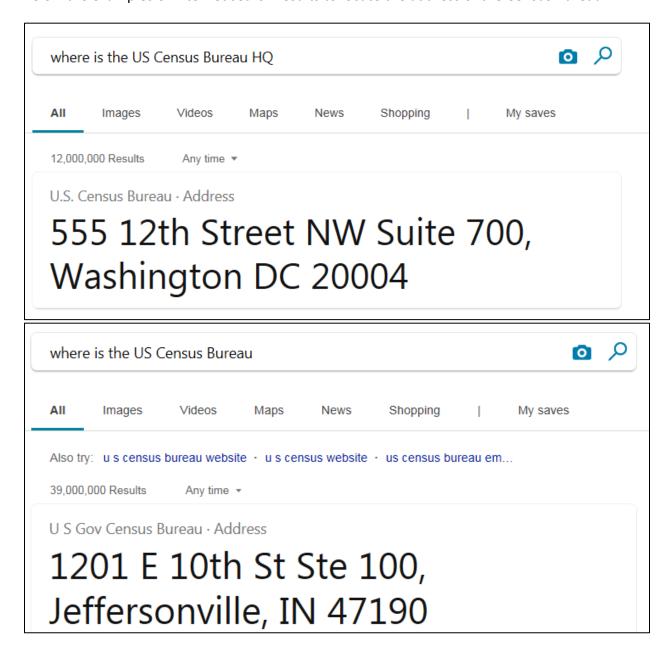
Massaga	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
Message	_	_		_	
	Mailing	Mailing	Mailing	Mailing	Mailing
"A message from the Director, U.S. Census Bureau"	✓	✓	✓	✓	✓
"Your household has been randomly selected to	✓				
complete a very important national survey."					
"A few days ago, you should have received instructions		✓			
for completing the American Community Survey online."					
"About two weeks ago, the U.S. Census Bureau sent			<b>✓</b>		
instructions for completing the American Community					
survey."					
"Within the last few weeks, the U.S. Census Bureau sent				<b>✓</b>	
you several requests to complete the American					
Community Survey."					<b>/</b>
"Within the last few weeks, the U.S. Census Bureau					<b>'</b>
mailed an American Community Survey to your					
address."	<b>√</b>				
"please complete the survey online as soon as possible	*				
at:					
https://respond.census.gov/acs"  "If you have not already responded, please do so now.				+	
Respond now at https://respond.census.gov/acs		<b>✓</b>			
Log in using this user ID: xxxxxxx"					
"If you have not, please complete the survey soon using					
ONE of the following two options.			<b>✓</b>		
Option 1: Go to https://respond.census.gov/acs to					
complete the survey online.					
Option 2: Fill out and mail back the enclosed					
questionnaire"					
"Now is the time to complete the survey if you have not				<b>√</b>	
already done so. Please complete the questionnaire and					
return it now OR go to https://respond.census.gov/acs					
to respond online."					
"If you have already responded, thank you. If you have					
not, please complete the questionnaire and send it now,					✓
or complete the survey online.					
Respond now at https://respond.census.gov/acs					
Log in using this user ID: xxxxxxx"					
"You are required by U.S. law to respond to this survey."	✓		✓		✓
"Your response to this survey is required by law."		✓			
"Your response to this survey is required by U.S. law."				✓	
"results from this survey are used to decide where new					
schools, hospitals, and fire stations are needed. This	<b>✓</b>				
information also helps communities plan for the kinds of					
emergency situations that might affect you and your					
neighbors, such as floods and other natural disorders."					
"Local communities depend on information from this		✓			
survey to decide where schools, highways, hospitals, and					
other important services are needed."				+	
"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."					
ciucity.	i				

Message	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
	Mailing	Mailing	Mailing	Mailing	Mailing
"Local and national leaders use the information from this survey for planning schools, hospitals, roads, and other community needs."				<b>√</b>	
"Your response is critically important to your local community and to your country."					<b>~</b>
"The U.S. Census Bureau is required by law to keep your information confidential. The Census Bureau is not permitted to publicly release your responses in a way that could identify you."	<b>✓</b>		<b>✓</b>		<b>✓</b>
"Per the Federal Cybersecurity Enhancement Act of 2015, your data are protected from cybersecurity risks through screening of the systems that transmit your data."	<b>✓</b>		<b>√</b>		<b>~</b>
"The enclosed brochures answer frequently asked questions about the survey."	<b>√</b>	N/A*	<b>~</b>	N/A	N/A
"If you need help completing the survey, please call our toll free number (1-800-354-7271)."	<b>✓</b>		<b>V</b>		
"If you need help completing the survey or have questions, please call 1-800-354-7271."		<b>√</b>		<b>✓</b>	
"If you would like to complete the survey by telephone or need assistance, please call our toll free number (1-800-354-7271)."					<b>✓</b>
"Thank you."	✓		✓	✓	<b>√</b>
"Thank you in advance for your prompt response."		✓			

<sup>\*</sup> Not applicable because this mailing does not contain an enclosure.

### **Appendix E. Internet Searches for Census Bureau Location**

Below are examples of internet search results to locate the address of the Census Bureau.



### People also ask

Where is the Census Bureau located?

Since 1903, the official **census**-taking agency of the United States government has been the **Bureau** of the **Census**. The **Census Bureau** is headed by a Director, assisted by a Deputy Director and an Executive Staff composed of the associate directors. The **Census Bureau** has had headquarters in Suitland, Maryland, since 1942.

### United States Census Bureau - Wikipedia

https://en.m.wikipedia.org/wiki/United States Census Bureau

#### Where is the Census Bureau located?

Search

Q All

☑ Maps

■ News

Shopping

Images

More

Settings

Tools

About 153,000,000 results (0.78 seconds)

## Maryland

Since 1903, the official **census**-taking agency of the United States government has been the **Bureau** of the **Census**. The **Census Bureau** is headed by a Director, assisted by a Deputy Director and an Executive Staff composed of the associate directors. The **Census Bureau** has had headquarters in Suitland, Maryland, since 1942.



### United States Census Bureau - Wikipedia

https://en.wikipedia.org/wiki/United\_States\_Census\_Bureau