2018 End-to-End Census Test Update

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2018 End-to-End Census Test
Operational Scope
2018 End-to-End Census Test: Self-Response

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2018 End-to-End Census Test: Self-Response

Agenda

• 2018 End-to-End Census Test Operational Testing
• 2018 End-to-End Census Test Mail Strategy and Sample
• 2018 End-to-End Census Test Results
  – Self-Response Overview
  – Self-Response by Mode and Panel
  – Self-Response by Mode Over Time
  – Census Questionnaire Assistance
• United States Postal Service (USPS) Partnership
• Moving from the 2018 End-to-End Census Test to the 2020 Census
2018 End-to-End Census Test: Self Response
Operational Testing in 2018

Internet Self-Response
• Utilized ECaSE platform
• Languages available: English and Spanish

Census Questionnaire Assistance
• Utilized Census Questionnaire Assistance contracted solution
• Interactive Voice Response (IVR) system active
• Live agents taking responses by phone
• Languages supported: English, Spanish, Chinese (Mandarin, Cantonese), Vietnamese, Korean, Russian, and Arabic

Paper Data Capture
• Utilized updated scanning equipment
• Refined operational design
• Refined paper control processes

Forms Printing and Distribution
• Refined print/mail and quality control procedures
# 2018 End-to-End Census Test

## Self-Response Mail Strategy

### Self-Response
- Self-response contact strategy: two-panel design
- ~277k housing units in sample
  - ~195k (70.3 percent) Internet First (invitation letter on first contact)
  - ~82k (29.7 percent) Internet Choice (questionnaire on first contact)
- Languages: English and bilingual (English/Spanish)
  - ~200k English
  - ~76k Bilingual (English/Spanish)

<table>
<thead>
<tr>
<th>Panel</th>
<th>Cohort</th>
<th>Mailing 1 Letter (Internet First) or Letter + Questionnaire (Internet Choice)</th>
<th>Mailing 2 Letter</th>
<th>Mailing 3* Postcard</th>
<th>Mailing 4* Letter + Questionnaire</th>
<th>Mailing 5* “It’s not too late” Postcard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Volumes</td>
<td>All</td>
<td>276,589</td>
<td>276,589</td>
<td>250,140</td>
<td>198,924</td>
<td>187,467</td>
</tr>
<tr>
<td>Internet First</td>
<td>1</td>
<td>March 16, 2018</td>
<td>March 20, 2018</td>
<td>March 30, 2018</td>
<td>April 12, 2018</td>
<td>April 23, 2018</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>March 20, 2018</td>
<td>March 23, 2018</td>
<td>April 3, 2018</td>
<td>April 16, 2018</td>
<td>April 26, 2018</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>March 23, 2018</td>
<td>March 27, 2018</td>
<td>April 6, 2018</td>
<td>April 19, 2018</td>
<td>April 30, 2018</td>
</tr>
<tr>
<td>Internet Choice</td>
<td>N/A</td>
<td>March 16, 2018</td>
<td>March 20, 2018</td>
<td>March 30, 2018</td>
<td>April 12, 2018</td>
<td>April 23, 2018</td>
</tr>
</tbody>
</table>

(*) Targeted only to nonrespondents

Dates in the table below are in-home dates.
Periodic Performance Management Reports
2018 End-to-End Census Test: Self-Response of Housing Units

Self-Response of Housing Units

Status:
- On Track

Data current as of:
- August 2, 2018

Completion Date:
- August 31, 2018

Notes:
- Self-Response (TEA 1) began March 16, 2018.
- Update Leave (TEA 2) began April 9, 2018.
- Internet and phone self-response operations ended July 31, 2018.
- The Response Rate is calculated using the number of responding households (unduplicated responses), which is 144,560.
- The initial housing unit workload in the Update Leave TEA was 1,799.

Response by Mode

<table>
<thead>
<tr>
<th>Mode</th>
<th>Self-Response (TEA 1)</th>
<th>Update Leave (TEA 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Response Volume</td>
<td>Percent of TEA 1 Total Responses</td>
</tr>
<tr>
<td>Internet</td>
<td>90,116</td>
<td>61.2%</td>
</tr>
<tr>
<td>Phone</td>
<td>10,989</td>
<td>7.5%</td>
</tr>
<tr>
<td>Paper</td>
<td>46,161</td>
<td>31.3%</td>
</tr>
</tbody>
</table>

## 2018 End-to-End Census Test

Preliminary Self-Response by Panel and Mode as of August 2, 2018*

### Response by Panel and Mode

<table>
<thead>
<tr>
<th></th>
<th>TOTAL, BOTH PANELS</th>
<th>INTERNET FIRST PANEL</th>
<th>INTERNET CHOICE PANEL</th>
<th>2018 PROJECTION</th>
<th>2020 PROJECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Response Volume</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Responses</td>
<td>147,266</td>
<td>112,094</td>
<td>35,172</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Internet</td>
<td>90,116</td>
<td>78,219</td>
<td>11,897</td>
<td>61.2%</td>
<td>33.8%</td>
</tr>
<tr>
<td>Phone</td>
<td>10,989</td>
<td>9,216</td>
<td>1,773</td>
<td>7.5%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Paper</td>
<td>46,161</td>
<td>24,659</td>
<td>21,502</td>
<td>31.3%</td>
<td>61.1%</td>
</tr>
<tr>
<td><strong>Percent of TEA 1 Total Responses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Responses</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Internet</td>
<td>61.2%</td>
<td>69.8%</td>
<td>33.8%</td>
<td>61.2%</td>
<td>59.2%</td>
</tr>
<tr>
<td>Phone</td>
<td>7.5%</td>
<td>8.2%</td>
<td>5.0%</td>
<td>7.5%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Paper</td>
<td>31.3%</td>
<td>22.0%</td>
<td>61.1%</td>
<td>31.3%</td>
<td>18.5%</td>
</tr>
</tbody>
</table>

*Self-response type of enumeration area (TEA 1) only.
2018 End-to-End Census Test
Preliminary Self-Response by Mode as of August 2, 2018*

*Self-response type of enumeration area (TEA1) only.
Inbound Calls Status

Status: Completed

Data current as of: August 2, 2018

Completion Date: July 31, 2018

Notes:
The deflection rate is the percentage of the calls that are resolved by an automated Interactive Voice Response function and do not require speaking with a customer service representative.

Total Call Volume by Language

<table>
<thead>
<tr>
<th>Other Languages</th>
<th>Total Call Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese-Cantonese</td>
<td>13</td>
</tr>
<tr>
<td>Chinese-Mandarin</td>
<td>32</td>
</tr>
<tr>
<td>Korean</td>
<td>16</td>
</tr>
<tr>
<td>Arabic</td>
<td>20</td>
</tr>
<tr>
<td>Russian</td>
<td>24</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>11</td>
</tr>
<tr>
<td>Tagalog</td>
<td>17</td>
</tr>
</tbody>
</table>

English: 92.4%  
Spanish: 6.5%  
Other: 1.1%

Key Performance Metrics

<table>
<thead>
<tr>
<th></th>
<th>Planned</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call Volume</td>
<td>20,705</td>
<td>19,241</td>
</tr>
<tr>
<td>Deflection Rate</td>
<td>30.0%</td>
<td>25.90%</td>
</tr>
<tr>
<td>Service Level – 30 Seconds</td>
<td>80%</td>
<td>99.0%</td>
</tr>
<tr>
<td>Avg. Handle Time</td>
<td>9:45</td>
<td>11:28</td>
</tr>
</tbody>
</table>

Source: Daily Briefing Report: Census Questionnaire Assistance
Periodic Performance Management Reports
2018 End-to-End Census Test: USPS Partnership Kiosks and Informed Delivery

USPS Partnership Kiosks
and Informed Delivery

Status: Completed

Data current as of: July 31, 2018

Completion Date: July 31, 2018

Notes:
• Kiosks were installed on April 2, 2018.
• 30 of the 33 Post Offices in Providence County, RI had Kiosks.
• 27 of the 30 participating Post Offices generated Kiosk activity.
• Informed Delivery outreach started March 16, 2018.
• There are ≈15,000 Informed Delivery subscribers in Providence, RI.

Source: USPS + Census Partnership: 2018 Census Test Report
2020 Census
Self-Response: Moving from the 2018 End-to-End Census Test to the 2020 Census

• Internet Self-Response (ISR)
  – Add languages to the ISR instrument, expanding to 13 total languages (English, Spanish, Chinese, Vietnamese, Korean, Russian, Arabic, Tagalog, Polish, French, Haitian Creole, Portuguese, Japanese)

• Census Questionnaire Assistance (CQA)
  – Expand required language support to 13 total languages
  – Determine locations of commercial contact center facilities

• Paper Data Capture (PDC)
  – Open two Paper Data Capture Centers (East and West)

• Forms Printing and Distribution (FPD)
  – Create connection between the Census Bureau and the print vendor for the transmission of address files
  – Automate collection and transmission of in-plant quality control records
QUESTIONS?
2018 End-to-End Census Test: Nonresponse Followup

Jennifer W. Reichert
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2018 End-to-End Census Test: Nonresponse Followup

Agenda

• Objectives for 2018 End-to-End Census Test
• Nonresponse Followup Workload
• Performance Reports
• Successes
• Administrative Record Modeling
• Getting from the 2018 End-to-End Census Test to the 2020 Census
Objectives

- Use of automated systems for recruiting, hiring, training, enumeration, and payroll
- Use of Administrative Records to reduce the NRFU workload
  - Vacant/Delete
  - Occupied

2018 End-to-End Census Test Nonresponse Followup
2018 End-to-End Census Test
Nonresponse Followup Workload

Field Data Collection

NRFU Universe

Nonresponding Addresses after multiple attempts for self-response (146,903 Cases)

Administrative Records Vacant/Delete (7,308 Net Removals)

Administrative Records Occupied (32,577 Cases Removed)

Selected NRFU Reinterview cases

Late self responses (14,309 Responses)

Completed cases

Reverse Check-ins
Field Verification (151 Cases)
Spring Delivery Sequence File
Geocoding Resolution

Completed telephone cases

Telephone Data Collection
Periodic Performance Management Reports
2018 End-to-End Census Test: Nonresponse Followup Progress

Nonresponse Followup Progress

Status:
- On Track

Data current as of:
August 2, 2018

Completion Date:
NRFU production and NRFU RI ended on 7/31.

Notes:
- NRFU RI began on 6/1
- As of 7/17, NRFU RI cases are no longer being sent for field enumeration
- The number of actual closed cases begins to fluctuate as cases are reopened during the final attempt phase of the operation

Cases Closed by Self-Response: 14,309
Remaining Workload: 0

Case Progress for Field Enumeration

![Graph showing case progress over time]

- Current Workload: 154,536
- Planned Closed Cases: 154,536
- Actual Closed Cases: 154,536

Projected vs Actual Total Cost

![Graph showing projected vs actual total cost]

- Total Budget: $11,431,601
- Planned Cost: $11,431,601
- Actual Cost: $3,511,800

Source: MOJO Optimizer

Source: Unified Tracking System
2018 End-to-End Census Test
Nonresponse Followup

Successes

• Automated recruiting, hiring, and training
• Deployed user-friendly enumeration instrument
• Implemented reengineered staffing and management structure
  – Streamlined staffing levels
  – No more face-to-face meeting requirements
• Optimized case assignments and routing
• Used administrative records data to reduce NRFU workload
2018 End-to-End Census Test
Nonresponse Followup

Administrative Records Modeling

• Vacant/Delete Housing Units – removed prior to any NRFU contacts
  – 10,862 Total Housing Units
    • 9,805 vacant housing units
    • 1,057 deleted housing units
  – 3,554 Cases returned to NRFU due to no UAA

• Occupied Housing Units – removed after one NRFU contact
  – 32,577 Total Housing Units
    • Phase 1 Modeling (May) – 31,896 housing units
    • Phase 2 Modeling (June) – 681 housing units (may have received >1 contact)
2018 End-to-End Census Test
Nonresponse Followup: Getting from the 2018 End-to-End Census Test to the 2020 Census

2018 Issues and Challenges:

• Automated training issues – clearing enumerators from training to production
• iPhone – touchscreen challenges (need for styluses)
• Notice of Visit – need hard surface
• Proxy path – looping, enumerator/respondent burden
• Alerts – determine most appropriate triggers and criteria
2018 End-to-End Census Test
Nonresponse Followup: Getting from the 2018 End-to-End Census Test to the 2020 Census

- Browse Living Quarters
- Mapping Application
- In-field Adds
- Dangerous Addresses Database
- New work availability functionality (submitting multiple time slots in a day)
- Stop/restart an operation
- Releasing child cases the day of the MV (after 4pm and on weekends)
- Additional reports (FOCS and UTS) for monitoring the operation
- PR adaptations and updates
- Early NRFU
- Addition of response recollect cases and other supplemental workloads (i.e., LUCA appeals, new construction, etc.)
QUESTIONS?
2020 Group Quarters Data Collection

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Decennial Census Management Division
2020 Group Quarters Data Collection

Agenda

• What are Group Quarters?
• Group Quarters Objective
• Status of the 2018 End-to-End Census Test
2020 Group Quarters Data Collection

What are Group Quarters?

A group quarters is a place where people live or stay, in a group living arrangement, that is owned or managed by an entity or organization providing housing and/or services for the residents. This is not a typical household type living arrangement. People living in group quarters are usually not related to each other. Examples are -

- Correctional Facilities for Adults
- Correctional Facilities for Juveniles
- Nursing/Skilled Nursing Facilities
- College/University Student Housing
- Group Homes for Adults
- Residential Treatment Centers
- Military Barracks
- Emergency and Transitional Shelters
- Soup Kitchens
- Regularly Scheduled Mobile Food Vans
- Targeted Non-Sheltered Outdoor Locations
2020 Group Quarters Data Collection

Two Phase Operation

Group Quarters (GQ) data collection is a two phase operation – Advance Contact and Enumeration

Objectives

• Reduce respondent burden by limiting the number of visits to the group quarters
• Take advantage of the use of facility-provided records, collected both electronically and in paper format for the enumeration process
2018 End-to-End Census Test
Group Quarters Operation

• Advance Contact to Service-Based Facilities and Group Quarter Facilities
  • June 18 – July 10

• Service-Based Enumeration (SBE)
  • July 25 – July 27

• Group Quarters Enumeration (GQE)
  • July 30 – August 24
The Providence GQ workload included most Group Quarters Types

<table>
<thead>
<tr>
<th>Group Quarters Type</th>
<th>Workload</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Based Enumeration Locations (Emergency and Transitional Shelters, Soup Kitchens, Regularly Scheduled Mobile Food Vans, Targeted Non-Sheltered Outdoor Locations)</td>
<td>143</td>
</tr>
<tr>
<td>Correctional Facilities for Adults</td>
<td>12</td>
</tr>
<tr>
<td>Juvenile Facilities</td>
<td>31</td>
</tr>
<tr>
<td>Nursing/Skilled-Nursing</td>
<td>119</td>
</tr>
<tr>
<td>College/University Student Housing</td>
<td>154</td>
</tr>
<tr>
<td>Religious Group Quarters</td>
<td>42</td>
</tr>
<tr>
<td>Group Homes and Residential Treatment Centers</td>
<td>147</td>
</tr>
</tbody>
</table>
The Production Control System (PCS)

• ACO Clerks used an in-house system, the Production Control System (PCS) to conduct Advance Contact.
• The PCS displays the Group Quarters name, address, Group Quarters type, and contact name. This information can be edited by the ACO Clerks.
• ACO Clerks enters into the PCS --
  • The expected population on Census Day, April 1.
  • The preferred enumeration method.
  • Date and time for a personal visit to conduct data collection.
2018 End-to-End Census Test
Advance Contact Enumeration Methods Offered

• Electronic Response Data Transfer or eResponse
• Paper Data Collection Options:
  – Facility Self-Enumeration
  – Drop-off/Pick-up
  – In-Person Interview
  – Paper Listing
Group Quarters Advanced Contact

**Status:**
- Complete

**Data current as of:**
- July 9, 2018

**Completion Date:**
- July 10, 2018

**Notes:**
- The GQ Advanced Contact operation began June 18, 2018.
- New GQs discovered as part of the GQ Advance Contact operation were mostly Service-Based locations. In order to thoroughly test the SBE operation, these facilities will be added and visited as part of SBE Operation.

**Total Workload (including adds): 690**

**Status of Advance Contact Cases**
- Completed with Appt/Enum Methods: 283
- Out of Scope (also includes TLs and NonRes): 187
- Unresolved: 220

**Breakdown of Enumeration Methods Selected**
- eResponse
- Paper Listing
- Drop Off/Pick Up
- Self-Enumeration
- In-Person

Source: GQAC Progress Report – PCS Extract
Periodic Performance Management Reports
2018 End-to-End Census Test: Service Based Enumeration and Group Quarters Enumeration

Service-Based Enumeration (SBE)
• 11 SBE interviews were confirmed during Advance Contact and enumerated
  – 7 Shelters
  – 3 Soup Kitchens
  – 1 Targeted Non-Sheltered Outdoor Location
• 14 SBE locations were non-interviews or refusals
• Targeted Non-Sheltered Outdoor Locations
  – 36 TNSOLS were added by our Partnership Specialists
  – 36 sites were enumerated
  – 32 persons interviewed

Group Quarters Enumeration (GQE)
• GQE started on July 30
• 200 of the 400 Group Quarters in GQE have been assigned to Enumerators for enumeration
• Letters have been mailed to 75 facilities that selected eResponse
QUESTIONS?
## 2020 Census

### 2018 End-to-End Census Test Operational Readiness and Status

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduct In-Office Address Canvassing</td>
<td>October 27, 2016 – February 2, 2017</td>
</tr>
<tr>
<td>Open Regional Census Centers</td>
<td>January 3, 2017</td>
</tr>
<tr>
<td>Begin Address Canvassing Field Staff Recruitment</td>
<td>March 10, 2017</td>
</tr>
<tr>
<td>Open Area Census Offices</td>
<td>April – July 2017</td>
</tr>
<tr>
<td>Conduct In-Field Address Canvassing</td>
<td>August 28 – October 6, 2017</td>
</tr>
<tr>
<td>Conduct Self-Response</td>
<td>March 16 – August 31, 2018</td>
</tr>
<tr>
<td>Conduct Internet Self-Response, including Non-ID Processing</td>
<td>March 16 – July 31, 2018</td>
</tr>
<tr>
<td>Conduct Census Questionnaire Assistance</td>
<td>March 16 – July 31, 2018</td>
</tr>
<tr>
<td>Conduct Paper Data Capture</td>
<td>March 16 – August 31, 2018</td>
</tr>
<tr>
<td>Census Day</td>
<td>April 1, 2018</td>
</tr>
<tr>
<td>Conduct Update Leave</td>
<td>April 9 – May 4, 2018</td>
</tr>
<tr>
<td>Conduct Coverage Improvement</td>
<td>April 13 – July 31, 2018</td>
</tr>
<tr>
<td>Conduct Nonresponse Followup</td>
<td>May 9 – July 31, 2018</td>
</tr>
<tr>
<td>Conduct Group Quarters Advance Contact</td>
<td>June 18 – July 10, 2018</td>
</tr>
<tr>
<td>Conduct Group Quarters Service Based Enumeration</td>
<td>July 25 – July 27, 2018</td>
</tr>
<tr>
<td>Conduct Group Quarters Enumeration</td>
<td>July 30 – August 24, 2018</td>
</tr>
<tr>
<td>Publish Prototype P.L. 94-171 Data and Geographic Products</td>
<td>April 1, 2019</td>
</tr>
</tbody>
</table>