Mandatory Messaging in the American Community Survey

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Any views expressed are those of the author(s) and not necessarily those of the U.S. Census Bureau.
American Community Survey (ACS) Background

- Monthly survey sent to 3.5 million addresses per year to collect population and housing data
- Mandatory survey
- 3-month multi-mode sequential data collection for each monthly panel
  - Month 1: Self-response (Internet and Mail)
  - Month 2: Telephone interviews with non-respondents (CATI)
  - Month 3: In-person interviews with a sample of non-respondents (CAPI)
ACS Sample Background

- Annual sample, split into 12 monthly panels of approximately 295,000 addresses
- Each month’s sample is further subdivided into 24 equally representative groups of 12,000 addresses
  - Allows testing to be conducted using production sample
Issue to Address

- We are required by law to inform respondents that the survey is mandatory.
- However, respondents and stakeholders of the ACS have expressed concerns about the prominent nature of mandatory messages on the mail materials.
- Conducted two tests to study the impact of reducing the prevalence of mandatory messages on the ACS.
Research Questions

- Test 1: What is the impact on response rates of removing the mandatory message from the envelopes for the ACS?
- Test 2: What is the impact on response of modifying mandatory messages in the mail materials for the ACS?
Previous Research

- 1993 National Census Test
  - Compared envelopes that included the phrase “Your Response Is Required by Law” to envelopes without the phrase
  - Difference in mail response rate of 9.2 percentage points (statistically significant)

- 2013 Messaging and Mail Package Assessment Research
  - Focus groups and one-on-one interviews
  - “Required by Law” single most effective message
  - Most participants said mandatory messaging would motivate them to respond
  - Some bristled at the messaging
## ACS Mail Strategy - May

<table>
<thead>
<tr>
<th>Mailout</th>
<th>Description of Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Notice Letter</td>
<td>Letter excludes mandatory language</td>
</tr>
<tr>
<td></td>
<td>Multi-Lingual Informational Brochure includes mandatory language</td>
</tr>
<tr>
<td>Initial Mailing Package</td>
<td>Letter and FAQ Brochure include mandatory language</td>
</tr>
<tr>
<td></td>
<td>Internet Instruction Card excludes mandatory language</td>
</tr>
<tr>
<td>First Reminder Postcard</td>
<td>Excludes mandatory language</td>
</tr>
<tr>
<td>Paper Questionnaire Package</td>
<td>Letter, FAQ Brochure, and Instruction Guide include mandatory language</td>
</tr>
<tr>
<td></td>
<td>Paper Questionnaire, Return Envelope, and Internet Instruction Card exclude mandatory language</td>
</tr>
<tr>
<td>Second Reminder Postcard</td>
<td>Includes mandatory language</td>
</tr>
<tr>
<td>Additional Postcard</td>
<td>Includes mandatory language</td>
</tr>
</tbody>
</table>
Test 1: Envelope Mandatory Messaging Test

What is the impact on response rates of removing the mandatory message from the envelopes for the ACS?
Envelope Mandatory Messaging Test

- Goal: Study impact of removing mandatory message from envelopes
- Conducted in May 2015
- Treatment 1: Control Materials with Mandatory Message on Envelopes
- Treatment 2: Mandatory Message Removed from Envelopes
- Sample Size: 24,000 addresses in each treatment
Mandatory Message on Control- Initial Envelopes

The American Community Survey

YOUR RESPONSE IS REQUIRED BY LAW
Experimental - Initial Envelopes
Mandatory Message on Control – Mail Package Envelopes
Experimental – Mail Package Envelopes

The American Community Survey Form Enclosed
# Envelope Mandatory Messaging Test Results

## Total Self-Response Return Rates (Internet & Mail combined)

<table>
<thead>
<tr>
<th>Point in Data Collection Cycle</th>
<th>Control (Includes Mandatory)</th>
<th>Test (Removed Mandatory)</th>
<th>Difference</th>
<th>Significant?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before First Reminder Postcard</td>
<td>3.0 (0.2)</td>
<td>2.6 (0.1)</td>
<td>0.4 (0.2)</td>
<td>Yes</td>
</tr>
<tr>
<td>Before Paper Questionnaire Package</td>
<td>22.6 (0.4)</td>
<td>18.7 (0.3)</td>
<td>3.9 (0.5)</td>
<td>Yes</td>
</tr>
<tr>
<td>Before CATI</td>
<td>42.5 (0.5)</td>
<td>37.1 (0.4)</td>
<td>5.4 (0.5)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

- Standard errors in parentheses.
- Return Rates exclude Undeliverable as Addressed (UAAs) but include out-of-scope address in the universe.
- Comparisons of Internet response and Mail response were also significant at the alpha=0.1 level.
## Envelope Mandatory Messaging Test Results

### Final Response Rate

<table>
<thead>
<tr>
<th></th>
<th>Control (Includes Mandatory)</th>
<th>Test (Removed Mandatory)</th>
<th>Difference</th>
<th>Significant?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Overall Response</td>
<td>96.3(^*) (0.3)</td>
<td>95.6(^*) (0.3)</td>
<td>0.7 (0.3)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Distribution of Final Response by Mode

<table>
<thead>
<tr>
<th>Mode</th>
<th>Control (Includes Mandatory)</th>
<th>Test (Removed Mandatory)</th>
<th>Difference</th>
<th>Significant?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet</td>
<td>35.7 (0.5)</td>
<td>32.7 (0.4)</td>
<td>3.0 (0.7)</td>
<td>Yes</td>
</tr>
<tr>
<td>Mail</td>
<td>23.8 (0.4)</td>
<td>21.3 (0.4)</td>
<td>2.5 (0.6)</td>
<td>Yes</td>
</tr>
<tr>
<td>CATI</td>
<td>3.8 (0.2)</td>
<td>4.7 (0.2)</td>
<td>-0.9 (0.2)</td>
<td>Yes</td>
</tr>
<tr>
<td>CAPI</td>
<td>33.1 (0.6)</td>
<td>36.8 (0.6)</td>
<td>-3.7 (0.8)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

- *Rates may not sum to total due to rounding.
- Standard error in parentheses.
- Partial interviews and vacant units are included as responses.
Envelope Mandatory Messaging Test Results

- Because the self-response rate in the test treatment was lower, additional paper questionnaires were mailed to nonrespondents, and the CATI and CAPI workloads were higher than the control panel.

- So, while the overall response rate drop of 0.7 percentages point might not seem to be large, it is estimated that cost impact of eliminating mandatory messages from the envelopes would increase the cost of the ACS by $9.5 million, annually.
Test 2: Additional Mandatory Messaging Test

What is the impact on response of modifying mandatory messages in the mail materials for the ACS?
## ACS Mail Strategy - September

<table>
<thead>
<tr>
<th>Mailout</th>
<th>Description of Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Notice Letter</td>
<td>NOT SENT</td>
</tr>
</tbody>
</table>
| Initial Mailing Package         | Letter, Multi-Lingual Brochure, and FAQ Brochure include mandatory language  
                                 | Internet Instruction Card excludes mandatory language             |
| First Reminder Letter           | **Includes** mandatory language                                      |
| Paper Questionnaire Package     | Letter, FAQ Brochure, and Instruction Guide include mandatory language  
                                 | Paper Questionnaire, Return Envelope, and Internet Instruction Card exclude mandatory language. |
| Second Reminder Postcard        | **Includes** mandatory language                                      |
| Additional Postcard             | **Includes** mandatory language                                      |
Additional Mandatory Messaging Test

- **Goal:** Study impact of removing or modifying mandatory message from broader set of mail materials
- **Conducted in September 2015**
- **5 Treatments** tested softening or removing mandatory messaging and tested a revised design
- **Sample Size:** 12,000 addresses in each treatment
Additional Mandatory Messaging Test Treatments

- Control
  - No change to materials

- Softened Control
  - Mandatory removed from initial letter, mail package letter, postcards, and envelopes
  - Mandatory kept in FAQ brochure, reminder letter, instruction guide
Additional Mandatory Messaging
Test Treatments (Con’t)

- Revised Design
  - Redesigned envelopes, use of bold lettering, highlight boxes, “Open Immediately”
  - Strong mandatory language
- Softened Revised Design
  - Revised design used
  - Mandatory Removed from postcards and envelopes
  - Mandatory Softened in letters (plain text)
- Minimal Revised Design
  - Revised design used
  - Mandatory removed in all materials except initial letter
  - Mandatory in initial letter on back of page, in small font
Softened Control Envelope

The American Community Survey

YOUR RESPONSE IS IMPORTANT TO YOUR COMMUNITY

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

• Bold text
• Box around the internet URL
• Bulleted lists
• Census Bureau logo
• Text that appeals to the respondent’s sense of community
Minimal Revised Design Letter

- This design includes the revised design features.
- Mandatory messaging is on the back of the letter in small font (below).
Additional Mandatory Messaging Test

- Field work concluded in December.
- Results indicated that reducing the frequency and visibility of mandatory messages reduces response rates.
Conclusions

- Removing the Mandatory Messaging from ACS envelopes reduces self-response rates, resulting in a reduction in overall response rates.
- Reducing the frequency and visibility of mandatory messages in the mail materials reduces response rates.
- Revisions to the design of the mail materials had a positive impact on response.
Report References

- Preliminary Results of the Envelope Mandatory Messaging Test are available here (final results forthcoming): [http://www.census.gov/library/working-papers/2015/acs/2015_Barth_01.html](http://www.census.gov/library/working-papers/2015/acs/2015_Barth_01.html)

- Results of the Additional Mandatory Messaging Test are available here: [http://www.census.gov/library/working-papers/2016/acs/2016_Oliver_01.html](http://www.census.gov/library/working-papers/2016/acs/2016_Oliver_01.html)