

# **APPENDIX I**

## **2017 NSCG Contact Strategies Experiment Research Questions and Design Rationale**

## 2017 NSCG Contact Strategies Experiment Research Questions and Design Rationale

### **Background Information on Contact Strategies**

One of the most important design decisions of a survey is the contact strategy. It makes potential respondents aware of the survey and gives them a means to respond. Research has shown that the type, timing, and number of contacts (Dillman et al., 2000) as well as the level of personalization (Cook, Heath, Thompson, 2000) can influence a respondent's decision to participate in a survey. Unfortunately, there is no definitive "best strategy" for survey designers to use. The strategy that will be most effective for a particular survey will depend on many factors, including the target population, the sponsor, and the mandatory status of the survey. We do, however, have guidelines that can help determine what features of different contacts tend to be successful in different modes. These guidelines can be used to create one or more contact strategies that can be tested and refined to efficiently maximize response rates within the survey's cost constraints.

In mixed mode surveys like the NSCG, Dillman and his colleagues (2014) emphasize the importance of contacting sample cases in multiple modes, such as mail, email, and telephone. Using multiple modes increases the likelihood the message will be received. People often delete email messages from unknown sources and do not answer calls from unrecognized phone numbers. Nichols (2012) found that over half of the nonrespondents in the American Community Survey (ACS) either did not remember receiving mail contacts or did not open them. Contacting sample cases through multiple modes can make the survey more familiar, increasing the chances one of the contacts will be received, while also legitimizing the survey.

Even when using multiple contact modes, it is valuable to consider the guidelines for each mode. In many cases, these guidelines overlap. For example, in all modes it is essential that contacts are unique and present only the pertinent information. In their 2009 book, Dillman and his colleagues state, "Perhaps more important than whether three, four, or five contacts are used is that each communication differs from the previous one and conveys a sense of appropriate renewal of an effort to communicate." This includes changing the look and feel of the materials as well as the message across contacts, as sending the same message repeatedly is unlikely to make someone change their mind about responding (Dillman et al., 2014). Each contact should emphasize what needs to be done and why it is important. Different reasons for participation are salient to different people, so it is important to identify what those reasons are and mention them in different messages.

In 2014, the ACS worked with a contractor to evaluate all of its mailing materials using focus groups, cognitive interviews, and visual testing (Walker, 2015). The main findings from this research were that it is important to use visual devices, including callout boxes and bolding to highlight important, actionable information, like a URL or deadline, or it is more likely to be missed. Similar to what Dillman and his colleagues found, the ACS participants also indicated they wanted to know and understand how responding benefits them and their communities (Dillman et al., 2009) and said that if messages or mailing packages are repetitive, have too much information, or appear too cluttered, they are more likely to disregard them (Dillman et al., 2014). While this research focused on mail contacts, the general principles apply to all modes.

Contacts should be non-repetitive, inform sample cases how to respond and why they should respond, and emphasize pertinent information.

In other cases, however, the guidelines are more mode-specific. For mail surveys, Dillman and his colleagues (2000) originally recommended the five-contact mailing strategy: prenotice letter, questionnaire, postcard, replacement questionnaire, and final reminder. Other surveys, like the NSCG and ACS, have taken this model and tweaked it to accommodate a web push strategy, by replacing the first questionnaire with a request to complete the survey online. More recently, however, Dillman and his colleagues (2014) are questioning the overall effectiveness of the prenotice letter, as there is no call to action, and have recommended replacing that contact with an additional reminder, later in the contact strategy. Both the 2012 National Census Test and the ACS experimented with this new strategy in the presence of an internet push approach. The 2012 National Census Test found that sending an additional reminder in place of a prenotice letter had a slightly lower internet response rate (0.9 percent), but the difference was not statistically significant. The ACS also saw a small, significant, negative effect from removing the prenotification of 1.7 percent for internet response. However, after the data collection activities across all modes (paper, phone, and personal visit) were completed, there was no significant difference in the overall response rate. Both the Census and ACS opted to eliminate the prenotification due to the cost savings (Murphy and Roberts, forthcoming; U.S. Census Bureau, 2014). Dillman and his colleagues (2014) do mention that prenotifications are particularly important in surveys that are contracted to another organization for data collection to explain the connection to the sponsor. While this may be applicable for the new portion of the NSCG sample, the returning sample is already familiar with the sponsor and the survey, so eliminating the prenotice letter may have no effect.

While some surveys have modified the mail survey guidelines to include offering an internet option, many internet surveys prefer to invite sample cases via email instead of mail. Email invitations allow respondents to click a hyperlink that takes them directly to the survey and, in some cases, contains a userid for an easier login process. The guidelines for email notifications are very similar to those for mail surveys (Dillman et al., 2014). Many survey administrators like to use email contacts because they are very cheap, but they are not particularly effective, as compared to mail invitations (Kaplowitz et al., 2004; Shih and Fan, 2008; Leece et al., 2004). For example, Kaplowitz and his colleagues (2004) obtained a response rate of 20.7 percent when contacting students via email and 31.5 percent when using mail contacts. These researchers compared mail contacts for a paper survey to email contacts for a web survey. However, when Kaplowitz added a mail postcard to the email treatment, the response rate increased to 29.7 percent, which was not statistically different from the mail only group. Similarly, Millar and Dillman (2011) compared a strategy with four postal mailings (two letters and two reminders) to one with two postal letters and two email reminders and found that the augmented strategy yielded a 4.3 percent increase in response. This research shows a benefit to using multiple contact modes to obtain a response and the key is to identify the optimal number and timing of contacts in each mode. The effectiveness of this strategy, however, is largely dependent on the quality of the email address frame being used and the technical savviness of the potential respondents. If the frame is poor, the strategy cannot be successful.

The guidelines for mail and email contacts are well-defined and commonly followed in survey practice. However, they are not so clear for telephone and personal contacts. For telephone contacts, the number of calls depends largely on whether the contact number is a cell phone or a landline. According to Dillman and his colleagues (2014), with landline phones the call is more likely to reach different people in the household whereas on a cell phone it will typically reach the same person each time, which can frustrate and alienate people rather than increase cooperation. Therefore, the number of calls made to a cell number should be lower than the number made to landlines. Additionally, Groves (1989) recommended one callback for soft refusals, after seven to 10 days, and no callbacks for hard refusals. Despite these guidelines, some telephone numbers can be called between 15 and 30 times, depending on the survey and whether a person was reached. Similarly, there are no strict guidelines for how many times an interviewer should visit a nonrespondent's home. Research using the ACS showed that the mean number of visits to achieve a final outcome code of a refusal or other noninterview is more than six visits while obtaining an interview took more than two visits (Zelenak, 2014).

Since the NSCG sample includes previous cycle nonrespondents, it is also important to consider the contact strategy for individuals who refused to complete the survey in the past. It is possible that no number of visits or phone calls would convert these nonrespondents. Therefore, it is important to know whether these additional contacts are worth the high cost. In the past, surveys typically attempted to achieve a certain response rate and then stop data collection. Recently, surveys have begun to focus more on data quality issues in their data collection decisions. As a result, a newer strategy is to stop data collection when the late responders no longer impact key survey estimates (Wagner and Raghunathan, 2010). This way interviewers and nonrespondents are not unnecessarily burdened and the survey can save money without unnecessarily impacting the survey estimates.

While we have seen that sample cases often need multiple contacts to motivate them to respond, the number and content of these contacts can also have a negative effect on response. Survey administrators need to balance maximizing response rates and overburdening sampled cases. Burden refers to the total time expended by the respondent to complete the survey (Graham, 2006). In addition to the time taken to actually take the survey, this burden also includes receiving the contacts, sorting through and reading mail materials, taking phone calls or listening to voicemails, and reading email messages. If these contacts are helpful and informative, they can increase response. However, if they provide the same information repeatedly, they can become frustrating and lead to feelings of harassment (Walker 2015; Griffin, 2014; Zelenak and Davis, 2013), which can lead to increased nonresponse.

This contact strategies research, in a general sense, aims to strike this balance between response and burden by determining the best way to contact sample cases, including contact mode, number of attempts, message content, and when additional contacts are no longer providing added value.

### **Proposed Contact Strategies for the 2017 NSCG Contact Strategies Experiment**

The 2017 NSCG contact strategies experiment proposes to test the following contact strategies to measure their effectiveness within the NSCG data collection effort:

- Using a revised mailout strategy and new survey contact materials;
- The inclusion of an infographic as a contact type; and
- Reducing the number of call attempts.

The sections below discuss the rationale for including these contact strategies as part of the experiment.

### **Revised Mailout Strategy and New Survey Contact Materials**

This section describes how we came to our decisions regarding the number of mailings, the timing of the mailings, and the type of mailing (letter, postcard, etc.).

#### *Number and timing of mailings*

The current NSCG contact strategy has 11 mail contacts for the new sample cases, 12 for the returning sample cases (including email). Invitations are sent periodically throughout the six-month data collection period with reminders coming one week after each invitation. Analysis of past NSCG response trends across the different contacts shows decreasing returns from each additional contact. We also see that the new sample cases receive the fourth reminder on week 13, just one week after the fourth invitation, while the returning sample does not receive any mailings for four weeks, yet the relative increase when the returning sample does receive its next mailing is no different. These findings suggests the mailings frequency could be reconsidered, especially since phone call efforts will still drive respondents to complete the survey online or by paper after the week 12 contacts.

Additionally, in focus groups and cognitive interviews, participants suggested they would cease opening the letters if they knew they were repeated requests. By reducing the number of contacts and spreading them out more, sample cases may be more likely to open the mailings. For the contact strategies experiment, we selected a base of eight contacts to allow a push at the beginning of the data collection effort and to stay salient to sampled cases throughout the data collection period without frustrating or overburdening them. Eight contacts allows us to make contact with sampled cases monthly, which when combined with the CATI operation seems sufficient.

Response rates are consistently higher for returning sample cases compared to new sample cases likely because these returning cases have already agreed to participate once, so they are more agreeable and invested in the survey than some new cases. Given the higher response rates among the returning sample, it does not make sense to provide them an additional contact compared to the new sample cases. Therefore, we recommend sending an additional mail contact to new sample cases.

Currently, the NSCG sends reminder emails to returning sample cases for which a valid email exists. Research suggests, however, that simultaneous reminders in multiple modes can be more effective at increasing response. Therefore, for the returning sample cases, for some weeks we are sending a reminder in the mail as well as an email. Cases that do not have a valid email will only receive the postal mail reminder.

### *Preferred mode*

In the past, the NSCG has honored respondents' mode choice for the subsequent survey cycle. This has resulted in multiple versions of the initial letter to include a questionnaire and an alert that a phone call will be coming. While we do not recommend ceasing to honor these choices, we have removed the telephone version of the initial letter for the contact strategies experiment. These cases will still receive an earlier phone call, but it does not seem necessary to create two additional letters (one for just telephone and one for telephone + incentive) when only a third of respondents who say they prefer to respond by phone actually do so. While this change likely will not have a tremendous impact on response, it will decrease the operational complexities of the data collection effort.

### *Type of mailing*

In his book, Dillman suggests each contact to a potential respondent should be unique. The current NSCG mailing strategy primarily uses white letter envelopes to contact sample cases. There is one postcard, one letter sent in a manila envelope, and one sent in a priority envelope. In focus groups, participants suggested they would remember the white envelope and while they would open it the first few times they received it, they would likely throw it away later because they know what the Census Bureau wants. By sending letters in various types of formats, we increase the chances sampled cases will continue to open the envelopes throughout the data collection cycle. Therefore, we recommend sending the following mail pieces:

- White letter envelope
- Manila letter envelope
- White envelope with perforation on 3 sides
- Postcard
- Tabbed postcard
- Priority envelope
- Larger white envelope (10 3/4" x 5 3/5" )

In cognitive interviews, participants felt the standard letter envelopes (white and manila), the perforated letter and the large envelope were the most noticeable and likely to be opened. Therefore, we recommend the first and last mailings use the manila envelope and the week 5 and 18 mailings the large envelope. None of the envelope types were disliked by the majority and each seemed to have benefits and drawbacks to different people. By using all the different mail pieces, we increase our chances of attracting people who may have ignored a standard letter or who lost the postcard, for example.

### *Content of mailing*

We evaluated the existing NSCG letters in four rounds of focus groups to see what prior respondents and potential sample cases thought of them. Several themes emerged across all the groups. The main takeaway was that the letters did not do a good job of explaining how the data collected in the NSCG are used and how the survey benefits communities or individuals. While the current letters do make statements concerning data uses, participants found them to be too vague. They requested specific and quantifiable examples so they could better understand how their response contributes to society. Another element that participants mentioned across all the groups was that the letters did not have a respond by date. The "respond within two weeks"

statement was viewed as not specific enough and not urgent. Participants also felt that the letters contained too much text and the block paragraph formatting was hard to read and most people would just skim it.

We focused on this feedback when redesigning the letters. To address the data uses and how participation benefits communities and the individual, we proposed wording that provides examples of the policies and programs the NSCG data help inform. Additionally, Dillman suggested that each contact provide new information. Therefore, in subsequent letters, we provide examples of how responding can help current workers and students, and we inform the sample cases that the results are publically available. While this information was available to some degree in the 2015 NSCG letters, it was buried at the end and most focus group participants did not notice it.

We also added a respond by date to the first two letters. This date is one and a half weeks from the mailing date, which focus group participants indicated was a good amount of time in that it gave them a few days but wasn't so far in the future it did not seem urgent. This time frame also allows us to send a reminder with the same date. Subsequent letters do not use a date and ask sample cases to "respond now" or "respond today" because we do not know the impact of changing the date or referring back to a past date. This is something we could consider testing in the future.

Finally, we reformatted the letters to provide more white space and text differentiation so sample cases are drawn to different parts of the letter. Specifically, we use a call out box for the call to action and bolding and bulleted lists to highlight important information. Cognitive interview participants found these features helped break up the letter so it was not an overwhelming block of text. Some still said they would skim the letters and may not read them in their entirety, but we hope the bolding will help the sample cases see the pertinent information.

### **Inclusion of an Infographic as a Contact Type**

For the returning sample, we propose sending an infographic that displays results from the 2015 NSCG prior to sending the invitation to respond to the 2017 NSCG. The purpose of sending the infographic is to thank the respondent for their contribution and highlight the utility of the data as well as the importance of their contribution. In focus groups and cognitive interviews, many participants wanted specific examples of the uses of the data to understand why their participation is important. This infographic provides a visual display of survey measures that we hope will pique the interest of past participants to make them more inclined to continue their participation in the 2017 cycle. For the new sample cases, the infographic will be included as part of the invitation to respond for the purpose of engaging them in the survey and helping them understand the nature of the survey.

### **Reducing the Number of Call Attempts**

We studied the 2015 NSCG data and simulated the effect of reducing the number of call attempts to examine the impact on response and costs. From this investigation, we have an understanding for the impact that would be felt if we reduced the number of call attempts while using current production contact materials. However, we are unsure if a similar impact would be felt if we were to use a reduced number of call attempts along with the new survey contact materials. With

this knowledge deficiency in mind, we propose testing the use of a call cutoff for the CATI operation as part of the experiment to examine if there is an interaction between the use of a call cutoff with the revised mailout strategy and new survey contact materials.

**2017 NSCG Contact Strategies Experimental Groups**

The examination of these three different contact strategies creates a total of eight experimental groups that will be included within this experiment as displayed in the following table.

**Table I.1. 2017 NSCG Contact Strategies Experimental Groups**

| <b>Contact Materials</b> | <b>Infographic</b> | <b>Call Attempt Reduction</b> | <b>Experimental Group</b> |
|--------------------------|--------------------|-------------------------------|---------------------------|
| New Materials            | Yes                | Yes                           | Treatment Group #1        |
|                          |                    | No                            | Treatment Group #2        |
|                          | No                 | Yes                           | Treatment Group #3        |
|                          |                    | No                            | Treatment Group #4        |
| Production               | Yes                | Yes                           | Treatment Group #5        |
|                          |                    | No                            | Treatment Group #6        |
|                          | No                 | Yes                           | Treatment Group #7        |
|                          |                    | No                            | Control Group             |

**Research Questions for the 2017 NSCG Contact Strategies Experiment**

The experimental groups allow for the evaluation of the following research questions.

1. What is the impact of the new materials compared to production? (*Treatment Group #4 (TG4) vs. Control Group (CG)*)
2. What is the impact of the infographic?
  - 2.1. On the new materials? (new materials + infographic vs. new materials) (*TG2 vs. TG4*)
  - 2.2. On production? (new materials + infographic vs. prod) (*TG6 vs. CG*)
3. What is the overall impact of reducing the number of call attempts?
  - 3.1. On the new materials? (new materials + call cut vs. new materials) (*TG3 vs. TG4*)
  - 3.2. On production? (new materials + call cut vs. prod) (*TG7 vs. CG*)
4. What is the impact of reducing the number of call attempts when an infographic is included?
  - 4.1. On the new materials with an infographic? (new materials + infographic + call cut vs. new materials + infographic) (*TG1 vs. TG2*)



- 4.2. On production with an infographic? (prod + infographic + call cut vs. prod + infographic) (*TG5 vs. TG6*)
5. What is the impact of the new materials with an infographic and call cut compared to production? (new materials + infographic + call cut vs. prod) (*TG1 vs. CG*)
6. What is the impact of the new materials with an infographic and call cut compared to production with an infographic and call cut? (new materials + infographic + call cut vs. prod + infographic + call cut) (*TG1 vs. TG5*)
7. What is the impact of the new materials with an infographic compared to production? (new materials + infographic vs. prod) (*TG2 vs. CG*)
8. What is the impact of the new materials and a call cut compared to production? (new materials + call cut vs. prod) (*TG3 vs. CG*)

### **Revised Mailout Strategy**

For this experiment, we are proposing the following revised mailout strategy. The first table provides the mailout strategy for the new sample cases and the second table provides the strategy for the returning sample cases.

**Table I.2. Contact Strategies Experiment – Mailout Strategy for the New Sample Cases**

| <b>Week</b> | <b>Mailing</b>                     | <b>Envelope</b>                | <b>Envelope Size</b> | <b>Letter Size</b>                             | <b>E-mail</b> |
|-------------|------------------------------------|--------------------------------|----------------------|--|---------------|
| 1           | Initial Invitation and infographic | Manila                         | 4 1/8" x 9 1/2"      | 8 1/2 x 11                                     | No            |
| 2           | Reminder 1                         | Tabbed Postcard                | 8 1/2" x 6"          | 8 1/2" x 6"                                    | No            |
| 5           | Reminder 2                         | ACS-style                      | 11 1/2" x 6"         | 10 3/4" x 5 3/5"<br>paper 90lbs<br>white index | No            |
| 6           | Reminder 3                         | Standard Postcard              | 4 1/4 x 6"           | 4 1/4 x 6"                                     | No            |
| 8           | Reminder 4/paper invitation        | White                          | 4 1/8" x 9 1/2"      | 8 1/2 x 11                                     | No            |
| 12          | Reminder 5                         | Perforated                     | 4 1/8" x 9 1/2"      | 8 1/2 x 11                                     | No            |
| 16          | Reminder 6                         | Tabbed Postcard                | 8 1/2" x 6"          | 8 1/2" x 6"                                    | No            |
| 20          | Reminder 7 or paper invitation     | ACS-style or brown or priority | 11 1/2" x 6"         | 10 3/4" x 5 3/5"<br>paper 90lbs<br>white index | No            |
| 23          | Last Chance                        | Manila                         | 4 1/8" x 9 1/2"      | 8 1/2 x 11                                     | No            |

**Table I.3. Contact Strategies Experiment – Mailout Strategy for the Returning Sample Cases**

| Week       | Mailing                        | Envelope                       | Envelope Size   | Letter Size                                    | E-mail                  |
|------------|--------------------------------|--------------------------------|-----------------|--|-------------------------|
| Pre-survey | Infographic                    | White                          | 4 1/8" x 9 1/2" | 8 1/2 x 11                                     | No                      |
| 1          | Initial Invitation             | Manila                         | 4 1/8" x 9 1/2" | 8 1/2 x 11                                     | No                      |
| 2          | Reminder 1                     | Tabbed Postcard                | 8 1/2" x 6"     | 8 1/2" x 6"                                    | No                      |
| 5          | Reminder 2                     | ACS-style                      | 11 1/2" x 6"    | 10 3/4" x 5 3/5"<br>paper 90lbs<br>white index | Both (email and letter) |
| 6          | Reminder 3                     | Standard Postcard              | 4 1/4 x 6"      | 4 1/4 x 6"                                     | Email only              |
| 8          | Reminder 4/paper invitation    | White                          | 4 1/8" x 9 1/2" | 8 1/2 x 11                                     | No                      |
| 12         | Reminder 5                     | Perforated                     | 4 1/8" x 9 1/2" | 8 1/2 x 11                                     | Both (email and letter) |
| 18         | Reminder 6 or paper invitation | ACS-style or brown or priority | 11 1/2" x 6"    | 10 3/4" x 5 3/5"<br>paper 90lbs<br>white index | No                      |
| 23         | Last Chance                    | Manila                         | 4 1/8" x 9 1/2" | 8 1/2 x 11                                     | Both (email and letter) |

**New Survey Contact Materials**

The remaining pages in this appendix include the draft contact materials proposed for use in the 2017 NSCG contact strategies experiment. Table I.4. provides a listing of the proposed materials and the corresponding page number within this appendix.

**Table I.4. New Survey Contact Materials**

| Contact Description  | Contact Filename | Page |
|--|------------------|------|
| Frequently Asked Questions (included on backside of all letters) | NSCG-CS-FAQ      | 11   |
| Week 1, Web Invite, New Sample                                   | NSCG-CS-NW01     | 12   |
| Week 1, Incentive Web Invite, New Sample                         | NSCG-CS-NIW01    | 13   |
| Week 1, Web Invite, Returning Sample                             | NSCG-CS-OW01     | 14   |
| Week 1, Incentive Web Invite, Returning Sample                   | NSCG-CS-OIW01    | 15   |
| Week 1, Mail and Web Invite, Returning Sample                    | NSCG-CS-OW01     | 16   |
| Week 1, Incentive Mail and Web Invite, Returning Sample          | NSCG-CS-OIW01    | 17   |
| Week 2 Reminder – Tabbed Postcard                                | NSCG-CS-W02      | 18   |
| Week 5 Reminder – ACS Style Flyer                                | NSCG-CS-W05      | 19   |
| Week 6 Reminder – Postcard                                       | NSCG-CS-W06      | 21   |
| Week 8 Reminder – Web Invite                                     | NSCG-CS-W08      | 22   |
| Week 8 Reminder – Questionnaire/Web Invite                       | NSCG-CS-MW08     | 23   |
| Week 12 Reminder – Perforated Envelope                           | NSCG-CS-W12      | 24   |
| Week 16 Reminder – New Sample Tabbed Postcard                    | NSCG-CS-W16      | 25   |
| Week 18 Reminder – Web Invite ACS Style Flyer                    | NSCG-CS-OW18     | 26   |

| <b>Contact Description</b>                                  | <b>Contact Filename</b> | <b>Page</b> |
|---|-------------------------|-------------|
| Week 18 Reminder – Questionnaire/Web Invite ACS Style Flyer | NSCG-CS-OMW18           | 28          |
| Week 20 Reminder – Web Invite ACS Style Flyer               | NSCG-CS-NW20            | 30          |
| Week 20 Reminder – Questionnaire/Web Invite ACS Style Flyer | NSCG-CS-NMW20           | 32          |
| Week 23 Reminder – Last Chance                              | NSCG-CS-W23             | 34          |
| NSCG Infographic  | NSCG-CS-INFO            | 35          |

# NATIONAL SURVEY OF COLLEGE GRADUATES

## FREQUENTLY ASKED QUESTIONS

### What is the National Survey of College Graduates?

Since the 1970s, the National Survey of College Graduates (NSCG) has been the most important source of information on the education and career paths of the nation's college-educated population. It is conducted by the U.S. Census Bureau on behalf of the National Science Foundation (NSF), an independent agency of the U.S. government that supports fundamental research and education.

### How is the information used?

The information you provide will be used to...

- Deliver important information about the education and career paths of college graduates,
- Study the relationship between education and career opportunities in the U.S.,
- Assist people in making education and career choices,
- Inform decisions about how to best use limited resources in the areas of research, education, and job training.

For other uses and more information, visit <http://www.census.gov/nscg>

### Why should I participate?

The success of this survey depends on your response. You were randomly selected to participate and you represent hundreds of other college-educated people in the U.S. We cannot replace you with another person because it would harm the quality of the data we collect. Your response is voluntary, and there are no penalties for not answering individual questions.

### Will my information be kept confidential?

Yes, your personal information and your responses to the survey are confidential. This survey is administered under the authority of the NSF Act of 1950, as amended. The U.S. Census Bureau is conducting this survey under the authority of Title 13, Section 8 of the United States Code. The U.S. Census Bureau and the NSF are required to keep all information about you strictly confidential under Title 13, Section 9 of the United States Code or the Confidentiality Information Protection and Statistical Efficiency Act of 2002. We use this information only for statistical purposes. Any U.S. Census Bureau or NSF employee who violate these provisions are subject to a fine up to \$250,000, a prison sentence up to five years, or both.

### How long will this survey take?

Although individual times may vary, the average time to complete the survey is about 30 minutes. Send comments regarding this burden estimate or any other aspects of this collection of information, including suggestions for reducing this burden, to the National Science Foundation, 4201 Wilson Blvd. Suite 295, Arlington, VA 22230, Attn: NSF Reports Clearance Officer.

### Additional information about the survey

Under 5 CFR 1320.5(b), an agency cannot conduct, sponsor, or require a response to a collection of information unless the collection displays a currently valid Office of Management and Budget (OMB) approval number. The OMB approval number for this survey is 3145-0141 and the expiration date is <DATE>.

[DATE]

Dear [FIRST NAME LAST NAME],

The U.S. Census Bureau and the National Science Foundation are dedicated to providing policy makers, you, and your community with the most comprehensive data on U.S. college graduates. To accomplish this, **we need your help**. Please complete the **2017 National Survey of College Graduates**, an important ongoing survey that has been conducted since the 1970s.

**Please respond by [DATE2] at <https://respond.census.gov/nscg>**

**Login ID:**

**Password:**

**By participating, college graduates like you can help:**

- Inform education and workforce initiatives, such as the America COMPETES Act, to improve our nation's standing in today's global economy
- Improve support for scholarship and fellowship opportunities, like the Graduate Research Fellowship Program, to help ensure the vitality and diversity of America's workforce

This national survey collects information on how people like you use their college education over time, especially as economic conditions change.

**The success of this survey depends on your participation;** we cannot substitute another college graduate for you. For more information, see the back of this letter for answers to frequently asked questions, email [nscg@census.gov](mailto:nscg@census.gov), or call toll-free, 1-888-262-5935 from 9 a.m. to 10 p.m. Eastern Time.

Thank you in advance for responding to this important national survey.

Sincerely,

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

NSCG-CS-NW01

[DATE]

Dear [FIRST NAME LAST NAME],

The U.S. Census Bureau and the National Science Foundation are dedicated to providing policy makers, you, and your community with the most comprehensive data on U.S. college graduates. To accomplish this, **we need your help**. Please complete the **2017 National Survey of College Graduates**, an important ongoing survey that has been conducted since the 1970s.

In appreciation of your participation, we have enclosed a \$30 debit card for you to use upon completion of the survey. Instructions for using the debit card are enclosed.

**Please respond by [DATE2] at <https://respond.census.gov/nscg>**

**Login ID:**

**Password:**

**By participating, college graduates like you can help:**

- Inform education and workforce initiatives, such as the America COMPETES Act, to improve our nation's standing in today's global economy
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This national survey collects information on how people like you use their college education over time, especially as economic conditions change.

**The success of this survey depends on your participation;** we cannot substitute another college graduate for you. For more information, see the back of this letter for answers to frequently asked questions, email [nscg@census.gov](mailto:nscg@census.gov), or call toll-free, 1-888-262-5935 from 9 a.m. to 10 p.m. Eastern Time.

Thank you in advance for responding to this important national survey.

Sincerely,

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

NSCG-CS-NIW01

[DATE]

Dear [FIRST NAME LAST NAME],

About two years ago, you participated in the 2015 National Survey of College Graduates. We thank you. Your responses help:

- Inform education and workforce initiatives, such as the America COMPETES Act, to improve our nation's standing in today's global economy
- Improve support for scholarship and fellowship opportunities, like the Graduate Research Fellowship Program, to help ensure the vitality and diversity of America's workforce

**It is now time for the 2017 National Survey of College Graduates. We are requesting your help** to continue to provide policy makers, you, and your community with the most comprehensive data available on U.S. college graduates.

**Respond by [DATE2] at <https://respond.census.gov/nscg>**

**Login ID:**

**Password:**

The success of this national survey still depends on your participation. **Your response is important even if your information has not changed.** Your continued participation allows us to investigate how social, technological, and economic events affect college-educated individuals over time. We cannot substitute another college graduate for you.

For more information, see the back of this letter for answers to frequently asked questions.

Still have questions?

- Email [nscg@census.gov](mailto:nscg@census.gov)
- Call, toll-free, at 1-888-262-5935 from 9 a.m. to 10 p.m. Eastern Time

Thank you in advance for your continued participation in this important national survey.

Sincerely,

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

NSCG-CS-OW01

[DATE]

Dear [FIRST NAME LAST NAME],

About two years ago, you participated in the 2015 National Survey of College Graduates. We thank you. Your responses help:

- Inform education and workforce initiatives, such as the America COMPETES Act, to improve our nation's standing in today's global economy
- Improve support for scholarship and fellowship opportunities, like the Graduate Research Fellowship Program, to help ensure the vitality and diversity of America's workforce

**It is now time for the 2017 National Survey of College Graduates. We are requesting your help** to continue to provide policy makers, you, and your community with the most comprehensive data available on U.S. college graduates.

In appreciation of your participation, we have enclosed a \$30 debit card for you to use upon completion of the survey. Instructions for using the debit card are enclosed.

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[DATE]

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**Respond by [DATE2] at <https://respond.census.gov/nscg>**

**Login ID:**

**Password:**

**If you prefer**, you may complete and mail back the enclosed paper questionnaire. Please return it by **[DATE 2]** in the provided postage-paid envelope.

The success of this national survey still depends on your participation. **Your response is important even if your information has not changed.** Your continued participation allows us to investigate how social, technological, and economic events affect college-educated individuals over time. We cannot substitute another college graduate for you.

For more information, see the back of this letter for answers to frequently asked questions.

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

[DATE]

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Thank you in advance for your continued participation in this important national survey.

Sincerely,

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

[DATE]

Dear [FIRST NAME LAST NAME],

Last week, we sent you a request to participate in the **2017 National Survey of College Graduates**. If you already completed the survey, thank you very much. If you have not responded, please use the secure website below to **complete the survey by [DATE2]**.

**Did you know**...that people who are employed in the same field they studied in college earn more, on average, than people who work in a different field than they studied? People can use information like this from the survey to help them make informed decisions about their education and occupation.

You were scientifically selected for this survey and your response is very important. For help or additional information, email [nscg@census.gov](mailto:nscg@census.gov) or call 1-888-262-5935 from 9 a.m. to 10 p.m. Eastern Time. Thank you in advance for responding to this important national survey.

Sincerely,

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

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### National Survey of College Graduates

- **Login ID:**
- **Password:**



## National Survey of College Graduates

Go to <https://respond.census.gov/nscg> to complete the 2017 National Survey of College Graduates online.

**Login ID:**

**Password:**

**See the other side of this card for more information.** If you need help or have any questions about this survey, call 1-888-262-5935 from 9 a.m. to 10 p.m. Eastern Time or send an email to [nscg@census.gov](mailto:nscg@census.gov).

## Second Reminder – Please respond today

Dear [FIRST NAME LAST NAME],

A few weeks ago, the U.S. Census Bureau contacted you to request your participation in the 2017 National Survey of College Graduates. If you have already completed the survey, we appreciate your help.

If you have not responded, **now is the time to do so**. Your individual response is critical to the success of this survey and provides valuable information to your community and your country.

For example, local governments and businesses use this data to better understand the skills available in the local workforce to help build the economy.

To respond online, go to: <https://respond.census.gov/nscg>

**Login ID:**

**Password:**

Thank you for your contribution to this valuable national survey.

Sincerely,

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

Recently, we sent you information requesting your participation in an important national survey. If you have already completed the survey, we thank you very much.

If you have not yet completed the survey, **please do so as soon as possible**. Your response is critical to the success of this survey. You were scientifically selected for this survey and your experiences are unique, so we cannot substitute anyone else for you.

If you need any help or have any questions, please call us between 9 a.m. and 10 p.m. Eastern Time on our toll-free number at 1-888-262-5935 or send an email to [nscg@census.gov](mailto:nscg@census.gov).

Sincerely,

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

NSCG-CS-W06

[DATE]

**Fourth Reminder  
Please respond now**

Dear [FIRST NAME LAST NAME],

Recently, we sent you several requests for your participation in the 2017 National Survey of College Graduates. **Your response is needed.** We are asking that you complete this survey because your participation is critical to its success. If you have already responded, thank you.

National results from this survey are publically available, allowing you and others to find information such as average salaries in over 28 fields and how they have changed over time. This can help inform the field of study for college students or career changes for professionals.

**Respond now at <https://respond.census.gov/nscg>**

**Login ID:**

**Password:**

**Your individual response is important**, even if you do not work, are retired, or work in a field that differs from that of your education or training.

For help or additional information, see the back of this letter for frequently asked questions, call the Census Bureau, toll-free, at 1-888-262-5935 from 9 a.m. to 10 p.m. Eastern Time, or send an email to [nscg@census.gov](mailto:nscg@census.gov).

Thank you for your contribution to this important national survey.

Sincerely,

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

NSCG-CS-W08

[DATE]

**Fourth Reminder  
Please respond now**

Dear [FIRST NAME LAST NAME],

Recently, we sent you several requests for your participation in the 2017 National Survey of College Graduates. **Your response is needed.** We are asking that you complete this survey because your participation is critical to its success. If you have already responded, thank you.

Combined results from this survey are publically available, allowing you and others to find information such as, average salaries in over 28 fields and how they have changed over time. This can help inform the field of study for college students or career changes for professionals.

**Please respond now by:**

- 1) **Going to <https://respond.census.gov/nscg> and entering your:**

**Login ID:**

**Password:**

**OR**

- 2) **Filling out the enclosed paper questionnaire and mailing it back in the provided postage-paid envelope**

**Your individual response is important**, even if you do not work, are retired, or work in a field that differs from that of your education or training.

For help or additional information, see the back of this letter for frequently asked questions, call the Census Bureau, toll-free, at 1-888-262-5935 from 9 a.m. to 10 p.m. Eastern Time, or send an email to [nscg@census.gov](mailto:nscg@census.gov).

Thank you for your contribution to this important national survey.

Sincerely,

John H. Thompson  
Director, U.S. Census Bure [DATE]

NSCG-CS-MW08



[DATE]

**Fifth Reminder  
Your response is critical**

Dear [FIRST NAME LAST NAME],

About four weeks ago, we asked you to complete the 2017 National Survey of College Graduates. **Your response is critical** and helps the U.S. government allocate resources to research and education programs for advancement opportunities for you and others in the U.S. If you have already responded, please accept our thanks.

**Respond today at <https://respond.census.gov/nscg>**

**Login ID:**

**Password:**

**Did you know...**your response can help determine how the U.S. compares to other countries in graduation rates in various fields? This can help identify areas for improvement in K-12 education and provide resources in these areas to make our country more competitive.

If we do not receive your response by **[DATE3]**, a Census Bureau representative may contact you.

**The success of this national survey depends on your participation.** We cannot substitute another college graduate for you. This survey helps policy makers and the public understand and quantify how people use their education as they age.

For additional Information:

- Email [nscg@census.gov](mailto:nscg@census.gov)
- Call, toll-free, at 1-888-262-5935 from 9 a.m. to 10 p.m. Eastern Time

Thank you in advance for your response.

Sincerely,

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

NSCG-CS-W12

[DATE]

Dear [FIRST NAME LAST NAME],

Over the past month we sent you several requests to participate in the 2017 National Survey of College Graduates. If you completed the survey, thank you very much. If you have not, **please take a moment to do so now.**

**Did you know...**researchers use data from the National Survey of College Graduates for many reasons, including to understand why people are leaving various fields, the relationship between field of degree and occupation, and how gender differences in various fields have changed over time?

For help or additional information, email [nscg@census.gov](mailto:nscg@census.gov) or call 1-888-262-5935 from 9 a.m. to 10 p.m. Eastern Time. Thank you in advance for responding to this important national survey.

Sincerely,

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

-----FOLD LINE-----



**National Survey of College Graduates**

Respond **now** at <https://respond.census.gov/nscg> and enter your:

- **Login ID:**
- **Password**



## National Survey of College Graduates

Go to <https://respond.census.gov/nscg> to complete the 2017 National Survey of College Graduates online.

**Login ID:**

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**See the other side of this card for more information.** If you need help or have any questions about this survey, call 1-888-262-5935 from 9 a.m. to 10 p.m. Eastern Time or send an email to [nscg@census.gov](mailto:nscg@census.gov).

## Sixth Reminder – We need your response

Dear [FIRST NAME LAST NAME],

The success of the 2017 National Survey of College Graduates depends on your help. The U.S. Census Bureau contacted you several times to request your participation in this important national survey that provides critical information on college graduates in the U.S. If you have already completed the survey, we thank you for your cooperation. If you have not responded, **please do so immediately**.

To respond online, go to: <https://respond.census.gov/nscg>

**Login ID:**

**Password:**

**Results from this survey show** that between 1993 and 2013, the percent of Bachelor's degree recipients who took work-related training for licensure or certification in the previous year increased by nearly 50%. This finding suggests that college graduates are increasingly looking for ways to improve their knowledge level and identify opportunities for promotion or advancement.

Thank you for your contribution to this valuable national survey.

Sincerely,

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



## National Survey of College Graduates

Go to <https://respond.census.gov/nscg> to complete the 2017 National Survey of College Graduates online.

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



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**Login ID:**

**Password:**

**See the other side of this card for more information.** If you need help or have any questions about this survey, call 1-888-262-5935 from 9 a.m. to 10 p.m. Eastern Time or send an email to [nscg@census.gov](mailto:nscg@census.gov).

## Seventh Reminder – We need your response

Dear [FIRST NAME LAST NAME],

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To respond online, go to: <https://respond.census.gov/nscg>

**Login ID:**

**Password:**

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





## National Survey of College Graduates

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Thank you for your contribution to this valuable national survey.

Sincerely,

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

[DATE]

**Final reminder  
Survey Closing Soon**

Dear [FIRST NAME LAST NAME],

The U.S. Census Bureau has sent you several requests, on behalf of the National Science Foundation, to participate in **the 2017 National Survey of College Graduates**. We know your time is valuable and we would greatly appreciate your participation to ensure that the survey results are accurate and representative.

This survey is the primary source of data about the educational outcomes of our nation's college-educated population. You were individually selected from millions of graduates in the United States to represent the college-educated population. We are counting on your help to ensure the highest quality data possible.

**Please respond at <https://respond.census.gov/nscg>**

**Login ID:**

**Password:**

The survey will be closing soon. **This is your last chance** to help policy makers, researchers, and the public better understand the impact of a college education.

For additional information:

- Email [nscg@census.gov](mailto:nscg@census.gov)
- Call, toll-free, at 1-888-262-5935 from 9 a.m. to 10 p.m. Eastern Time
- See the back of this letter for answers to frequently asked questions

Thank you for your contribution to this valuable national survey. If you have already completed the survey, please accept our appreciation.

Sincerely,

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

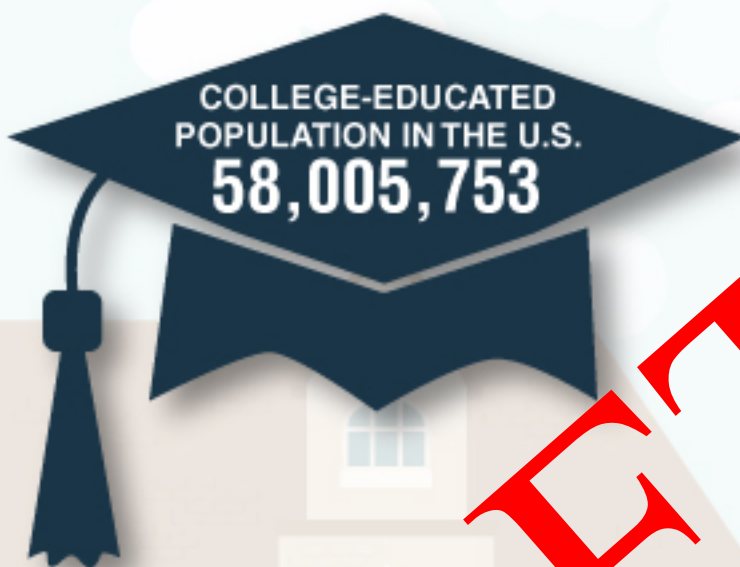
NSCG-CS-W23

# THANK YOU

for participating in the 2015 National Survey of College Graduates!

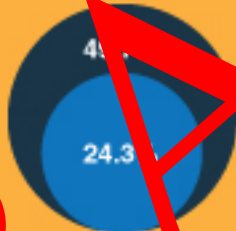
The National Survey of College Graduates is a valuable source of information about the college-educated population across the nation. The data you provide help us better understand changes in education and the workforce in the United States.

Here is a first look at some results.



Financial Aid  
Recipients for  
Bachelor's Degree

50.3% of college graduates did not borrow money to finance their undergraduate education



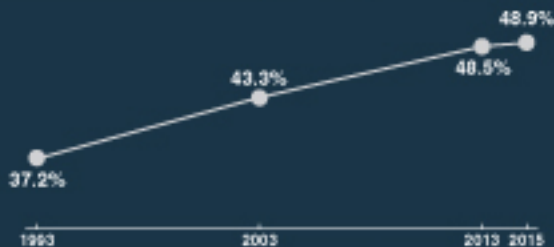
Borrowed money

Borrowed more than \$50,000



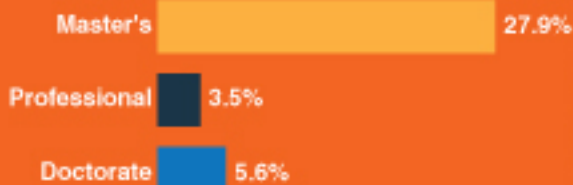
1<sup>st</sup> Generation  
College Graduates

This increase shows that younger generations have opportunities that were not available for previous generations



Pathways After  
Bachelor's Degree

39% had no further education beyond the Bachelor's degree level



Certificates &  
Licensure

36.9% of the total college-educated population with a work-related certification or license

The most common reasons for pursuing a certification or license was to improve skills or increase opportunities

For more results from the NSCG, visit <http://www.nsf.gov/statistics/srvygrads>.

