

Suggestions for improving response to the web/mail phase of data collection in the 2020 Census

For
**National Academies
Committee on National Statistics**

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By

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Initial reactions to the recent release of the 2020 Census Operational Plan

- This plan is being released much earlier than I recall this happening in either of the last two decades.
- I am impressed with many of the design features, including:
 - Emphasis on self-administration to reduce in-person enumeration.
 - Extensive use of internet responses for households that will respond in that way.
 - Using administrative records and 3rd party data to reengineer field operations.
- Until I saw details of this plan I was not optimistic that cost reductions could be realized.
- To achieve that goal, the self-enumeration methods need to work well, and that's where my comments today are focused.
- I think those methods can be improved beyond those used in 2015 and planned for 2016 tests.

Background for comments

- The comments I am making here draw on my experiences at the Census Bureau from 1991 until about 2005 helping to redesign forms and implementation strategies.
- They also draw upon my own research in trying to develop a web-push methodology for household surveys from about 2007.
- I appreciate the Census Bureau providing me access to forms and implementation procedures so I could prepare the comments that follow
- Shifting to a joint internet-mail implementation, requires undoing some procedures found quite effective in both 2000 and 2010.
- And, getting people to go from paper request to web response is significantly more difficult than getting only a paper response.

Previous research on improving Census self-administration response

- In the 1990's 16 factors were tested experimentally in an effort to improve response rates*.
- Only five of these factors significantly improved response rates.
 1. Respondent-friendly visual design
 2. Pre-notice letter
 3. Postcard thank-you reminder
 4. Replacement questionnaire
 5. Prominent disclosure on envelope (U.S. Census Form Enclosed: Your Response is required by law)
- Findings on the first four techniques were consistent with non-Census research
- The 5th effect had been demonstrated in two business survey experiments inside the Census Bureau.

*Dillman, Don A. 2000 Mail and Internet Surveys: The Tailored Design Method. John Wiley Co. New York. Pages 298-313.

The 11 factors that did not improve response rates significantly included:

(No significant effect)

6. Real stamp on return envelope (border line effect)
7. Prominent disclosure of benefits
8. Strong (vs. standard) confidentiality statement.
9. Invitation to respond by alternative mode, telephone vs. mail.
10. Additional reminder after thank you postcard
11. Color of questionnaire
12. Booklet vs. one-sheet format
13. Stapled vs. unstapled booklets

(Significant negative effect)

14. Difficult or objectionable questions.
15. Greater length (additional questions).
16. Marketing instead of a government, “official business” appeal.

A 1991 survey of why people did not respond to the 1990 Census was quite revealing

- The Census self-administered response process broke down in different places. Some people...
 - did not remember receiving the Census form.
 - received it, but did not open it.
 - opened it, but did not start to fill it out.
 - started to fill it out but did not finish.
 - completed the form, but did not send it back.
- This breakdown process has been demonstrated repeatedly in other studies; the Decennial Census is not an exception.
- The strength (and necessity) of multiple contacts is that each is an opportunity to get people started and/or finish responding, but each of them needs to add value.

Discussion of communications in The 2015 National Content Test

- The 2015 NCT could not use exactly the same appeal that might be used in the 2020 Census (e.g. getting an accurate count of population, reapportioning Congress, allocating funds), but the contact methods used here probably foreshadow the nature of the 2020 implementation procedures.
- The basic procedure for 2015 NCT was:
 - Mailing 1 - letter, instruction card, web request
 - Mailing 2 – postcard reminder
 - Mailing 3 – postcard reminder
 - Mailing 4 - letter, outgoing envelope, return envelope, other language one-page insert, paper census form
 - Mailing 5 – postcard reminder
- These procedures are probably not optimal for getting people through the completion process I have just described.

A Desirable Change from previous Censuses

Eliminating the pre-notice seems desirable.

There is no compelling reason to withhold response request until later.

But the total number of contacts is typically the strongest predictor of response rates. Thus, it's important not to remove pre-notice as a way of reducing the number of mailings.

However, response may be reduced by five potential problems

1. The messages in these five contacts are repeated over and over, often in the same words.
 - Respondents are told in four contacts,
 - “Respond on time to avoid a personal visit.”
 - “Avoid a personal visit”
 - “Respond today and you can avoid a personal visit.”
 - “An interviewer may visit you to complete the survey.”
 - Response is mandatory is stated 10 times in the five contacts .
 - Bold print in the messages is mostly reserved for:
 - Go to <https://survey.census.gov/censustest>
 - **You are required by law** messages
 - **Bold boxes** with mandatory messages
 - “Helps us conserve natural resources, process data more efficiently, and save taxpayer money by responding online” is repeated verbatim in three contacts

The negative aspects of repetition are increased by visual similarity of mailings

2. The mail contacts have visual similarity (packaging). That combined with repetitive content encourages the recipient NOT to look at and attend to each mailing.
 - Mailings 1 (online request) and 4 (paper and online request) arrive in the same size and format of envelope.
 - Postcards 2, 3 and 5 have same appearance and similar content (with only slight differences in wording).
3. The combined effect of limited space (postcards) and sameness of content tends to force-out offering new reasons for responding in later contacts to present additional reasons for responding to the Census.

For example, 1st postcard (2nd contact)

August 31, 2015



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

Dear Resident:

OMB No. 0607-0985: Approval Expires 06/30/2018

Last week, you should have received information about completing the 2015 National Content Test online. Your response is required by law. If you have already provided your information, thank you.

If you have not yet responded, please complete the survey online at:
<https://survey.census.gov/censustest>

Responding on time saves money, and you can avoid a personal visit from a Census Bureau interviewer. If you need help completing your survey, please call 1-866-226-2836 toll-free.

Sincerely,

A handwritten signature in black ink, appearing to read "John H. Thompson".

John H. Thompson
Director

2nd postcard (3rd contact)

September 7, 2015



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

Important Note: You are receiving this notice because we did not receive your response by September 1, 2015.

Dear Resident:

Within the last few weeks, the U.S. Census Bureau sent two requests for your participation in the 2015 National Content Test. Your response is important. If you have not yet responded, please do so.

Go to <https://survey.census.gov/censustest> to respond to the survey online.

You are required by U.S. law to respond to this survey. If you do not respond, a Census Bureau interviewer may visit you to complete the survey.

Help us conserve natural resources, process data more efficiently, and save taxpayer money by responding online. If you are unable to respond online, or need assistance, please call our toll-free number 1-866-226-2836.

Sincerely,

A handwritten signature in black ink, appearing to read "John H. Thompson".

John H. Thompson
Director

OMB No. 0607-0985: Approval Expires 06/30/2018

3rd postcard (5th contact); virtually the same as 2nd contact

September 21, 2015



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

Important Note: This survey is required by law. You are receiving this notice because we did not receive your response by September 14, 2015.

Dear Resident:

Over the past few weeks, the U.S. Census Bureau sent multiple invitations for your participation in the 2015 National Content Test. Your response is important. If you have not yet responded, please do so.

Go to <https://survey.census.gov/censustest> to respond to the survey online OR complete and return the paper questionnaire that we sent you earlier.

You are required by U.S. law to respond to this survey. If you do not respond, a Census Bureau interviewer may visit you to complete the survey.

Help us conserve natural resources, process data more efficiently, and save taxpayer money by responding online. If you are unable to respond online, or need assistance, please call our toll-free number 1-866-226-2836.

Sincerely,

A handwritten signature in black ink, appearing to read "John H. Thompson".

John H. Thompson
Director

OMB No. 0607-0985: Approval Expires 06/30/2018

The emphasis on choice in the 4th contact is also likely to lower response.

4. The 4th contact provided a 16 page paper questionnaire (32 in this test because of two languages. The cover letter asked explicitly for recipients to make a choice

If you have not responded, complete the survey using ONE of the following options:

Option 1

Go to **<https://survey.census.gov/censustest>** to complete the survey online. You will need to provide your 14-digit User ID, which is printed just below the barcode on the back of the enclosed form.

Option 2

Complete and mail back the enclosed form in the postage-paid envelope provided.

Respond today and you can avoid a personal visit from a Census Bureau interviewer. If you are unable to complete the survey online, or need assistance, please call our toll-free number 1-866-226-2836.

How Choice and negative incentives combine to decrease response

- Research has shown that offering choice and leaving it up to the respondent lowers total response; it makes the response decision more complex and also encourages a delay.
- This letter also focuses primarily on getting an online response, which is what all previous contacts did; doing that again has diminishing returns.
- Only one sentence mentions the new option (mail) and no reason for using mail is offered.
- Arrival of this mailing with the paper questionnaire will come as a surprise to some people who have already concluded they could not or would not respond online, the only option mentioned in the first three contacts. That adds “frustration” to the list of negative appeals.
- There is considerable incentive being built into this sequence of mailings not to respond.

Many smaller problems could be reduced

5. There are a number of other design characteristics that could also be changed in positive ways, Here are a few of them:
 - No mention that one person is being asked to respond by Internet for everyone living or staying in the house, apartment or mobile home.
 - Language and location of instruction (at bottom of card) for entering ID number is not in natural reading order. Better connectivity would also be helpful.
 - First postcard does not indicate that the respondent needs to have the address on the other side of the postcard when starting to respond on a computer.
 - I am uneasy with divided page English/Spanish letters because of brochure-look and limited space for explaining Census.
 - Some visual design features on the paper questionnaire (e.g first page layout, unexplained length, location of headings) that could be improved.

Five suggestions for revising the mail-outs

A. Change format for some of the mail-out pieces to get recipients to attend to them.

- Mailing 1 - Keep current letter format and envelope
- Mailing 2 –Keep postcard format
- **Mailing 3 – Send letter in different kind of envelope (for contrast)**
- **Mailing 4 – Send Letter with questionnaire as a “flat” for contrast with first mailing.**
- **Mailing 5 – Final postcard that emphasizes last opportunity prior to in-person enumeration need for completing the count.**
- Major goal is to get recipients to attend to each mail-out and read the contents. Content changes are also important.

Eliminate un-friendly features and add new explanations

B. Change content of communications significantly.

- Reduce heavy repetition of negative messages.
- Tell people in first contact that a paper Census Form will be sent later and the reason.
- Provide additional information on why the Census is important—e.g. the Constitutional requirement and how results are used.
- Explain reasons for online reporting with different reasons instead of the “stock” sentence on conserving resources.
- Use additional letter space to appeal in different ways for a response.

Why is the paper form being sent?

- C. Decide purpose of 4th contact. Is it only to keep most responses to the Internet, or is it to maximize total self-enumeration?
- D. Pushing once more to the Internet, as now done, ignores what's new in this contact. Make this mailing useful to all recipients. What if you did something like this?

“I am sending a paper Census form in hopes that this will make it easier for you to respond. Just return your completed form using the enclosed envelope.... If you want to respond online, but have not yet had time to do that, we hope that being able to see the kind of questions asked in the Census will be helpful.... Regardless of which of these ways that you respond, it will reduce the need for us to contact you in-person.”

Why is the paper form being sent?

D. (continued)

- Seeing the questionnaire may be helpful in getting complex households to respond, where people are less likely to know full ethnicity or race, exact ages and birthdays, etc. of roommates.
- Speak positively and with encouragement to those inclined to respond by mail as well as those inclined to respond by web.
- Rework the final postcard to connect better with field enumeration (a postcard “thankyou/reminder” has consistently been shown to encourage return of additional paper questionnaires sent a week earlier).

Will web and mail answers to the Census Form be the same?

- E. Considerable research shows Internet and mail questionnaires are likely to obtain similar measurement if
 - Similar question structures (wordings) are asked
 - Same question order is used
 - Similar visual layouts are used.

Currently, several differences exist between the internet and mail forms that are likely to produce different answers.

How the web and mail construction differ

- Instructions and Question order. The paper form starts with “who to include”, goes to number of people, additional people, own vs. rent, telephone number, and then proceeds one person at a time.
- Internet starts with log-in, address and contact information leading into asking for a roster of who lives or stays at this address, additional people, own vs. rent, relationship of other people to respondent, each person’s sex, each person’s age, each person’s race, etc.
- I am not sure whether the difference in order and formats for these particular questionnaires will produce differences or not, but careful testing is needed.

For example, some individual questions are different, e.g. the race wording and sequence

- The Paper question asks:

What is Person 1's race?

*Mark all boxes that apply **AND** print ethnicities in the spaces below.
Note, you may report more than one group.*

White – *Print, for example, German, Irish, English, Italian, Polish, French, etc.* ↴

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The internet question breaks into two steps, and will probably get more race categories mentioned.

Which categories describe Don Andrew Dillman? [\(Help\)](#)

Select all boxes that apply.

Note, you may report more than one group.

White

For example, German, Irish, English, Italian, Polish, French, etc.

Next, we will collect detailed information for each category selected.

You said that Don Andrew Dillman is:

White

What are Don Andrew Dillman's specific **White** categories? — Select all boxes that apply and/or enter categories in the space below.

Note, you may report more than one group. [\(Help\)](#)

- German
- Irish
- English
- Italian
- Polish
- French

Enter, for example, Scottish, Norwegian, Dutch, etc.

Additional census form observations

- In general the Internet construction is excellent!
- However, it is essential to know whether differences in the provided information, question order, and question wordings produce different answers to some questions.

Conclusions

- I am enthusiastic about the 2020 Census operational plans and optimistic about the potential for reducing costs.
- My comments have focused only on implementation strategies for the self-administration phase, which I believe can be improved.
- Doing so should reduce the burden for later follow-up by increasing self-administered response rates to help reduce follow-up costs.
- I also think it's possible, between now and 2020, to make the kinds of changes I have discussed.

**Thank you for the opportunity to
comment on plans for the 2020
Census.**

Questions or comments on this
presentation are welcomed.

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