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MEMORANDUM FOR ACS Research and Evaluation Advisory Group

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Subject: 2014 American Community Survey (ACS) Internet Test

Attached is the final American Community Survey Research and Evaluation report “2014 American Community Survey (ACS) Internet Test.” This report provides the results of the 2014 ACS Internet Test that was designed to evaluate potential solutions to correct design issues of the ACS Internet instrument that were potentially affecting respondents’ experience using the Internet instrument, subsequently resulting in response issues and breakoffs. We also tested sending an email reminder to Internet respondents who started but left the survey to encourage them to return and complete the survey.

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Attachment

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# 2014 American Community Survey (ACS) Internet Test

FINAL REPORT

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## Executive Summary

In 2013, the American Community Survey (ACS) added an Internet self-response option to its existing data collection modes (paper, computer-assisted telephone interviews, and computer-assisted personal interviews) to improve the timeliness and efficiency of data collection and processing. Previous tests in April and November 2011 evaluated the design of the ACS Internet instrument and found some issues potentially affecting user experience. These included the inability of respondents to return to the survey when the assigned PIN (Personal Identification Number) was forgotten, frequent breakoffs on transition screens resulting in subsequently higher item nonresponse rates for items later in the survey, frequent rendering of error messages on screens with two tasks, and a smaller percentage of Internet respondents compared to mail respondents reporting multiple ancestries. The 2014 ACS Internet Test was designed to evaluate potential solutions to correct these design issues and encourage Internet respondents to return to complete the survey, subsequently reducing breakoffs and response issues.

### *Methodology*

The 2014 ACS Internet Test consisted of six treatments. The first two treatments tested specific changes to the Internet instrument screens while the remaining four tested variations related to the collection of email addresses and the sending of an email reminder message to respondents who started but did not finish the ACS online. All treatments followed the ACS production mailing schedule, with breakoffs in Treatments 3, 4, 5, and 6 receiving an additional reminder via email if an email address was provided. Each of the six experimental treatments used approximately 12,000 addresses from the July 2014 ACS production panel. The remaining 216,000 addresses served as our Control.

1. Basic Changes – Offered verification questions on the PIN screen to allow the PIN to be reset, increased the height of the ancestry write-in box, and highlighted the write-in box for unfolding questions.
2. Revised Transition – Combined transition screens between detailed person question sections and updated language to encourage continued response.
3. Email Reminder with ACS – Collected email address and sent reminder email with survey name in subject line and body to breakoffs.
4. Email Reminder without ACS (URL Only) – Email excluded the survey name except the ACS acronym appeared in the complete URL link provided.
5. Email Reminder without ACS (Click Here) – Email excluded the survey name and the link to access the survey was embedded in “Click here” text so the respondent did not see the URL in the body of the message.
6. Revised Contact Information Text (Contact) – Email was identical to Treatment 3, but new instructions on the *Respondent Name* screen and in corresponding Help text allowed flexibility to contact respondents via email about the ACS or another Census survey.



## *Research Questions and Results*

*Are respondents able to re-enter the survey using the verification questions? What is the effect of the verification questions on the rate of multiple returns?*

We asked respondents to select and answer a verification question (for example, “What color was your first car?”) upon initial entry to the survey so those who forgot their PIN could re-enter the survey by correctly answering their verification question. Among all six test treatments, we found that 97.9 percent (standard error 0.1) of respondents who reached the PIN screen, selected and answered a verification question suggesting that most are willing to use this feature. We found that only four people among all six treatments attempted to use the verification question to reset their PIN and re-enter the survey; one appeared to be successful. We expected that respondents who were unable to return to the Internet survey because of a forgotten PIN would likely respond in another mode. With the verification feature, we expected that the multiple return rate (the percent of responding addresses that provided returns in more than one mode) would be lower for the test treatments compared to Control because respondents would be able to return and finish the Internet survey. Because very few respondents used this feature, we were unable to detect any significant difference between the Basic Changes Treatment and Control.

*What is the effect of increasing the height of the ancestry write-in box in the Internet instrument on multiple ancestry entries?*

The 2011 ACS Internet Tests showed that a smaller percentage of Internet respondents reported multiple ancestries compared to mail respondents. To encourage Internet respondents to provide more ancestries, we increased the height of the ancestry write-in box. The 2014 ACS Internet Test, unlike the 2011 Internet Tests, showed no significant difference in multiple-ancestry reporting between the Control and Basic Changes Treatment in either of the self-response modes (Internet and mail). Because our results for the Control did not replicate the findings from the 2011 Internet Tests, and the percentage point difference between the Internet respondents in the Control and Basic Changes Treatment was not significant, we can only infer that enlarging the write-in box did not seem to discourage Internet respondents from reporting multiple ancestries.

*What is the effect of highlighting the write-in/drop-down box for unfolding questions on the percent of respondents receiving an error message?*

To reduce the number of error messages rendered on screens with multiple tasks (i.e., a respondent is expected to provide additional information in a write-in field after selecting the associated radio button), we drew attention to the write-in boxes by outlining the border of the write-in field in bold, changing the inside of the field from grey to pale yellow when the associated radio button or check box was selected, and adding an arrow before the field. The changes seemed to capture respondents’ attention to the second task, as indicated by significantly fewer error messages rendered on most screens with multiple tasks in the Basic Changes Treatment compared to the Control.

*What is the effect of the revised transition on self-response, Internet response, breakoffs, and item nonresponse?*

In an effort to reduce breakoffs on transition screens, we combined information from the *Saved Person* and *Pick Next Person* screens onto one screen and added new language to encourage respondents to answer questions for other household members to the best of their ability. There was no significant difference in self-response or Internet response rates between the Revised Transition Treatment and the Basic Changes Treatment. However, the Revised Transition Treatment had a significantly lower screen breakoff rate than Basic Changes Treatment. Adjusting for multiple comparisons, only one item among the detailed person questions that follow the transition and were analyzed in this test, the speak another language question, had a significantly lower item nonresponse rate in the Revised Transition Treatment compared to the Basic Changes Treatment. There was no difference for the other items. The evidence seems to indicate that the revised transition did not have a negative effect on the item nonresponse rates. Thus, the combined transition screen and updated text may have encouraged respondents to continue in the survey.

*Do respondents receive and open each of the reminder emails?*

Of the 1,582 reminder emails sent to those who started the ACS online but did not finish, 99 percent were successfully delivered. We tested email messages with two different subject lines: “Reminder to complete the Census Bureau’s American Community Survey” and “Reminder to complete your survey.” Email reminders that included the survey name in the subject line had a nominally, but not significantly, higher open rate than those with the generic subject: 42.7 percent (standard error 1.9) versus 39.3 percent (standard error 2.1).

*What is the effect of the reminder emails on self-response, Internet response, and the rate of multiple returns?*

Adjusting for multiple comparisons among all treatments, there were no significant differences in response rates between the treatments, suggesting that the changes made in the test treatments did not adversely affect ACS self-response rates. Also, the multiple return rates (the percent of respondents who provided returns in more than one mode) in the email reminder treatments were not significantly different from each other, but each of the four email reminder treatments had significantly lower rates than the Control. This suggests that email reminders can help reduce respondent burden associated with multiple returns, as well as mailing and processing costs. This also may indicate that the reminder emails were able to reduce the number of multiple returns because respondents received a reminder before the mail questionnaire would have been sent.

*What is the effect of each of the reminder emails on breakoff cases returning to the survey?*

We did see that a higher percentage of respondents broke off on the *Respondent Name* screen in the email reminder treatments that collected email addresses compared to the Revised Transition Treatment that did not. This may be a sign that some respondents do not want to provide their contact information online. Approximately 93 percent of respondents who reached the

*Respondent Name* screen provided a seemingly valid email address (containing an @ and an extension).

The percent of email recipients who returned and completed the survey after receiving the email reminder was significantly higher than the percent of Internet respondents from Control who started before the date the reminder email for the treatments was sent, broke off, returned and completed it. This suggests that the email reminder does provide a bump in the percent of respondents returning to the Internet instrument and providing additional information. The treatments with the ACS in the subject line had nominally higher return to complete rates than those with the generic subject, suggesting that the survey name in the subject line or email body may encourage respondents to return to the survey. The URL only and Contact Treatments each had a significantly lower percentage of respondents who broke off and never returned to complete their survey compared to Control. This reiterates our finding that suggests reminder emails do encourage respondents to return and complete the survey.

*What is the effect of the reminder emails on item nonresponse?*

Adjusting for multiple comparisons, only two items had significantly different item nonresponse rates in an email reminder treatment compared to the Revised Transition Treatment. While significant, these differences are small and may not have a big impact on the estimates. Worth noting is that there were no significant differences among the questions in the detailed person section. While we did not find definitive results that the reminder emails helped to reduce item nonresponse, we did not find there was any harm either.

*What is the effect of removing the survey name from the subject line and body of the reminder email and embedding the survey link on opening the email, click-throughs, self-response, and Internet response?*

The treatment where ACS appeared only in the URL (URL Only) had a significantly higher open rate than the treatment with no mention of the ACS (Click Here). We expected that these rates would be closer because respondents see only the subject line and sender before opening the email. Click Here had a significantly higher click-through rate than ACS Email Reminder, Contact, and URL Only. This surprising result seems to suggest that, at the time of the test, respondents were not too leery of a hidden URL or it could be they trusted that the sender is legitimate. There was no significant difference in the response rates between the email reminder treatments.

*What is the effect of the new instructional wording on the Respondent Name screen on breakoffs and the percent of respondents that provide their name, phone number, and email address?*

Treatment 6 (Contact) had a nominally, but not significantly, lower breakoff rate on the *Respondent Name* screen than the ACS Email Reminder Treatment. This may indicate that the new wording on the *Respondent Name* screen does not negatively affect respondents or cause them to break off at this point in the survey.

There was no significant difference in the percentage of respondents who provided an email address in the Contact Treatment compared to ACS Email Reminder group, suggesting that the revised text explaining that the respondent may be contacted for other business purposes did not discourage respondents from providing an email address.

### *Recommendations*

Based on these findings, the changes we tested appear to have either a neutral or a positive effect on ACS data collection, rendering of error messages, item nonresponse, and breakoffs.

Therefore, we recommend implementing these changes. Specifically,

- add the verification question to the PIN screen,
- increase the height of the ancestry write-in box,
- for unfolding questions, highlight the write-in boxes and add the preceding arrow when the associated check box or radio button is selected,
- combine the *Saved Person* and *Pick Next Person* screens and revise the language,
- collect the respondent's email address on the *Respondent Name* screen using the updated language, and
- send an email reminder to respondents who left the survey before completing it. Include the survey name in the subject line and body, and use the "Click here" link.

After implementing any of these changes, the Internet instrument, response data, and paradata should continue to be monitored to assess whether any additional changes may be necessary. Additional testing of reminder email messages and subject lines using a larger sample to help reiterate and improve upon the results from this test should also be conducted.

## 1. Introduction

Results from the 2011 American Community Survey (ACS) Internet Tests conducted in April and November 2011 led to the Census Bureau introducing the Internet data collection mode in ACS production starting with the January 2013 panel (Tancreto et al., 2012; Matthews et al., 2012). The development of the Internet instrument was an iterative and collaborative process building on web survey design best practices and findings from cognitive and usability testing.

During the 2011 ACS Internet Tests we evaluated the design of the Internet instrument and identified some issues that may have an impact on user experience. There were several screens on which a relatively high percentage of respondents broke off, that is they left the survey before completing it, resulting in higher item nonresponse in the detailed person section of the instrument. Additionally, we found that smaller percentage of Internet respondents compared to mail respondents entered multiple ancestries and many of the error messages rendered throughout the instrument were on screens with unfolding formats (i.e., two tasks on one screen) (Horwitz et al., 2013a; Horwitz et al., 2013b). The 2014 ACS Internet Test was designed to research whether we could successfully decrease breakoffs and item nonresponse throughout the Internet instrument. We tested several changes to the ACS Internet instrument as well as sending an additional reminder to respondents who left the survey without finishing.

### 1.1 Transition Screen Breakoffs

To reduce breakoffs and improve item nonresponse, we needed to understand where and why respondents were leaving the survey. First, we noticed a higher percentage of respondents broke off on two transitional screens: *Saved Person* and *Pick Next Person* (Appendix A) compared to most other screens in the instrument (Horwitz et al., 2013b). After asking basic demographics for all people at the address and all housing-level questions, the Internet instrument asks detailed person questions, one person at a time. The *Saved Person* screen appears after a respondent sees all applicable questions in the detailed person section for a person in the household and informs them that their answers for that person have been saved. The *Pick Next Person* screen lists all remaining household members for which the respondent has not started answering questions in the detailed person section. This screen allows respondents to select the order in which they answer. In the November 2011 Test, 3.3 percent of breakoffs occurred on the *Saved Person* screen while 17.5 percent occurred on the *Pick Next Person* screen. More breakoffs occurred on the *Pick Next Person* screen than any other screen in the instrument both as a percent of all breakoffs (17.5 percent) and as a percent of respondents who visited the screen (1.1 percent) (Horwitz et al., 2013b).

We believe that these breakoffs occur on these screens for two reasons. First, these screens are transitional in that they do not provide an explicit survey task to complete, which makes them natural breaking points. Peytchev (2009) showed that respondents are more likely to break off on these types of screens in Web surveys. Secondly, we use language on the *Pick Next Person* screen encouraging respondents to log out if they cannot answer the questions for those household members that remain on the roster. To address these issues, we made several revisions to the transition screens. First, we included the text from the *Saved Person* screen on the *Pick Next Person* screen and eliminated the *Saved Person* screen. Next, we modified the language on the *Pick Next Person* screen to encourage respondents to complete as much of the

survey as they can and removed the language that told them to save and logout if they could not answer for any remaining person (Appendix A). We expected these changes to the transition screen would keep more respondents in the instrument and reduce the overall percent of breakoffs.

## **1.2 Reminder to Complete Survey**

In both the April and November 2011 Internet Tests we saw a spike in overall Internet response following the mailing of the reminder postcards (Tancreto et al., 2011; Matthews et al., 2011). Data from the November Internet Test show that 14.4 percent of respondents that started the survey before the reminder postcard was sent returned to the survey and answered more questions after receiving the reminder. However, this reminder postcard was a general reminder to all nonrespondents and did not specifically target Internet breakoffs. Additionally, some breakoff cases may have switched modes and responded via paper after receiving the reminder. Because using a general postcard reminder was successful in bringing some Internet breakoff cases back into the survey, we tested the effect of sending an email reminder to cases that started the survey online but did not finish. We believe that specifically targeting these cases with an email reminder would motivate at least some of them to return to the survey. We sent two waves of email. Email 1 was sent to those who provided a valid email address and started but did not submit by July 1, 2014. Email 2 was sent to those who provided a valid email address and started after July 1, 2014 but did not submit by July 21, 2014. Each Internet breakoff received only one email reminder. See Appendix E.

An email reminder allows respondents to immediately access the survey by clicking a link embedded in the email instead of needing to take the postcard to their computer to type in the URL. Not only does emailing respondents save time, but it can also save money compared to mail reminders. Because there are no printing and mailing costs associated with sending an email, if these households complete the survey, we will save these costs in future mailings (paper questionnaires and reminder postcards) as well as Computer Assisted Telephone Interviewing (CATI) and Computer Assisted Personal Interviewing (CAPI) nonresponse follow-up costs. While the ACS has not collected email addresses in the past, results from the 2012 National Census Test (NCT) showed that they successfully<sup>1</sup> collected email addresses for 92.3 percent of households that reached the last screen in the instrument where the email address was requested (Barron and Pape, 2013).

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<sup>1</sup> An email address was provided by 92.3 percent of respondents who were asked to provide it, however we have no measure of the quality of the email addresses provided.

### **1.3 Returning to the Survey**

For respondents who break off, another reason why they may not finish the survey is if they have difficulty re-entering the instrument. Currently, respondents need to enter a four-digit personal identification number (PIN) assigned to them during their initial entry to the survey. They need this PIN to re-enter the survey if they leave or time out. If the respondent loses or does not remember the PIN, he or she has no way of retrieving it. Each respondent's PIN is randomly generated and is only displayed one time. Once a respondent leaves the screen displaying the PIN, it will not be shown again. Not only can the respondent not retrieve a lost PIN, but the survey developers cannot either. To complete the survey, these respondents need to call Telephone Questionnaire Assistance (TQA) to have their case reset and then start the survey from the beginning, losing all information they previously provided. Otherwise, these cases remain breakoffs. It is not possible to know how large of a problem this was in the tests or is in production because we cannot separate people who intentionally did not re-enter the online survey from those that would have but did not have their PIN. In the April 2011 Internet Test, 3.5 percent of Internet-related calls to TQA were regarding re-entry issues (Horwitz et al., 2013a). About 11 percent of the calls to TQA from January 2013 through March 2014, after the addition of the Internet to ACS production, were related to issues with PINs. Only motivated respondents generally call an assistance line, so it is safe to assume more respondents faced this issue. To make it easier to complete the survey, we need to give respondents a way to re-enter the survey, even if they lost their PIN.

Having respondents answer verification questions is a way of verifying their identity and allowing them back into the survey without requiring a phone call or the case to be reset. The 2012 NCT tested this design and found that approximately 97 percent of respondents who accessed the Internet selected a verification question and provided an answer (Barron and Pape, 2013). Providing this option in the ACS may help respondents return and complete their surveys. Currently, respondents who leave the survey but forget their PIN may call TQA for assistance or return a paper form, thus increasing the number of multiple returns. We expect that providing this alternate method of re-entry would reduce the percentage of addresses providing multiple returns.

### **1.4 Ancestry Responses**

In addition to reducing breakoffs, this test also attempted to reduce response issues identified in the 2011 Internet Tests. First, a higher percentage of mail respondents reported multiple ancestries compared to Internet respondents. Specifically, 10.6 percent of Internet respondents entered multiple ancestries while 30.3 percent of mail respondents provided multiple entries (Horwitz et al., 2012). We suspect this difference is a result of differences in the format of the text boxes between modes. On the paper form, there is a faint horizontal line in the middle of the text box, giving the illusion of two separate boxes. This effect could not be recreated in the Internet instrument, so there is just an open text box (Appendix B). The appearance of the text box on the paper form likely encourages multiple responses. For example, Christian and Dillman (2004) found that respondents provided more words and more themes when they were provided with larger text boxes. Therefore, it is possible that increasing the size of the text box in the Internet instrument would encourage respondents to provide more information.

## 1.5 Unfolding Questions

Additionally, the 2011 Internet Tests identified screens with a high rate of error messages rendered. Many of these screens have questions with an unfolding design format that requires the respondent to click a radio button or check box and then provide more information in a write-in or drop-down box (Appendix C). In the current design, the second task (write-in or drop-down) is greyed out until the respondent clicks the associated radio button and then it is activated and becomes white. Based on the 2011 findings, it appears that this cue is too subtle for respondents as many respondents missed the second task on these screens and therefore received an error message. For example, in the November Test, 24.8 percent of all error messages were rendered on the Place of Birth screen and 9.9 percent of the people who visited this screen received an error message (Horwitz et al., 2013b). Although over 90 percent of respondents correct their errors on these screens, it makes the survey more burdensome for respondents (Horwitz et al., 2013a; Horwitz et al., 2013b). Therefore, highlighting and bolding the second task may help draw the respondents' attention, thereby reducing respondent burden and any cumulative effect on satisfaction of receiving multiple error messages.

## 2. Research Questions and Methodology

The 2014 ACS Internet Test was designed to research whether we could successfully decrease breakoffs and item nonresponse throughout the Internet instrument. We tested several changes to the ACS Internet instrument as well as sending an additional reminder to respondents who left the survey without finishing.

The research questions are listed in Section 2.1, Section 2.2 describes the changes that apply to all treatments, Section 2.3 describes the six experimental treatments included in the test, Section 2.4 describes the experimental design and sample design of the test, and Section 2.5 describes the usability testing.

### 2.1 Research Questions

*Research questions that measure the effect of the across the board changes:*

- 1) Are respondents able to re-enter the survey using the verification questions?
- 2) What is the effect of the verification questions on the rate of multiple returns?
- 3) What is the effect of increasing the height of the ancestry write-in box in the Internet instrument on multiple ancestry entries?
- 4) What is the effect of highlighting the write-in/drop-down box for unfolding questions on the percent of respondents receiving an error message?

*Research questions that measure the effect of the Revised Transition:*

- 5) What is the effect of the revised transition on self-response and Internet response?
- 6) What is the effect of the revised transition on breakoffs?
- 7) What is the effect of the revised transition on item nonresponse?



*Research questions that measure the effect of the reminder email:*

- 8) Do respondents receive and open each of the reminder emails?
- 9) What is the effect of removing the survey name from the subject line and body of the reminder email and embedding the survey link on opening the email, click-throughs, self-response, and Internet response?
- 10) What is the effect of the reminder emails on self-response and Internet response?
- 11) What is the effect of the reminder emails on breakoff cases returning to the survey?
- 12) What is the effect of the reminder emails on item nonresponse?
- 13) What is the effect of the reminder emails on the rate of multiple returns?

*Research questions that measure the effect of the new instructional wording:*

- 14) What is the effect of the new instructional wording on the *Respondent Name* screen on breakoffs?
- 15) What is the effect of the new instructional wording on the *Respondent Name* screen on the percent of respondents that provide their name, phone number, and email address?

## **2.2 Changes That Apply to All Treatments**

As described in Section 1, the data quality analysis from the April 2011 ACS Internet Test alerted us to several issues with the current Internet instrument, some of which the 2012 NCT later confirmed. The following changes were designed to make the instrument more user-friendly. We believe these changes can only improve the data collected and the respondents' experience, so we were comfortable applying them to all of the treatments in this test.

### **1. Verification Questions for Forgotten PINs (tested in the 2012 NCT)**

In the 2014 ACS Internet Test, Internet respondents were asked to select and answer one verification question on the PIN screen. The verification questions (e.g., "What color was your first car?") appeared in a drop-down box. On subsequent logins, the respondents had the option of either entering their PIN or clicking a hyperlink to go to the screen with the verification question if they forgot their PIN. If they successfully answered the verification question, they received a new PIN for login. See Appendix D for the screens used in this test.

### **2. More text lines/larger text box for *Ancestry* question**

In the 2014 ACS Internet Test, we increased the height of the write-in box for the *Ancestry* question in the Internet instrument. The November 2011 Test revealed that respondents did not report as many ancestries on the Internet compared to mail, and we believe the format of the box on the Web was the reason. On the mail form, there is a faint horizontal line in the middle of the text box, giving the illusion of two separate boxes. This effect could not be recreated in the Internet instrument, so on the current production Internet screen, there is one text box that is two lines high with arrows for scrolling up and down on the right hand side designed to convey that the box can accept more than one ancestry entry (Appendix B).

### 3. Highlight write-in boxes for unfolding questions with multiple tasks

Within the production ACS Internet instrument there are several two-part questions, which we refer to as unfolding questions. In the first part of these questions, the respondent selects a radio button or check box. In the second part, the respondent provides additional information in either a drop-down box or write-in field associated with the selected radio button or check box (Appendix C). This design elicited many error messages in the previous tests because respondents selected a radio button, but did not provide the additional information. We suspect that respondents did not notice the second task. In an effort to reduce these errors and resulting respondent burden, we highlighted the write-in box more prominently once the associated radio button was selected. Specifically, once a radio button was selected and the write-in or drop-down field became active, the border of the field was bolded and the inside of the field changed from grey to pale yellow. An arrow was added before the field to draw attention to the task. Affected questions included, in order as they appeared in the instrument: Hispanic origin, race, year built, computer use, Internet subscription, place of birth, citizenship, current grade level, educational attainment, residence one year ago, and health insurance.

## 2.3 Experimental Treatments

We used six different treatments to test the effects of the various changes on breakoffs and item nonresponse. The treatments discussed in this section are Basic Changes, Revised Transition, Reminder Email with ACS, Reminder Email without ACS (URL), Reminder Email without ACS (Click Here), and Revised Contact Information Text (Contact).

1. **Basic Changes** – Included the new verification question to reset PIN and the changes to all treatments noted in Section 2.2. See Appendix D for the changes to the PIN screen.
2. **Revised Transition** – Eliminated the *Saved Person* screen and added the information to the *Pick Next Person* screen. Additionally, the *Pick Next Person* screen had new language to encourage respondents to answer questions for other household members to the best of their ability. Screenshots of the original screens and the revised screen can be found in Appendix A. This treatment also included the basic changes described Section 2.2.

Note: Treatments 3, 4, 5, and 6 included the basic changes described Section 2.2 and the revised transition described in Treatment 2.

3. **Reminder Email with ACS** – Collected email addresses on the *Respondent Name* screen. These email addresses were then used to remind respondents who started but did not complete the survey to return and finish. This email message contained the survey name in the subject line and in the body of the email (Appendix E). There were two waves of email, although respondents only received one email depending on when they started and broke off the survey. The first reminder email was sent after the reminder postcard was sent, but before the paper questionnaire package was

sent. The second reminder was sent after the paper questionnaire package mailing but before the cut for CATI to breakoffs that first entered the survey after the first reminder email.

4. **Reminder Email without ACS (URL)** – Mimicked all aspects of Reminder Email with ACS in Treatment 3, except the survey name was excluded from both the subject line and the body of the email message (except the acronym in the survey URL) (Appendix E). We excluded the survey name due to concerns about privacy and identifying survey inclusion and participation to outside parties through unsecure email correspondence. This research was commissioned by the Data Stewardship Executive Policy Committee to explore whether or not including a survey’s name in respondent emails has any impact on survey participation.
5. **Reminder Email without ACS (Click Here)** – Census policy and privacy concerns may prohibit specifying the survey name in email correspondence. Therefore, this treatment mimicked all aspects of Reminder Email without ACS (URL) in Treatment 4, except the link to access the survey was embedded in text that said, “Click here” so the respondent did not see the URL (Appendix E). Using the “Click here” link provided an additional security measure compared to Treatment 4 because the survey name acronym was found in the URL.
6. **Revised Contact Information Text (Contact)** – The reminder email followed the same format as that in Treatment 3. However, this treatment changed the instructional wording on the *Respondent Name* screen and corresponding Help text. The current text says, “We may contact you if there is a question.” We updated the language to allow the flexibility to contact respondents via email or telephone about the ACS or another Census survey (Appendix F).

## 2.4 Experimental Design and Sample Design

The ACS sample design consists of dividing the monthly sample panel into 24 groups of approximately 12,000 addresses each. Each group within a monthly sample is representative of the full monthly sample. Each monthly sample is a representative subsample of the entire annual sample and is representative of the entire country.

We selected one group for each of our six treatments from the July 2014 ACS production panel resulting in a total of approximately 72,000 sample addresses. The Control consisted of all remaining production addresses (216,000) from the July 2014 panel. Generally, the statistical testing assumed two-way comparisons at the  $\alpha = 0.10$  level with 80 percent power. However, adjustments for multiple comparisons were also made using the Holm-Bonferroni method.

This test used the full production three-month data collection period including CATI and CAPI nonresponse followup and Failed Edit Followup (FEFU). However, all of the evaluation measures use only mail and Internet data collected during the full production cycle.

## 2.5 Usability Testing

To determine whether respondents would react to our changes as expected, the Center for Survey Measurement conducted two rounds of usability testing. Each round consisted of ten participants. The first round took place in June and July of 2013 and the second round occurred in October and November of 2013. Usability participants worked through the Internet instrument and were exposed to the new verification question, the revised transition, the unfolding questions, and the new *Respondent Name* screen, which asked respondents for their email address. We monitored how respondents interacted with and reacted to these features.

Results from the first round of testing suggested that merely highlighting the second task on unfolding questions was not enough to direct respondents' attention to the field (Olmsted-Hawala et al., 2013a). Therefore, in the second round we added an arrow which appeared to be sufficient based on the results of the second round of testing. In general, the participants reacted to the changes as we expected. They willingly provided email addresses and said they expected to be contacted. Additionally, they successfully used the verification questions to re-enter the instrument after logging out (Olmsted-Hawala et al., 2013b).

## 3. Limitations

The sample size for this test was selected to detect differences in breakoff rates and focused on only Treatments 1, 2 and 3. Three additional email treatments (4, 5, and 6) were added, but the sample size was not adjusted to take into account changes in the email open rates and click-through rates. While the differences between the email treatments for the different measures are not significant, some are quite large and the benefit of the reminder should not be minimized due to these findings. Future testing with a larger sample is likely required to draw definitive conclusions.

Our measures of email delivery, receipt, and open rates are limited by the respondent's technology and computer settings. For example, if a respondent did not have images enabled, we were unable to detect if the respondent opened the email reminder. Also, some email server settings allow the recipient to see a preview of email messages before they are opened, therefore, respondents may have seen and read the email reminder message without actively opening it.

In Treatment 5, ACS was embedded in the "Click here" link so it was not visible in the body of the message. However, some computer settings allow respondents to see the URL associated with the link when the cursor hovers over it. Therefore, in some cases, the reference to ACS would have been seen by the respondent prior to clicking on the link.

The number of people who attempted to re-enter the survey using a verification question was quite small (only four respondents among all six treatments), therefore, we are unable to draw definitive conclusions about its effect on respondents' cooperation.

Some of the analyses related to the rendering of error messages and breakoffs on specific screens in the Internet instrument were based on available paradata. These paradata provide details about respondents' actions in the Internet instrument but may not be a complete record of every action due to server speed or errors, response speeds, and unexpected glitches in the recording of

paradata. In most of the analyses, we selected the cases where the paradata for the item of interest appeared to be complete.

## 4. Results

The purpose of the 2014 ACS Internet Test was to make improvements to the ACS Internet instrument based on issues identified in the 2011 ACS Internet Tests as well as find ways to discourage breakoffs and encourage respondents to return to the survey. This section presents the findings from our analyses. All counts and estimates are weighted using the production base weights and replicate weights unless otherwise noted. Statistical testing assumed two-way comparisons at the  $\alpha = 0.10$  level. We also made adjustments for multiple comparisons using the Holm-Bonferroni method where applicable.

Research Questions 4.1 through 4.4 compare Treatment 1 (Basic Changes) to Control (Production). Specifically, Research Questions 4.1 and 4.2 measure the impact of the verification questions; Question 4.3 assesses the changes to the ancestry write-in field; and Question 4.4 looks at the highlighting of the write-in boxes for unfolding questions.

Research Questions 4.5 through 4.7 measure the impact of the revised transition by comparing Treatment 2 (Revised Transition) to Treatment 1 (Basic Changes).

Research Questions 4.8 through 4.13 measure the impact of the email reminders by looking at Email Reminder Treatments 3 (ACS Email Reminder), 4 (URL Only), 5 (Click Here), and 6 (Contact).

Research Questions 4.14 and 4.15 measure the impact of the new instructional wording on the *Respondent Name* screen by comparing Treatment 6 (Contact) to Treatment 3 (ACS Email Reminder).

### 4.1 Are respondents able to re-enter the survey using the verification questions?

The verification questions were added to every treatment to make re-entering the survey less burdensome for respondents. Among all six test treatments, we found that 97.9 percent (standard error (s.e.) 0.1) of respondents who reached the PIN screen, selected and answered a verification question suggesting that most are willing to use this feature.

Next, we wanted to know if respondents used the verification question to re-enter the survey. Based on the paradata, only four people among all six treatments attempted to use the verification question to log back in to the survey, with one being successful. Because only a few appeared to use this feature to return to the survey, it is unclear whether respondents remembered their PIN to re-enter or simply did not return.

Part of the original analysis plan was to compare the percent of respondents that re-entered the survey using the verification questions to the percent that re-entered using their original PIN and to compare the invalid login rate (total invalid logins divided by total re-entry logins) between the Basic Treatment and Control. Because of the small number of respondents who attempted to return using the verification question, we were unable to conduct this analysis.

## 4.2 What is the effect of the verification questions on the rate of multiple returns?

We expected that respondents who were unable to return to the Internet survey because of a forgotten PIN would likely respond in another mode. If a respondent reached the first detailed person question in the survey instrument, their response was considered a sufficient partial response and was included in the return rate. The multiple return rate, shown in formula 1 below, is the percent of responding addresses that provided a complete or sufficient partial ACS response in more than one mode. For our analysis, we focused on the self-response modes: Internet, paper, and TQA.<sup>2</sup>

$$[1] \text{ Multiple Return Rate} = \left( \frac{\text{Number of sample addresses providing complete or sufficient responses in two or more modes}}{\text{Total number of sample addresses providing at least one complete or sufficient response}} \right) \times 100$$

In the initial ACS Internet instrument, respondents who started but did not finish the survey could not return to complete the survey if they forgot their PIN. They may have called TQA for assistance or returned a paper form, thus increasing the number of multiple returns. We expected that the addition of the verification questions would help reduce the multiple return rate by giving respondents another way to re-enter and complete their survey online. We used formula [1] to calculate multiple return rates and compared the rate in Treatment 1 (Basic Changes) to the rate in the Control. As Table 1 shows, there was no significant difference in multiple return rates between the two treatments. Note that because only one person logged back in to the survey using their verification question, we cannot make a definitive conclusion about the effect of the verification questions on the multiple return rates.

**Table 1. Comparison of Multiple Return Rates (Self-Response Only) between the Control and the Basic Changes Treatment**

<b>Metric</b>	<b>Control</b>	<b>Treatment 1: Basic Changes</b>	<b>Percentage Point Difference</b>	<b>Significant?</b>
	<b>% (s.e.)</b>	<b>% (s.e.)</b>	<b>(s.e.)</b>	
Multiple Return Rate	1.5 (0.0)*	1.6 (0.2)	-0.1 (0.2)	Not significant

\* Standard error is zero due to rounding.

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

<sup>2</sup> TQA allows respondents to call a toll-free number to receive help completing the survey. Respondents can either complete the mail or Internet form or complete the survey over the phone with an interviewer. TQA responses are included with self-administered responses because they usually occur during the first month of data collection before CATI and CAPI follow-up operations, and they are initiated by the respondent.

### 4.3 What is the effect of increasing the height of the ancestry write-in box in the Internet instrument on multiple ancestry entries?

In the 2011 Internet Tests, we found that a smaller percentage of Internet respondents compared to mail respondents provided two or more ancestries (10.6 percent vs. 30.3 percent, respectively). In order to encourage more ancestry reporting in the Internet mode, we increased the height of the write-in box on the *Ancestry* question screen. See Appendix B.

In the July 2014 Test, we did not replicate the findings from the 2011 Internet Tests. We found no significant difference in the percentage of Internet respondents that reported two or more ancestries between Treatment 1 (Basic Changes) and the Control. There was no difference between the mail responses either. See Table 2.

**Table 2. Difference in the Percent of Multiple Ancestry Responses between the Control and the Basic Changes Treatment by Mode**

Metrics	Control % (s.e.)	Treatment 1: Basic Changes % (s.e.)	Percentage Point Difference (s.e.)	Significant?
Percent of Internet Respondents Providing Two or More Ancestries	30.5 (0.2)	31.5 (0.8)	-1.0 (0.9)	Not significant
Percent of Mail Respondents Providing Two or More Ancestries	25.4 (0.2)	24.4 (0.8)	1.0 (0.8)	Not significant

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

We also looked at the difference in multiple reporting between the Internet and mail modes for Treatment 1 and Control and compared those differences. Table 3 shows a significantly higher difference between the modes for Treatment 1 compared to the Control. Because our results for the Control did not replicate the findings from the 2011 Internet Tests, and the percentage point difference between the Internet respondents in the Control and Basic Changes Treatment was not significant, we can only infer that enlarging the write-in box did not seem to discourage Internet respondents from reporting multiple ancestries.

**Table 3. Percentage Point Difference of Multiple Ancestry Responses between Internet and Mail Respondents in the Control and the Basic Changes Treatment**

Metric	Internet-Mail for Control % (s.e.)	Internet-Mail for Treatment 1: Basic Changes % (s.e.)	Control-Basic Changes Percentage Point Difference (s.e.)	Significant?
Percentage Point Difference	5.0 (0.3)	7.0 (1.1)	-2.0 (1.1)	Significant

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

#### **4.4 What is the effect of highlighting the write-in/drop-down box for unfolding questions on the percent of respondents receiving an error message?**

To reduce respondent burden associated with receiving error messages on unfolding questions, we directed respondents' attention to the write-in boxes and drop-down menus by outlining the write-in boxes in bold, changing the color of the box from grey to yellow, and adding an arrow in front of each box associated with a selected radio button or check box. See Appendix C.

Looking at Tables 4a and 4b, this seems to have worked as expected. Adjusting for multiple comparisons, we saw a significantly lower percent of error messages rendered on most of the screens with this type of format: Hispanic origin, race, year built, place of birth, current grade level, and educational attainment for the Basic Changes Treatment compared to the Control. Two screens that did not see a significant difference between the two treatments were citizenship and health insurance. This may be due to a smaller universe of respondents required to provide these write-ins and also relatively low error rates on these screens. There were three screens (Computer Use, Internet Subscription and Residence One Year Ago) that have the same format and to which we applied the changes, however, they currently do not have any error messages rendered, so we excluded them from this part of the analysis.

As a percent of all errors, the largest difference between the Basic Changes Treatment and the Control was for the place of birth screen (11.5 percentage points). This is the first screen in the detailed person section of the survey and our speculation from previous tests was that respondents likely make the error the first time they see the screen but "learn" what to do for additional visits to the screen. This appears to be reflected in the percent of errors among all visits to the screen, which was also reduced by our tested changes. These results are a good indication that the changes tested appear to be capturing respondents' attention to the second task on these screens, thus reducing the error messages rendered and, potentially, any associated respondent frustration.



**Table 4a. Differences in the Error Message Render Rate per Screen Among all Errors Rendered between the Control and the Basic Changes Treatment**

<b>Screens with Error Messages</b>	<b>Control % of Errors (s.e.)</b>	<b>Treatment 1: Basic Changes % of Errors (s.e.)</b>	<b>Percentage Point Difference (s.e.)</b>	<b>Significant?</b>
Hispanic Origin	0.9 (0.0)*	0.3 (0.1)	0.6 (0.1)	Significant
Race	1.1 (0.1)	0.4 (0.1)	0.7 (0.1)	Significant
Year Built	2.7 (0.1)	1.9 (0.3)	0.8 (0.3)	Significant
Place of Birth	16.1 (0.2)	4.6 (0.4)	11.5 (0.5)	Significant
Citizenship	0.2 (0.0)*	0.4 (0.2)	-0.2 (0.2)	Not Significant
Current Grade Level	1.3 (0.1)	0.7 (0.2)	0.6 (0.2)	Significant
Educational Attainment	0.7 (0.0)*	0.4 (0.1)	0.3 (0.1)	Significant
Health Insurance	0.2 (0.0)*	0.2 (0.1)	0.0* (0.1)	Not Significant

\*Differences and standard errors are zero due to rounding.

Differences shown may differ from simple visual calculations due to rounding.

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

**Table 4b. Differences in the Error Message Render Rate per Screen Among All Visits to the Screen between the Control and the Basic Changes Treatment**

Screens with Error Messages	Control % of Errors (s.e.)	Treatment 1: Basic Changes % of Errors (s.e.)	Percentage Point Difference (s.e.)	Significant?
Hispanic Origin	15.7 (0.8)	3.8 (1.4)	11.9 (1.6)	Significant
Race	11.8 (0.5)	3.1 (1.0)	8.7 (1.2)	Significant
Year Built	15.8 (0.4)	8.3 (1.1)	7.5 (1.1)	Significant
Place of Birth	8.7 (0.1)	2.4 (0.3)	6.3 (0.3)	Significant
Citizenship	1.3 (0.2)	2.5 (1.1)	-1.1 (1.1)	Not Significant
Current Grade Level	4.7 (0.2)	1.7 (0.5)	3.0 (0.5)	Significant
Educational Attainment	2.3 (0.1)	0.9 (0.3)	1.4 (0.4)	Significant
Health Insurance	3.0 (0.3)	2.0 (0.8)	1.0 (0.9)	Not Significant

\*Differences and standard errors are zero due to rounding.

Differences shown may differ from simple visual calculations due to rounding.

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

#### 4.5 What is the effect of the revised transition on self-response and Internet response?

The purpose of revising and combining the *Saved Person* and *Pick Next Person* screens was to reduce breakoffs and encourage respondents to continue answering as many questions as possible for other people in the household. One way to assess whether this change was effective was to look at the self-administered response rates and Internet response rates.

The self-administered response rate is the percent of mailable and deliverable addresses with a non-blank mail, Internet or TQA response. The Internet response rate uses the same denominator but includes only Internet respondents in the numerator. See formulas [2] and [3] below.

**[2] Self – Administered Response Rate**

$$= \left( \frac{\text{Number of mailable and deliverable sample addresses that provided a non – blank}^3 \text{ return by mail, TQA, or a complete or sufficient partial response by Internet}}{\text{Total number of mailable and deliverable sample addresses}^4} \right) \times 100$$

$$[3] \text{ Internet Response Rate} = \left( \frac{\text{Number of sample addresses that provided a complete or sufficient partial Internet response}}{\text{Total number of mailable and deliverable sample addresses}} \right) \times 100$$

Respondents who break off on or before the first *Pick Next Person* screen are considered insufficient partials. If the revised transition prevents some of these breakoffs, then both the self-administered response and Internet response rates may increase.

To assess the impact of the revised transition on both self-response and Internet response we compared Treatment 2 (Revised Transition) to Treatment 1 (Basic Changes). We estimated the self-administered response rates (combined mail and Internet response rates) and the Internet response rates at the end of the first month of data collection on July 31, 2014 (just before the start of the CATI follow-up operations) and again at the end of the third month of data collection on September 30, 2014 (panel closeout). As shown in Tables 5 and 6, we found no significant differences in the self-administered or Internet response rates between the treatments at the end of the first month of data collection or at the closeout of the test. Thus, there appears to be no harm to self-response due to combining these screens.

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<sup>3</sup> A blank form is a form in which there are no data-defined persons and the telephone number listed on the form by respondents is blank.

<sup>4</sup> We removed addresses from the universe of eligible households where the initial mailing was returned by the Postal Service as Undeliverable As Addressed and a response was not received by the time of the paper questionnaire package mailing because they never had the opportunity to self-respond and did not receive a second mailing.

**Table 5. Difference in Self-Administered Response Rates and Internet Response Rates between the Basic Changes and the Revised Transition Treatments (through July 31, 2014)**

Metrics	Treatment 1: Basic Changes % (s.e.)	Treatment 2: Revised Transition % (s.e.)	Percentage Point Difference (s.e.)	Significant?
Self-Administered Response Rate	42.6 (0.6)	43.0 (0.5)	-0.3 (0.8)	Not Significant
Internet Response Rate	24.9 (0.5)	25.5 (0.5)	-0.6 (0.6)	Not Significant

Differences shown may differ from simple visual calculations due to rounding.  
Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

**Table 6. Difference in Self-Administered Response Rates and Internet Response Rates between the Basic Changes and the Revised Transition Treatments (through September 30, 2014)**

Metrics	Treatment 1: Basic Changes % (s.e.)	Treatment 2: Revised Transition % (s.e.)	Percentage Point Difference % (s.e.)	Significant?
Self-Administered Response Rate	55.9 (0.5)	56.0 (0.5)	0.0* (0.8)	Not Significant
Internet Response Rate	31.7 (0.5)	31.9 (0.5)	-0.2 (0.7)	Not Significant

\* Difference is zero due to rounding.

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

#### 4.6 What is the effect of the revised transition on breakoffs?

To further measure the effectiveness of the revised transition, we looked at the screen breakoff rate on the revised transition screen itself. The screen breakoff rate tells us whether respondents are leaving the instrument on this specific screen. Respondents may visit this screen multiple times depending on how many people live in the household. Therefore, we calculated two rates. The screen breakoff rate among all households that visited the screen in formula [4] measured whether a household broke off any time they visited the *Pick Next Person* screen and used the number of households that saw the *Pick Next Person* screen one or more times as the denominator. The screen breakoff rate among all visits to the screen in formula [5] measured whether the respondent broke off each time they reached the *Pick Next Person* screen. The denominator was the total number of times the *Pick Next Person* screen was seen.

[4] Screen Breakoff Rate (among all households that visited the screen)

$$= \left( \frac{\text{Number of mailable and deliverable sample addresses that accessed the Internet instrument but exited on the specified screen}}{\text{Total number of mailable and deliverable sample addresses that accessed the specified screen at least once}} \right) \times 100$$

[5] Screen Breakoff Rate (among all visits to the screen)

$$= \left( \frac{\text{Number of mailable and deliverable sample addresses that accessed the Internet instrument but exited on the specified screen}}{\text{Total number of times the specified screen was seen}} \right) \times 100$$

In Table 7, we compared the screen breakoff rate on the revised transition screen in Treatment 2 (Revised Transition) to the screen breakoff rate on the *Pick Next Person* screen in Treatment 1 (Basic Changes) and found that the screen breakoff rates in the Revised Transition Treatment were significantly lower than the screen breakoff rates in the Basic Changes Treatment. This seems to indicate that revising the transition did keep respondents in the survey.

**Table 7. Difference in Screen Breakoff Rates between the Basic Changes and Revised Transition Treatments**

Metrics	Treatment 1: Basic Changes ( <i>Pick Next Person</i> Screen) % (s.e.)	Treatment 2: Revised Transition ( <i>Revised Screen</i> ) % (s.e.)	Percentage Point Difference (s.e.)	Significant?
Screen Breakoff Rate (among all households that visited the screen)	3.7 (0.5)	1.1 (0.2)	2.6 (0.5)	Significant
Screen Breakoff Rate (among all visits to screen)	1.2 (0.2)	0.4 (0.1)	0.8 (0.2)	Significant

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

Next, we calculated the overall final breakoff rates in Treatment 2 (Revised Transition) and Treatment 1 (Basic Changes) using formula [6]. The final breakoff rate is the percent of addresses that accessed the Internet instrument but did not view all of the applicable questions.

$$[6] \text{ Final Breakoff Rate} = \left( \frac{\text{Number of mailable and deliverable sample addresses that accessed the Internet instrument but did not view all applicable questions}}{\text{Total number of mailable and deliverable sample addresses that accessed the Internet instrument}} \right) \times 100$$

As shown in Table 8, the Revised Transition Treatment resulted in a significantly lower final breakoff rate than the Basic Changes Treatment. Thus, combining the screens and changing the language seemed to encourage respondents to continue in the survey.

We also looked at the breakoff rates among the sufficient partial and insufficient partial cases separately, because, at most, insufficient partial breakoffs would only have reached the first transition screen. This first screen does not have all of the changes that the subsequent transition screens have, so analyzing the sufficient and insufficient partials separately allows us to gain a better understanding of the effect of the revised transition.

The breakoff rates for the sufficient partials reiterate our overall finding that the revised transition helped to keep respondents in the survey. Note that the significant difference between the insufficient partial breakoff rates cannot be attributed to revised transition as these cases did not see the new screen. Because the Internet instruments are identical for these treatments until this screen, this result may simply be random noise in the data.

**Table 8. Difference in Final Breakoff Rates between the Basic Changes and the Revised Transition Treatments**

Metrics	Treatment 1: Basic Changes % (s.e.)	Treatment 2: Revised Transition % (s.e.)	Percentage Point Difference (s.e.)	Significant?
Overall Breakoff Rate	14.6 (0.7)	12.8 (0.7)	1.7 (1.0)	Significant
Sufficient Partial Breakoff Rate	10.6 (0.6)	7.8 (0.6)	2.8 (0.9)	Significant
Insufficient Partial Breakoff Rate	4.0 (0.3)	5.0 (0.4)	-1.1 (0.6)	Significant

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

#### 4.7 What is the effect of the revised transition on item nonresponse?

As seen in Table 7, the revised transition appears to have been successful in reducing breakoffs on the *Pick Next Person* screen therefore, we expect that respondents answered more survey questions, resulting in lower item nonresponse. The item nonresponse rate for a specified question is the percent of person or housing unit records with missing data for the question among those that should have answered the question.

$$[7] \text{ Item Nonresponse Rate} = \left( \frac{\text{Number of person or housing unit records with missing data for a specified question}}{\text{Total number of persons or housing units that should have answered the specified question}} \right) \times 100$$

Using formula [7], we calculated the item nonresponse rates for a subset of questions chosen because their response was not dependent on a response to a previous question. We compared the item nonresponse rates in Treatment 2 (Revised Transition) to Treatment 1 (Basic Changes). Tables 9a-9c shows the item nonresponse rates for Internet respondents who provided at least a sufficient partial Internet response, as they were most likely to have gotten far enough in the survey to view the revised transition screen. After adjusting for multiple comparisons, we saw a significant difference in the item nonresponse rates for two items, the food stamps and speak another language questions. The food stamps question appears before the transition screens therefore, the difference cannot be attributed to the revised transition in this test. Among the detailed person questions analyzed in this test, only one item, the speak another language question, had a significantly lower item nonresponse rate in the Revised Transition Treatment compared to the Basic Changes Treatment. The evidence seems to indicate that the revised transition did not have a negative effect on the item nonresponse rates for items later in the survey.

**Table 9a. Difference in Item Nonresponse Rates between the Basic Changes and Revised Transition Treatments for Selected Basic Demographic Questions\*\***

Selected Basic Demographic Questions	Treatment 1:	Treatment 2:	Percentage Point Difference (s.e.)	Adjusted p-value***	Significant?
	Basic Changes % (s.e.)	Revised Transition % (s.e.)			
Age	0.3 (0.1)	0.2 (0.1)	0.1 (0.1)	1.00	Not Significant
Date of Birth	2.5 (0.4)	2.7 (0.4)	-0.2 (0.5)	1.00	Not Significant
Sex	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1.00	Not Significant
Relationship	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1.00	Not Significant
Hispanic Origin	0.1 (0.1)	0.2 (0.1)	-0.1 (0.2)	1.00	Not Significant
Race	0.2 (0.1)	0.0 (0.0)	0.2 (0.1)	0.40	Not Significant

\*\* Zero estimates, differences, and standard errors are due to rounding.

\*\*\* P-values adjusted for 17 multiple comparisons using Holm-Bonferroni method.

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

**Table 9b. Difference in Item Nonresponse Rates between the Basic Changes and Revised Transition Treatments for Selected Housing Questions\*\***

<b>Selected Housing Questions</b>	<b>Treatment 1: Basic Changes % (s.e.)</b>	<b>Treatment 2: Revised Transition % (s.e.)</b>	<b>Percentage Point Difference (s.e.)</b>	<b>Adjusted p-value***</b>	<b>Significant?</b>
Type of Building	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	1.00	Not Significant
Number of Rooms	0.5 (0.1)	0.4 (0.1)	0.1 (0.2)	1.00	Not Significant
Number of Vehicles	0.4 (0.1)	0.3 (0.1)	0.1 (0.2)	1.00	Not Significant
Food Stamps	0.8 (0.2)	0.2 (0.1)	0.6 (0.2)	0.09	Significant
Tenure	0.1 (0.0)	0.1 (0.0)	0.0 (0.1)	1.00	Not Significant

\*\* Zero estimates, differences, and standard errors are due to rounding.

\*\*\* P-values adjusted for 17 multiple comparisons using Holm-Bonferroni method.

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

**Table 9c. Difference in Item Nonresponse Rates between the Basic Changes and Revised Transition Treatments for Selected Detailed Person Questions\*\***

<b>Selected Detailed Person Questions</b>	<b>Treatment 1: Basic Changes % (s.e.)</b>	<b>Treatment 2: Revised Transition % (s.e.)</b>	<b>Percentage Point Difference (s.e.)</b>	<b>Adjusted p-value***</b>	<b>Significant?</b>
Place of Birth	9.0 (0.7)	6.5 (0.6)	2.5 (0.9)	0.10	Not Significant
Educational Attainment	8.8 (0.7)	6.7 (0.6)	2.2 (0.9)	0.19	Not Significant
Speak Another Language	9.5 (0.7)	6.9 (0.6)	2.6 (0.9)	0.07	Significant
Health Insurance	10.6 (0.7)	8.2 (0.6)	2.3 (1.0)	0.19	Not Significant
Difficulty Hearing	10.5 (0.7)	8.0 (0.6)	2.5 (1.0)	0.19	Not Significant
Work Last Week	8.8 (0.7)	6.3 (0.5)	2.5 (0.9)	0.10	Not Significant

\*\* Zero estimates, differences, and standard errors are due to rounding.

\*\*\* P-values adjusted for 17 multiple comparisons using Holm-Bonferroni method.

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014



The remaining research questions focus on the effects of the email reminder treatments. The original research plan was to analyze Email 1 and Email 2 separately. However, because the universes for these were small, 979 and 603 respectively, we combined them for the analysis.

#### 4.8 Do respondents receive and open each of the reminder emails?

We used the GovDelivery email system to send a reminder email to those who started the ACS online but did not finish, referred to as “breakoffs.” There were two waves of reminder emails sent. The timing of the email was based on when Internet response tends to drop off between the initial mailing and the questionnaire package mailing, and between the questionnaire package mailing and the cut for the CATI universe. Email 1 was sent to those who provided a valid email address and started but did not submit by July 1, 2014. Email 2 was sent to those who provided a valid email address and started after July 1, 2014 but did not submit by July 21, 2014. Each Internet breakoff received only one reminder email.

In total, 1,582 reminder emails were sent to Internet breakoffs across the four email reminder treatments (Email 1: 979 and Email 2: 603) and 99 percent were successfully delivered, that is, they were not returned to the sender. Table 10 shows the unweighted counts of email reminders that were delivered, opened (detected only if images were enabled in the recipient’s email settings), and clicked-through (the survey was accessed via the link in the email) for Email 1 and Email 2 by treatment. Because of the small sample size, the number of email recipients in each wave by treatment is quite small which makes it difficult to draw any firm conclusions from comparisons between Email 1 and Email 2. For this reason, and because the sample was not designed to detect differences in the email open and click-through rates, we combined Email 1 and Email 2 recipients in the remaining analyses.

**Table 10. Unweighted Counts of Delivered, Opened, and Clicked-through Email Reminders for Email 1 and Email 2 Reminders by Treatment**

Treatment	Email 1 Delivered	Email 1 Opened	Email 1 Clicked Through	Email 2 Delivered	Email 2 Opened	Email 2 Clicked Through
Treatment 3: ACS Email Reminder with survey name in subject line*	254	104	32	157	63	17
Treatment 6: Contact with survey name in subject line*	236	95	22	153	72	17
Treatment 4: URL Only with generic subject line**	237	109	33	139	54	11
Treatment 5: Click Here with generic subject line**	247	101	42	146	47	20
<b>TOTAL</b>	<b>974</b>	<b>409</b>	<b>129</b>	<b>595</b>	<b>236</b>	<b>65</b>

\* Subject line is “Reminder to complete the Census Bureau’s American Community Survey.”

\*\* Subject line is “Reminder to complete your survey.”

Source: U.S. Census Bureau, GovDelivery Data, 2014 ACS Internet Test, July to September 2014

### Email Open Rates

The email open rate is the percent of successfully delivered emails that were opened. This is an undercount because if images are disabled, GovDelivery cannot detect that the email was opened. Because only the subject line and sender are visible to the respondent, we assume these features are the reason a respondent opens or does not open the reminder email. Combining the treatments with the same subject line, we found a nominally, but not significantly, higher open rate for email messages containing the survey name “Reminder to complete the Census Bureau’s American Community Survey” compared to the open rate for the generic subject: “Reminder to complete your survey.” This may suggest that the specific reference to the Census Bureau or the American Community Survey in the subject line may encourage respondents to open the email reminder.

**Table 11. Weighted Email Open Rates and Unweighted Counts by Email Reminder Subject Line**

Metrics	Subject: Reminder to complete the Census Bureau’s American Community Survey (s.e.)	Subject: Reminder to complete your survey (s.e.)	Percentage Point Difference (s.e.)	Significant?
Unweighted N	800	769	--	--
Percent Opened (%)	42.7 (1.9)	39.3 (2.1)	3.4 (2.8)	Not Significant

Source: U.S. Census Bureau, GovDelivery Data, 2014 ACS Internet Test, July to September 2014

#### **4.9 What is the effect of removing the survey name from the subject line and body of the reminder email and embedding the survey link on opening the email, click-throughs, self-response, and Internet response?**

During the development of this test, the Census Bureau was considering whether policy and privacy concerns may prohibit specifying the survey name in email correspondence. Therefore, we wanted to isolate the impact of excluding the survey name and embedding the survey link in “Click here” text on the percent of recipients that open the email, the percent of recipients that clicked the survey link within the body of the email, and the self-response and Internet response rates. The self-response and Internet response rates will be addressed in Question 4.10.

In Table 11, we saw the email open rate was nominally higher when the subject included the survey name. When we look at the individual email reminder treatments in Table 12, we see that Treatment 4 (URL Only) and Treatment 6 (Contact) had significantly higher open rates than Treatment 5 (Click Here). The inconsistency among the treatments with the generic subject line is difficult to explain. We expected that the URL Only and Click Here rates would be closer because respondents see only the subject line and sender before opening the email.

**Table 12. Weighted Email Open Rates and Unweighted Counts by Email Reminder Treatment**

Treatment	Percent Opened (%) (s.e.)	Unweighted N
Treatment 3: ACS Email Reminder with survey name in subject line*	41.6 (2.9)	411
Treatment 6: Contact with survey name in subject line*	43.8 (2.7)	389
Treatment 4: URL Only with generic subject line**	43.5 (2.8)	376
Treatment 5: Click Here with generic subject line**	35.3 (2.8)	393

\* Subject line is “Reminder to complete the Census Bureau’s American Community Survey.”

\*\* Subject line is “Reminder to complete your survey.”

Source: U.S. Census Bureau, GovDelivery Data, 2014 ACS Internet Test, July to September 2014

### Click-Through Rates

The click-through rate is the percent of email recipients that clicked the survey link among those who were sent and opened the email reminder. Using pairwise comparisons, we found no significant difference in email click-through rates by email subject (Treatments 3 and 6 combined compared to Treatments 4 and 5 combined). Among the four email reminder treatments, Click Here had a significantly higher click-through rate than ACS Email Reminder, Contact, and URL Only. This surprising result seems to suggest that, at the time of the test, respondents were not too leery of a hidden URL or it could be they trusted that the sender was legitimate. We should be cautious of this finding as it may change over time or as a result of increased concerns about Internet security and privacy. We did find some inconsistency in the click-through rates between ACS Email Reminder and Contact Treatments despite the fact that their email messages contained the same subject and email content. While the difference between the rates was not significant, we expected the rates to be closer.

**Table 13a. Weighted Email Click-Through Rates and Unweighted Counts by Email Reminder Treatment with Subject: Reminder to complete the Census Bureau’s American Community Survey**

Treatment	Percent Clicked Through (%) (s.e.)	Unweighted N
Treatment 3: ACS Email Reminder	30.3 (4.2)	167
Treatment 6: Contact	23.8 (3.8)	167
Treatments 3 and 6 Combined	27.0 (2.8)	334

Source: U.S. Census Bureau, GovDelivery Data, 2014 ACS Internet Test, July to September 2014

**Table 13b. Weighted Email Click-Through Rates and Unweighted Counts by Email Reminder Treatment with Subject: Reminder to complete your survey**

Treatment	Percent Clicked Through (%) (s.e.)	Unweighted N
Treatment 4: URL Only	24.1 (3.3)	163
Treatment 5: Click Here	43.3 (4.0)	148
Treatments 4 and 5 Combined	32.7 (2.5)	311

Source: U.S. Census Bureau, GovDelivery Data, 2014 ACS Internet Test, July to September 2014

#### 4.10 What is the effect of the reminder emails on self-response and Internet response?

We calculated the self-administered response and Internet response rates for Treatments 2 through 6 using formulas [2] and [3] and compared each of the email reminder treatments to the Revised Transition Treatment. Adjusting for multiple comparisons among all treatments, there were no significant differences between the treatments, suggesting that the changes made in the test treatments did not affect the ACS self-response rates.

**Table 14. Weighted Self-Administered Response Rates and Internet Response Rates by Treatment (through September 2014)**

Metrics	Treatment 2: Revised Transition %	Treatment 3: ACS Email Reminder %	Treatment 4: URL Only %	Treatment 5: Click Here %	Treatment 6: Contact %
	(s.e.)	(s.e.)	(s.e.)	(s.e.)	(s.e.)
Self-Administered Response Rate	56.0 (0.5)	55.5 (0.6)	56.1 (0.5)	55.8 (0.5)	55.4 (0.6)
Internet Response Rate	31.9 (0.5)	32.1 (0.5)	32.2 (0.5)	31.7 (0.5)	31.8 (0.6)

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

#### 4.11 What is the effect of the reminder emails on breakoff cases returning to the survey?

We expected email reminders to help reduce breakoffs by encouraging recipients to return to the survey and provide additional information. However, the request for an email address could have the unintended consequence of increasing the screen breakoff rate on the *Respondent Name* screen because we are asking for additional information that may be considered sensitive.

We used formula [4] to calculate the screen breakoff rate for Treatments 2 through 6. See Appendix F for the screenshots. A significantly higher percentage of respondents broke off on the *Respondent Name* screen in Treatment 3 (ACS Email Reminder) compared to the Revised Transition Treatment that did not collect email addresses. This may be a sign that some respondents do not want to provide their contact information (name, telephone number, or email address) online. Note that some differences between other rates in Table 15 may appear significant, but that is likely due to rounding. There were no other significant differences among the treatments.

**Table 15. Respondent Name Screen Breakoff Rates by Treatment**

<b>Metric</b>	<b>Treatment 2: Revised Transition %</b> (s.e.)	<b>Treatment 3: ACS Email Reminder %</b> (s.e.)	<b>Treatment 4: URL Only %</b> (s.e.)	<b>Treatment 5: Click Here %</b> (s.e.)	<b>Treatment 6: Contact %</b> (s.e.)
Screen Breakoff Rate (among all households that visited the screen)	0.5 (0.1)	0.9 (0.2)	0.8 (0.2)	0.9 (0.2)	0.6 (0.1)

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

As shown in Table 16, in the email reminder treatments, approximately 93 percent of respondents who reached the *Respondent Name* screen provided a seemingly valid email address (containing an @ and an extension). This suggests that email may be a viable way to reach respondents. We went a step further by checking whether those who started the survey but broke off provided an email address as often as those who did not break off. For Email Reminder Treatments 3, 4, and 5, we had no expectation that there would be a difference in the percent of respondents who provided a valid email address because the survey was exactly the same for all respondents up to the *Respondent Name* screen where the email address was requested. We found that about 83 to 89 percent of breakoffs in the email reminder treatments 3, 4, and 5 provided a seemingly valid email address compared to about 92 to 94 percent of non-breakoffs in these treatments. This may indicate that some respondents are cautious right from the beginning of the survey, and thus they go as far as they are willing and then break off. While these percentages are lower than those for the non-breakoffs, they are still relatively high which indicates that many breakoffs do provide us with the necessary information to contact them. Ninety-four percent of all respondents, breakoffs, and nonrespondents in Treatment 6 (Contact) provided a valid email address. We will look at the impact of Treatment 6 further in Section 4.15.

**Table 16. Percent of Respondents Who Provided a Valid Email Address by Email Reminder Treatment**

Who Provided an Email Address	Treatment 3: ACS Email Reminder % (s.e.)	Treatment 4: URL Only % (s.e.)	Treatment 5: Click Here % (s.e.)	Treatment 6: Contact % (s.e.)
Percent of All Respondents	93.0 (0.5)	92.0 (0.6)	93.3 (0.4)	94.1 (0.4)
Percent of Breakoffs	83.2 (2.3)	86.3 (2.2)	89.5 (1.5)	94.6 (1.5)
Percent of Non-Breakoffs	94.1 (0.5)	92.6 (0.6)	93.7 (0.4)	94.1 (0.5)

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

Next, we looked at the effect of the reminder email on breakoffs returning to the survey. Using formula [8], we calculated the breakoff return rate for each email reminder treatment as the number of cases that returned to the survey after the email reminder was sent among those who broke off and were sent an email reminder.

$$[8] \text{ Breakoff Return Rate} = \left( \frac{\text{Number of cases that returned to the survey after the email reminder was sent to them}}{\text{Total number of cases that broke off and were sent an email reminder}} \right) \times 100$$

We compared the breakoff return rate in Treatments 3 (Reminder Email with ACS), 4 (URL Only), 5 (Click Here) and 6 (Contact) to the breakoff return rate in Treatment 2 (Revised Transition). The breakoff return rate for the Revised Transition Treatment included the cases that would have been sent an email reminder if they were in one of the email treatments. We limited this analysis to the status change for cases that started before first email reminder, Email 1, was sent and returned before the Questionnaire Package was sent. This way, the only difference between the email reminder treatments and the Revised Transition Treatment was the additional reminder via email to the breakoffs in the email reminder treatments.

Table 17 shows the percent of cases that came back to the survey and proceeded further in the survey (i.e., viewed additional questions or provided more data) allowing their response status to be changed. The breakoff return rates for the email treatments were not significantly different from that for the Revised Transition Treatment. However, we did find that the breakoff return rates for all of the email treatments were significantly higher than the Control Treatment rate. This suggests that the email treatments, which include the revised transition changes, may help to encourage respondents to return to the survey.

**Table 17. Breakoff Return Rates (Percent Returned to Survey and Provided More Information before Questionnaire Package was Sent) by Treatment**

<b>Metric</b>	<b>Control, no email reminder</b> % (s.e.)	<b>Treat. 2: Revised Transition, no email reminder</b> % (s.e.)	<b>Treat. 3: ACS Email Reminder with survey name in subject line*</b> % (s.e.)	<b>Treat. 6: Contact survey name in subject line*</b> % (s.e.)	<b>Treat. 4: URL Only with generic subject line**</b> % (s.e.)	<b>Treat. 5: Click Here with generic subject line**</b> % (s.e.)
Percent Returned to Survey and Provided More Information	17.6 (0.6)	22.6 (2.7)	26.9 (2.8)	27.7 (2.8)	23.7 (2.3)	24.6 (2.8)

\* Subject line is “Reminder to complete the Census Bureau’s American Community Survey.”

\*\* Subject line is “Reminder to complete your survey.”

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

Ultimately, our goal in sending email reminders to breakoffs was to encourage them to return and complete the survey. Therefore, we calculated the return to complete rate for each email reminder treatment using formula [9]. The return to complete rate is the percent of cases that returned and completed the survey after the email reminder was sent to them. For this metric, “completed the survey” means the respondent viewed all applicable questions in the survey, but it does not imply that all questions were answered.

$$[9] \text{ Return to Complete Rate} = \left( \frac{\text{Number of cases that returned and completed the survey after the email reminder was sent}}{\text{Total number of cases that broke off and were sent an email reminder}} \right) \times 100$$

For the Control Treatment, the return to complete rate is the percent of cases that returned and completed the survey among those that broke off. The percent of email recipients who returned and completed the survey after receiving the email reminder was significantly higher than the 16.5 percent of Internet respondents from Control who started before the reminder mail was sent, broke off, returned and completed it. This suggests that the email reminder does provide a bump in the percent of respondents returning to the Internet instrument and providing additional information, which should translate to lower item nonresponse rates. Among the email reminder treatments, the ACS Email Reminder and Contact Treatments had nominally, but not significantly, higher return to complete rates than the URL Only and Click Here Treatments. This may suggest that the survey name in the subject line and body of the email message may encourage respondents to return to the survey.

**Table 18. Weighted Return to Complete Survey Rates by Treatment**

	<b>Control, no email reminder</b>	<b>Treatment 3: ACS Email Reminder with survey name in subject line*</b>	<b>Treatment 6: Contact with survey name in subject line*</b>	<b>Treatment 4: URL Only with generic subject line**</b>	<b>Treatment 5: Click Here with generic subject line**</b>
<b>Metric</b>	<b>% (s.e.)</b>	<b>% (s.e.)</b>	<b>% (s.e.)</b>	<b>% (s.e.)</b>	<b>% (s.e.)</b>
Percent Returned and Completed Survey	16.5 (0.5)	25.9 (2.7)	26.8 (2.8)	22.3 (2.3)	22.9 (2.7)

\* Subject line is “Reminder to complete the Census Bureau’s American Community Survey.”

\*\* Subject line is “Reminder to complete your survey.”

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

Finally, we looked at the final breakoff rates among the treatments and found that compared to Control, the URL Only and Contact Treatments each had a significantly lower percentage of respondents who broke off and never returned to complete the survey. This reiterates our finding that suggests reminder emails do encourage respondents to return and complete the survey.

**Table 19. Final Breakoff Rates by Treatment**

	<b>Control</b>	<b>Treatment 3: ACS Email Reminder</b>	<b>Treatment 4: URL Only</b>	<b>Treatment 5: Click Here</b>	<b>Treatment 6: Contact</b>
<b>Metric</b>	<b>% (s.e.)</b>	<b>% (s.e.)</b>	<b>% (s.e.)</b>	<b>% (s.e.)</b>	<b>% (s.e.)</b>
Final Breakoff Rate	13.7 (0.2)	12.3 (0.7)	11.9 (0.6)	12.0 (0.6)	10.2 (0.6)

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

#### 4.12 What is the effect of the reminder emails on item nonresponse?

We expect that if the reminder email is successful in bringing respondents back into the Internet instrument then item nonresponse will decrease. Using formula [7], we calculated the item nonresponse rate for selected questions in the Email Reminder Treatments 3, 4, 5, and 6 and compared them to Treatment 2 (Revised Transition). We looked at the item nonresponse rates among all Internet respondents in each treatment.

After adjusting for multiple comparisons, we found that only two items had significantly different item nonresponse rates in an email reminder treatment compared to the Revised Transition Treatment. Overall, the differences between email reminder treatments and the Revised Transition Treatment were small and, therefore, may not have a big impact on the estimates. While we did not find definitive results that the reminder email helped to reduce item nonresponse, we did not find there was any harm either.



**Table 20a. Item Nonresponse Rates for Selected Basic Demographic Questions by Treatment (Universe: All Cases with an Internet Return)\*\***

<b>Selected Basic Demographic Questions</b>	<b>Treatment 2: Revised Transition % (s.e.)</b>	<b>Treatment 3: ACS Email Reminder % (s.e.)</b>	<b>Treatment 4: URL Only % (s.e.)</b>	<b>Treatment 5: Click Here % (s.e.)</b>	<b>Treatment 6: Contact % (s.e.)</b>
Age	0.2 (0.1)	0.4 (0.1)	0.5 (0.2)	0.6 (0.1)	0.3 (0.1)
Date of Birth	2.7 (0.4)	2.6 (0.4)	2.9 (0.4)	2.9 (0.5)	2.4 (0.3)
Sex	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Relationship	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Hispanic Origin	0.2 (0.1)	0.3 (0.1)	0.2 (0.1)	0.1 (0.1)	0.2 (0.1)
Race	0.0 (0.0)	0.3 (0.1)	0.1 (0.1)	0.2 (0.1)	0.3* (0.1)

\* Adjusting for 17 multiple comparisons using the Holm-Bonferroni method, the item nonresponse rate in this treatment is significantly higher than the rate in the Revised Transition Treatment.

\*\* Zero estimates and standard errors are due to rounding.

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

**Table 20b. Item Nonresponse Rates for Selected Housing Questions by Treatment (Universe: All Cases with an Internet Return)\*\***

<b>Selected Housing Questions</b>	<b>Treatment 2: Revised Transition % (s.e.)</b>	<b>Treatment 3: ACS Email Reminder % (s.e.)</b>	<b>Treatment 4: URL Only % (s.e.)</b>	<b>Treatment 5: Click Here % (s.e.)</b>	<b>Treatment 6: Contact % (s.e.)</b>
Type of Building	0.0 (0.0)	0.1 (0.1)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Number of Rooms	0.4 (0.1)	0.6 (0.1)	0.6 (0.2)	0.5 (0.2)	0.8 (0.2)
Number of Vehicles	0.3 (0.1)	0.5 (0.1)	0.4 (0.1)	0.5 (0.1)	0.6 (0.2)
Food Stamps	0.2 (0.1)	0.8* (0.2)	0.7 (0.2)	0.5 (0.1)	0.6 (0.2)
Tenure	0.1 (0.0)	0.2 (0.1)	0.2 (0.1)	0.3 (0.1)	0.3 (0.1)

\* Adjusting for 17 multiple comparisons using the Holm-Bonferroni method, the item nonresponse rate in this treatment is significantly higher than the rate in the Revised Transition Treatment.

\*\* Zero estimates and standard errors are due to rounding.

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

**Table 20c. Item Nonresponse Rates for Selected Detailed Person Questions by Treatment (Universe: All Cases with an Internet Return)\*\***

Selected Detailed Person Questions	Treatment 2:	Treatment 3:	Treatment 4:	Treatment 5:	Treatment 6:
	Revised Transition % (s.e.)	ACS Email Reminder % (s.e.)	URL Only % (s.e.)	Click Here % (s.e.)	Contact % (s.e.)
Place of Birth	6.5 (0.6)	6.8 (0.6)	6.6 (0.4)	6.4 (0.5)	5.9 (0.5)
Educational Attainment	6.7 (0.6)	7.0 (0.6)	6.5 (0.4)	6.4 (0.5)	5.8 (0.5)
Speak Another Language	6.9 (0.6)	7.5 (0.6)	7.0 (0.5)	6.8 (0.5)	6.2 (0.5)
Health Insurance	8.2 (0.6)	9.3 (0.7)	9.1 (0.5)	8.5 (0.6)	7.6 (0.6)
Difficulty Hearing	8.0 (0.6)	8.7 (0.7)	8.4 (0.5)	7.7 (0.5)	7.4 (0.5)
Work Last Week	6.3 (0.5)	7.3 (0.6)	5.9 (0.4)	5.9 (0.5)	5.7 (0.5)

\*\* Zero estimates and standard errors are due to rounding.  
Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

#### 4.13 What is the effect of the reminder emails on the rate of multiple returns?

An analysis of 2013 production data showed an increase in multiple returns compared to the 2012 rates, largely because respondents completed the survey online and mailed in a paper form (Fish, 2014). In the 2014 Internet Test, adjusting for multiple comparisons across all treatments and the Control, we found the multiple return rates for the email reminder treatments are not significantly different from each other, but each of the four email reminder treatments have significantly lower rates than Control. This may indicate that the reminder emails were able to reduce the number of multiple returns because respondents received a reminder email before the mail questionnaire would have been sent. This suggests that email reminders may help reduce respondent burden associated with multiple returns, as well as mailing and processing costs.

**Table 21. Multiple Return Rates (Self-Response Only) by Treatment**

Metric	Control	Treatment 3:	Treatment 4:	Treatment 5:	Treatment 6:
	% (s.e.)	ACS Email Reminder % (s.e.)	URL Only % (s.e.)	Click Here % (s.e.)	Contact % (s.e.)
Multiple Return Rate	1.5 (0.0)*	1.0 (0.2)	1.1 (0.2)	1.0 (0.1)	1.1 (0.1)

\* Standard error is zero due to rounding.  
Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

**Table 22. Comparison of Multiple Return Rates (Self-Response Only) between Email Reminder Treatments and Control**

Treatment Comparisons	Percentage Point Difference (s.e.)	Significant?
Treatment 3: ACS Email Reminder vs. Control	-0.5 (0.2)	Significant
Treatment 4: URL Only vs. Control	-0.4 (0.2)	Significant
Treatment 5: Click Here vs. Control	-0.5 (0.2)	Significant
Treatment 6: Contact vs. Control	-0.5 (0.2)	Significant

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

**4.14 What is the effect of the new instructional wording on the *Respondent Name* screen on breakoffs?**

The ACS primarily collects respondents’ contact information in case followup is necessary. However, if the ACS starts collecting email addresses, there are other survey areas within the Census Bureau that would benefit from having this information. In order to share email addresses within the Census Bureau, we need to make it clear to respondents that their information may be used in a variety of ways. We are aware that respondents may be concerned about the privacy of their information. We wanted to see if the revised instruction on the *Respondent Name* screen: “We will only contact you if needed for official Census Bureau business.” and the new usage statement: “You may be asked to participate in other Census Bureau surveys.” in the help text would lead them to abandon the survey. We compared the screen breakoff rate on the *Respondent Name* screen in Treatment 6 (Contact) to that in Treatment 3 (ACS Email Reminder).

The Contact Treatment had a nominally, but not significantly, lower breakoff rate on the *Respondent Name* screen than the ACS Email Reminder Treatment. This may indicate that the new wording on the *Respondent Name* screen does not negatively affect respondents or cause them to break off at this point in the survey.

**Table 23. Difference in the *Respondent Name* Screen Breakoff Rates between the ACS Email Reminder and Contact Treatments**

Metric	Treatment 3: ACS Email Reminder % (s.e.)	Treatment 6: Contact % (s.e.)	Percentage Point Difference (s.e.)	Significant?
Screen Breakoff Rate (among all households that visited the screen)	0.9 (0.2)	0.6 (0.1)	0.3 (0.2)	Not Significant

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

**4.15 What is the effect of the new instructional wording on the *Respondent Name* screen on the percent of respondents that provide their name, phone number, and email address?**

While the new language on the *Respondent Name* screen in the Contact Treatment may not lead respondents to break off, our concern was that they may provide less information than they did with the original usage wording.

We compared the percent of respondents that reached the *Respondent Name* screen, did not break off on that screen, and provided a name, telephone number, and email address between ACS Email Reminder Treatment and the Contact Treatment. As shown in Table 24, there was no significant difference in the percentage of those who provided a name, a telephone number, and an email address between the two groups. This seems to suggest that the revised text explaining that the respondent may be contacted for other business purposes did not discourage respondents from providing contact information.

The percent of respondents who provided a telephone number in the Control was significantly higher compared to the combined email reminder treatments, 99.7 percent (0.0) versus 99.5 (0.1). However, the difference is very small and may indicate that some people in the test treatments chose to provide an email address instead of a phone number.

**Table 24. Difference in Percent of Respondents who Provided a Name, Telephone Number and Email Address between the Contact Treatment and the ACS Email Reminder Treatment**

Metrics	Treatment 3:	Treatment 6:	Percentage Point Difference	Significant?
	ACS Reminder Email	Contact		
	%	%		
	(s.e.)	(s.e.)	(s.e.)	
Percent Provided Name	99.6 (0.1)	99.8 (0.1)	-0.2 (0.1)	Not Significant
Percent Provided Telephone Number	99.5 (0.2)	99.5 (0.1)	0.0* (0.2)	Not Significant
Percent Provided Email Address	93.0 (0.5)	94.1 (0.4)	-1.1 (0.7)	Not Significant

\* Difference is zero due to rounding.

Source: U.S. Census Bureau, 2014 ACS Internet Test, July to September 2014

**5. Conclusions**

The purpose of the 2014 ACS Internet Test was to make improvements to the Internet instrument to make it more user-friendly and to reduce breakoffs and item nonresponse. Based on our analysis, many of the tested changes seemed to meet our expectations, appearing to have either a neutral or a positive effect on data collection, rendering of error messages, item nonresponse, and breakoffs.

The verification questions did not appear to have a negative effect as about 97 percent of respondents selected and answered a verification question at the beginning of the survey.

However, only four people attempted to use this feature upon returning to the survey so we were not able to determine the level of effectiveness of this feature.

The 2011 ACS Internet Tests showed that a smaller percentage of Internet respondents reported multiple ancestries compared to mail respondents. Unlike the 2011 Internet Tests, the 2014 Internet Test showed no significant difference in multiple-ancestry reporting between the Control and Basic Changes Treatment by mode. Because our results for the Control did not replicate the findings from the 2011 Internet Tests, and the percentage point difference between the Internet respondents in the Control and Basic Changes Treatment was not significant, we can only infer that enlarging the write-in box did not seem to discourage Internet respondents from reporting multiple ancestries.

The highlighting features for the unfolding questions appear to help reduce the percent of error messages rendered on these screens. Most screens with the highlighting in the Basic Changes Treatment rendered significantly fewer error messages than the Control versions of screens suggesting that the changes appear to be capturing respondents' attention to the second task.

In the Revised Transition Treatment, adjusting for multiple comparisons, only one item among the detailed person questions analyzed in this test had a significantly lower item nonresponse rate compared to the Basic Changes Treatment. The evidence seems to indicate that the revised transition did not have a negative effect on the item nonresponse rates. The Revised Transition Treatment resulted in lower screen breakoff rates and final breakoff rates compared to the Basic Changes Treatment, suggesting that combining the transition screens and updating the text seemed to encourage respondents to continue in the survey.

Collecting email addresses did appear to increase the breakoff rate on the *Respondent Name* screen. However, we did not see a negative effect in response as a result of sending the reminder email. Approximately 93 percent of respondents provided an email address. Of the 1,582 reminder emails sent, 99 percent were successfully delivered. The "Click here" link resulted in a higher percentage of click-throughs than the full URL. The survey name in the subject line and email message text encouraged a nominally higher percentage of recipients to return and complete the survey compared to the generic subject. The email treatments had significantly lower rates of multiple returns compared to Control suggesting that email reminders may help to reduce respondent burden.

While the differences between the email reminder treatments are not significant, some are quite large, and the benefit of the reminder should not be minimized due to these findings. As previously mentioned, the sample for this test was not designed to detect differences corresponding to the email reminder treatments and additional sample is likely required to draw definitive conclusions. However, based on the nominal differences, we believe that the email reminder is providing some benefit to bringing breakoff cases back into the survey and may subsequently reduce item nonresponse rates and breakoff rates.

## 6. Recommendations

Based on these findings, we recommend the following changes to the ACS Internet instrument and procedures.

- Allow respondents to select and answer a verification question upon initial entry to the survey, so those who forget their PIN could re-enter the survey by correctly answering their verification question. Monitor breakoffs on the PIN screen and re-entry logins to assess respondents' use of this feature.
- Increase the size of the ancestry write-in box to potentially encourage Internet respondents to provide more information. At a minimum, monitor the multiple-ancestry reporting among mail and Internet respondents to assess whether other changes should be considered.
- For unfolding questions, when the radio button or check box is selected, boldly outline the border of the associated write-in field, change the inside of the field from grey to pale yellow, and add an arrow before the field. Monitor errors rendered on the affected screens for these items to assess the effects of these changes.
- As tested in the Revised Transition Treatment, combine information from the *Saved Person* and *Pick Next Person* screens into one screen and revise the language to encourage respondents to answer questions for other household members to the best of their ability. Monitor breakoffs on this new transition screen.
- Collect email addresses from respondents on the *Respondent Name* screen at the beginning of the survey and send a reminder email message to Internet breakoffs encouraging them to return to and complete the survey. The subject line and body of the reminder email message should include the name of the survey as tested in Treatment 3 (Appendix E). The link to return to the survey, however, should be the "Click here" link tested in Treatment 5.
- Conduct additional testing of reminder email messages and subject lines using a larger sample to help reiterate and improve upon the results from this test.

Some of these recommendations including the revised transition, highlighting the write-in boxes and adding the verification questions are proposed for implementation in mid-2016. The Data Stewardship Executive Policy Subcommittee approved the use of the survey name in the subject line and body of the email reminder message, as well as the "Click here" link. The collection of email addresses and sending of email reminders will be implemented when resources are available.

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**Appendix A. 2014 ACS Internet Test: Control Version of the Saved Person and Pick Next Person Screens and Test Version of the Revised Transition Screen**

*Saved Person (Control)*

United States  
**Census**  
Bureau

American Community Survey

Instructions      FAQs      Save & Logout

➔ The information you provided for John E Doe has been saved. At the end of the survey you will be able to review or change your answers. Click Next to continue with the survey.

<< Previous      Next >>

Where You Are

- Basic Info
- Housing Questions
- Person Info
  - John E Doe
  - Jane P Doe
  - Jim E Doe

Contact Us  
Accessibility   Privacy   Security

*Pick Next Person (Control)*

United States  
**Census**  
Bureau

American Community Survey

Instructions      FAQs      Save & Logout

➔ The next questions are about each person in the household. Select a name to begin answering questions about that person. If you cannot answer now for any person on the list, click Save & Logout.

John E Doe  
 Jane P Doe  
 Jim E Doe

<< Previous      Next >>

Where You Are


- Basic Info
- Housing Questions
- Person Info
  - John E Doe
  - Jane P Doe
  - Jim E Doe

Contact Us  
Accessibility   Privacy   Security



**Appendix A. 2014 ACS Internet Test: Control Version of the *Saved Person* and *Pick Next Person* Screens and Test Version of the Revised Transition Screen (continued)**

*Revised Transition (Test)*

		<b>American Community Survey</b>	
<a href="#">Instructions</a>		<a href="#">FAQs</a>	
<a href="#">Save &amp; Logout</a>		<b>Where You Are</b>	
<p>➔ The information you provided for John Smith has been saved.</p> <p>Select another name to begin answering questions about that person. Please answer as many questions as you can.</p> <p>You will be able to review or change your answers at the end of the survey.</p> <p><input type="radio"/> Tammy Smith <input type="radio"/> Jack Smith</p> <p><a href="#">&lt;&lt; Previous</a>   <a href="#">Next &gt;&gt;</a></p>		Basic Info	
		Housing Questions	
		<b>Person Info</b>	
		• John Smith	
		• Tammy Smith	
		• Jack Smith	
		<a href="#">Contact Us</a>	

## Appendix B. 2014 ACS Internet Test: Control and Test Versions of the Ancestry Field

### Paper Version of Ancestry Question (Control and Test)

**13** What is this person's ancestry or ethnic origin?

(For example: Italian, Jamaican, African Am., Cambodian, Cape Verdean, Norwegian, Dominican, French Canadian, Haitian, Korean, Lebanese, Polish, Nigerian, Mexican, Taiwanese, Ukrainian, and so on.)

### Internet Version of Ancestry Question (Control)

United States<sup>™</sup>  
**Census**  
Bureau

American Community Survey

Instructions    FAQs    Save & Logout

**13** What is John E Doe's ancestry or ethnic origin? ([Help](#))

(For example: Italian, Jamaican, African Am., Cambodian, Cape Verdean, Norwegian, Dominican, French Canadian, Haitian, Korean, Lebanese, Polish, Nigerian, Mexican, Taiwanese, Ukrainian, and so on.)

<< Previous    Next >>

Where You Are

- Basic Info
- Housing Questions
- Person Info**
  - John E Doe
  - Jane P Doe
  - Jim E Doe

Contact Us

[Accessibility](#)   [Privacy](#)   [Security](#)

### Internet Version of Ancestry Question with Larger Text Box (Test)

United States<sup>™</sup>  
**Census**  
Bureau

American Community Survey

Instructions    FAQs    Save & Logout

**13** What is Joe's ancestry or ethnic origin? ([Help](#))

(For example: Italian, Jamaican, African Am., Cambodian, Cape Verdean, Norwegian, Dominican, French Canadian, Haitian, Korean, Lebanese, Polish, Nigerian, Mexican, Taiwanese, Ukrainian, and so on.)

<< Previous    Next >>

Where You Are

- Basic Info
- Housing Questions
- Person Info**
  - Joe
  - Jane
  - Ralph

Contact Us

[Accessibility](#)   [Privacy](#)   [Security](#)

**Appendix C. 2014 ACS Internet Test: Control and Test Versions of an Unfolding Design Screen (Place of Birth)**

*Place of Birth Screen (Control)*

United States **Census** Bureau

American Community Survey

Instructions    FAQs    Save & Logout

→ The following series of questions refer to John Smith.

7 Where was John Smith born? [\(Help\)](#)

In the United States - *Select name of state.*  
 Select Name

Outside the United States - *Enter name of foreign country, or Puerto Rico, Guam, etc.*

<< Previous    Next >>

Where You Are

- Basic Info
- Housing Questions
- Person Info**
  - John Smith
  - Tammy Smith
  - Jack Smith

Contact Us

*Place of Birth Screen with Error Message Rendered (Control)*

United States **Census** Bureau

American Community Survey

Instructions    FAQs    Save and Log Out

**!** Please specify this person's country of birth.

→ The following series of questions refer to John Doe.

7 Where was John Doe born? [\(Help\)](#)

In the United States - *Select name of state.*  
 Select Name

Outside the United States - *Enter name of foreign country, or Puerto Rico, Guam, etc.*

< Previous    Next >

Where You Are

- Basic Info
- Housing Questions
- Person Info**
  - John Doe

Contact Us    Accessibility    Privacy    Security

**Appendix C. 2014 ACS Internet Test: Control and Test Versions of an Unfolding Design Screen  
(Place of Birth) (continued)**

*Place of Birth Screen with Boldly Outlined Write-in Box, Pale Yellow Fill, and Arrow (Test)*

United States<sup>™</sup>  
**Census**  
Bureau

American Community Survey

Instructions      FAQs      Save & Logout

➔ The following series of questions refer to Mikey Smith.

7 Where was Mikey Smith born? ([Help](#))

In the United States - *Select name of state.*  
Select Name

Outside the United States - *Enter name of foreign country, or Puerto Rico, Guam, etc.*  
➔

<< Previous      Next >>

Where You Are

- Basic Info
- Housing Questions
- Person Info
  - Jason Smith
  - Kara Smith
  - Mikey Smith

Contact Us

## Appendix D. 2014 ACS Internet Test: Control and Test Versions of the PIN Screen and Test Version of the Additional Verification Question Screens

### *PIN Screen without Verification Question (Control)*

The screenshot shows the 'United States Census Bureau' logo on the left and 'American Community Survey' on the right. A green navigation bar contains 'Instructions', 'FAQs', and 'Save & Logout'. The main content area has two bullet points: 'Please make note of the PIN below.' and 'It will allow you to log back into the survey if the session times out or you need to stop and come back later. The session will time out if left idle for more than 15 minutes. This survey will take approximately 40 minutes to complete.' Below this, the PIN '5268' is displayed in red. A message states: 'For your security, we will not be able to reset the PIN if lost or forgotten.' A 'Next >>' button is at the bottom left. The footer includes 'Contact Us', 'Accessibility', 'Privacy', and 'Security' links.

United States<sup>™</sup>  
**Census**  
Bureau

American Community Survey

Instructions      FAQs      Save & Logout

- ➔ Please make note of the PIN below.
- ➔ It will allow you to log back into the survey if the session times out or you need to stop and come back later. The session will time out if left idle for more than 15 minutes. This survey will take approximately 40 minutes to complete.

**PIN: 5268**

For your security, we will not be able to reset the PIN if lost or forgotten.

Next >>

Contact Us  
[Accessibility](#)   [Privacy](#)   [Security](#)

### *PIN Screen with Verification Question (Test)*

The screenshot shows the 'United States Census Bureau' logo on the left and 'American Community Survey' on the right. A green navigation bar contains 'Instructions', 'FAQs', and 'Save & Logout'. The main content area has two bullet points: 'Please make note of the PIN below.' and 'It will allow you to log back into the survey if the session times out or you need to stop and come back later. The session will time out if left idle for more than 15 minutes. This survey will take approximately 40 minutes to complete.' Below this, the PIN '2105' is displayed in red. A message states: 'Please select a security question to answer. If you forget your PIN, you will be asked to provide this answer to re-enter the survey.' There is a dropdown menu for 'Security Question' with the text 'Please select a security question.' and an 'Answer:' text input field. A 'Next >>' button is at the bottom left. The footer includes 'Contact Us', 'Accessibility', 'Privacy', and 'Security' links.

United States<sup>™</sup>  
**Census**  
Bureau

American Community Survey

Instructions      FAQs      Save & Logout

- ➔ Please make note of the PIN below.
- ➔ It will allow you to log back into the survey if the session times out or you need to stop and come back later. The session will time out if left idle for more than 15 minutes. This survey will take approximately 40 minutes to complete.

**PIN: 2105**

Please select a security question to answer. If you forget your PIN, you will be asked to provide this answer to re-enter the survey.

Security Question:  ▾


Answer:

Next >>

Contact Us  
[Accessibility](#)   [Privacy](#)   [Security](#)

**Appendix D. 2014 ACS Internet Test: Control and Test Versions of the PIN Screen and Test Version of the Additional Verification Question Screens (continued)**

*Login Screen with Forgotten PIN Link (Test)*



# American Community Survey


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

**Welcome to the American Community Survey. You will need the materials we mailed to you to start the survey.**

**All the information that you provide will remain completely confidential.**

[Para completar en español, oprima aquí.](#)

### Please Log In



Example User ID

➔ Enter the 10-digit User ID found below the barcode on the materials we mailed to you.

User ID:  -

➔ Enter the 4-digit PIN we gave you.

PIN:

[Click here if you do not know your PIN.](#)

The Census Bureau estimates that, for the average household, this survey will take 40 minutes to complete, including the time for reviewing the instructions and answers. You may email comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing burden, to: Paperwork@census.gov. Use "Paperwork Project 0607-0810, 0607-0936" as the subject. Or you may send comments to: Paperwork Project 0607-0810, 0607-0936, U.S. Census Bureau, 4600 Silver Hill Road, AMSD - 3K138, Washington, D.C. 20233.

Respondents are not required to respond to any information collection unless it displays a valid approval number from the Office of Management and Budget. The 8-digit number appears in the left side of the green bar at the bottom of the survey screen.

**\*\* WARNING \*\***

You have accessed a UNITED STATES GOVERNMENT computer. Use of this computer without authorization or for purposes for which authorization has not been extended is a violation of Federal law and can be punished with fines or imprisonment (PUBLIC LAW 99-474). System usage may be monitored, recorded, and subject to audit. Any information you enter into this system may be used by the Census Bureau for statistical purposes, including but not limited to improving the efficiency of our data collection programs. For information regarding the use of this system, and how your privacy is protected, visit our online privacy webpage at [http://www.census.gov/privacy/privacy\\_policy/](http://www.census.gov/privacy/privacy_policy/). Use of this system indicates consent to the collection, monitoring, recording, and use of information provided inside this system.

**Appendix D. 2014 ACS Internet Test: Control and Test Versions of the PIN Screen and Test Version of the Additional Verification Question Screens (continued)**

*Verification Screen Rendered Due to a Forgotten PIN (Test)*

United States  
**Census**  
Bureau

**American Community Survey**

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

➔ Please provide the answer to the following security question to reset your PIN and return to your survey.

In what city were you born?  
(Not case-sensitive)

Answer:

If you do not know the answer to your security question, please call 1-888-369-3603 for assistance.

Next >>

Contact Us

*PIN Reset Screen (Test)*

United States  
**Census**  
Bureau

**American Community Survey**

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

**Your PIN has been reset.**  
**New PIN: 2082**

Please login using this new PIN to access your account.

Return to Login

Contact Us

**Appendix E. 2014 ACS Internet Test: Email Reminder Messages by Treatment**  
(Highlighting did not appear in actual messages)

***Treatment 3. Email Reminder with ACS (Also used for Treatment 6 - Contact)***

**From:** U.S. Census Bureau

**Subject line:** Reminder to complete the Census Bureau's American Community Survey

Recently, you may have begun answering questions online for the American Community Survey. Thank you for any of your answers so far. It is important that you complete the survey; you are required by U.S. law to respond.

Go to <https://respond.census.gov/acs> to return to the survey. Enter your USER ID XXXXX-XXXXX followed by your assigned PIN. If you have trouble returning to the survey, please call toll free 1-888-369-3603.

Finishing the survey online saves time and money by reducing the need for further contact by Census Bureau interviewers. Thank you for your time and cooperation.

***Treatment 4. Email Reminder without ACS (URL Only)***

**From:** U.S. Census Bureau

**Subject line:** Reminder to complete your survey

Recently, you may have begun answering questions online for an important Census Bureau survey. Thank you for any of your answers so far. It is important that you complete the survey; you are required by U.S. law to respond.

Go to <https://respond.census.gov/acs> to return to the survey. Enter your USER ID XXXXX-XXXXX followed by your assigned PIN. If you have trouble returning to the survey, please call toll free 1-888-369-3603.

Finishing the survey online saves time and money by reducing the need for further contact by Census Bureau interviewers. Thank you for your time and cooperation.

***Treatment 5. Email Reminder without ACS (Click Here)***

**From:** U.S. Census Bureau

**Subject line:** Reminder to complete your survey

Recently, you may have begun answering questions online for an important Census Bureau survey. Thank you for any of your answers so far. It is important that you complete the survey; you are required by U.S. law to respond.

**Click here** to return to the survey. Enter your USER ID XXXXX-XXXXX followed by your assigned PIN. If you have trouble returning to the survey, please call toll free 1-888-369-3603.

Finishing the survey online saves time and money by reducing the need for further contact by Census Bureau interviewers. Thank you for your time and cooperation.



## Appendix F. 2014 ACS Internet Test: Control and Test Versions of the *Respondent Name* Screen and Corresponding Help Text in the Email Reminder Treatments

### *Respondent Name Screen (Control)*

United States<sup>™</sup>  
**Census**  
Bureau

American Community Survey

Instructions      FAQs      Save & Logout

➔ What is your name and your telephone number? We may contact you if there is a question.  
[\(Help\)](#)

First Name      MI      Last Name  
           

Area  
Code      Number  
 -  -

Next >>

Contact Us

### *Help Text for Respondent Name Screen (Control)*

#### Why We Ask?

We ask for a respondent's name in case we need to contact someone to ask about incomplete or missing survey information.

#### Help

- Names and phone numbers are kept confidential.
- Providing a name helps eliminate confusion as you proceed through the interview to know about whom questions are being asked.
- The phone number you provide will be used to contact you only if we have questions about any of your responses.

[Close Window](#)

**Appendix F. 2014 ACS Internet Test: Control and Test Versions of the *Respondent Name* Screen and Corresponding Help Text in the Email Reminder Treatments (continued)**

*Respondent Name Screen for Email Reminder Treatments 3, 4, and 5 (Test)*

United States<sup>™</sup>  
**Census**  
Bureau

**American Community Survey**

[Instructions](#)   [FAQs](#)   [Save & Logout](#)

➔ **What is your name, telephone number, and email address?** We may contact you if there is a question. ([Help](#))

First Name   MI   Last Name  
     

Area Code   Number  
 -  -

Email Address

Confirm Email Address

[Next >>](#)

[Contact Us](#)  
[Accessibility](#)   [Privacy](#)   [Security](#)

*Help Text for Respondent Name Screen in Email Reminder Treatments 3, 4, and 5 (Test)*

### Why We Ask?

We ask for a respondent's name in case we need to contact someone to ask about incomplete or missing survey information.

### Help

- Names, phone numbers, and email addresses are kept confidential.
- Providing a name helps eliminate confusion as you proceed through the interview to know about whom questions are being asked.
- The phone number and email address you provide will be used to contact you only if we need to follow up with you about any of your responses.

**Appendix F. 2014 ACS Internet Test: Control and Test Versions of the *Respondent Name* Screen and Corresponding Help Text in the Email Reminder Treatments (continued)**

*Respondent Name Screen for Email Reminder Treatment 6 (Test)*

United States<sup>™</sup>  
**Census**  
Bureau

American Community Survey

Instructions      FAQs      Save & Logout

➔ **What is your name, telephone number, and email address?** We will only contact you if needed for official Census Bureau business. [\(Help\)](#)

First Name      MI      Last Name  
           

Area  
Code      Number  
 -  -

Email Address

Confirm Email Address

Next >>

Contact Us

*Help Text for Respondent Name Screen in Email Reminder Treatment 6 (Test)*

**Why we ask?**

We ask for a respondent's name and contact information in case we need to contact someone to ask about incomplete or missing survey information.

**help**

- names, phone numbers, and email addresses are kept confidential.
- providing a name helps eliminate confusion as you proceed through the interview to know about whom questions are being asked.
- the phone number and email address you provide will only be used if needed for official Census Bureau business. You may be asked to participate in other Census Bureau surveys.

[Close Window](#)