2020 Census Update

Presentation to the American Community Survey Data Users Conference

May 11, 2017
## Decennial Census Programs

### Budget

<table>
<thead>
<tr>
<th>Budget (in thousands)</th>
<th>FY14 (Enacted)</th>
<th>FY15 (Enacted)</th>
<th>FY16 (Enacted)</th>
<th>FY17 (President’s Budget)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020 Census</td>
<td>$232,687</td>
<td>$344,566</td>
<td>$631,885</td>
<td>$798,174</td>
</tr>
<tr>
<td>American Community Survey</td>
<td>$230,600</td>
<td>$230,899</td>
<td>$230,899</td>
<td>$251,053</td>
</tr>
<tr>
<td>Geographic Support</td>
<td>$55,613</td>
<td>$58,202</td>
<td>$58,202</td>
<td>$84,715</td>
</tr>
</tbody>
</table>

Note: Dollar amounts in thousands
The 2020 Census
Goals and Key Innovation Areas

**Goal:** To count everyone once, only once, and in the right place

**Focus on Four Key Innovation Areas**

- Reengineering Address Canvassing
- Optimizing Self-Response
- Utilizing Administrative Records and Third-Party Data
- Reengineering Field Operations
Key 2020 Census Innovation Areas
Opportunities for the American Community Survey

- **Reengineering Address Canvassing**: Improvement to the address frame will benefit sample selection, questionnaire distribution, and data tabulation
- **Optimizing Self-Response**: 2020 Census mailing strategies may be adopted by the ACS to improve self-response and reduce burden
- **Utilizing Administrative Records and Third-Party Data**: The 2020 Census research and experiences using these data will inform expanded uses of these records in the ACS
- **Reengineering Field Operations**: Using research from 2020 Census group quarters activities to improve ACS group quarters coverage
The 2020 Census
Where Are We Today?

Key Activities:
• **Making Key Decisions:** Continuously make timely decisions based on research and evidence
• **Award Key Contracts:** Continue to award key contracts for the 2020 Census
• **2017 Census Test:** Nationwide self-response test that includes Internet self-response, Real-Time Non-ID response and processing, and the deploying of applications in the Cloud

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>2013 Census Test (Complete)</td>
</tr>
<tr>
<td>2014</td>
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</tr>
<tr>
<td>2018</td>
<td>Address Crewing Test (Complete)</td>
</tr>
<tr>
<td>2019</td>
<td>2019 National Content Test (Complete)</td>
</tr>
<tr>
<td>2020</td>
<td>2020 Census Operational Plan (Complete)</td>
</tr>
<tr>
<td>2021</td>
<td>Key Census activities start in 2015 and continue through 2021</td>
</tr>
</tbody>
</table>

**Residence Criteria:** Proposed criteria in June 2016 and final criteria in 2017
**Topics to Congress:** Title 13 requires the Census Bureau deliver to Congress subjects for the decennial census program by March 31, 2017, and questions by March 31, 2018
**Operational Readiness**
- 2020 Census Operational Plan 2.0
- Local Update of Census Addresses (LUCA)
- Field Infrastructure: Space, Decennial Logistics Management, Training, Recruiting, and Onboarding
- 2018 End-to-End Census Test
2017 Census Test

Overview

- April 1, 2017 Census Day
- A nation-wide self-response test of 80,000 housing units

Purpose

- Test the integration of operations and systems for Self-Response
- Test the feasibility of collecting tribal enrollment information

<table>
<thead>
<tr>
<th>National Sample: 80,000 housing units</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Housing units in mailable areas</td>
</tr>
<tr>
<td>• Remove housing units from recent decennial tests and the American Community Survey</td>
</tr>
<tr>
<td>• Stratified to oversample housing units in:</td>
</tr>
<tr>
<td>• Alaska</td>
</tr>
<tr>
<td>• Areas with relatively higher populations of American Indian and Alaska Natives</td>
</tr>
<tr>
<td>• Areas with lower propensity to respond online</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reinterview: 15,000 housing units</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Conducted by phone</td>
</tr>
<tr>
<td>• Heavy oversample:</td>
</tr>
<tr>
<td>• Alaska</td>
</tr>
<tr>
<td>• People who identify as American Indian and Alaska Native</td>
</tr>
<tr>
<td>• People who indicate they are enrolled in a tribe</td>
</tr>
<tr>
<td>• People responding initially without a Census ID</td>
</tr>
</tbody>
</table>
2017 Census Test
Preliminary Self-Response as of May 9, 2017

Overall Self-Response
• 39.63 percent of the 80,000 households in sample have responded as of May 9, 2017

<table>
<thead>
<tr>
<th></th>
<th>Initial Panel</th>
<th>Final Panel</th>
<th>Internet</th>
<th>Internet Participation %</th>
<th>Telephone</th>
<th>Telephone Participation %</th>
<th>Mail</th>
<th>Mail Participation %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet First</td>
<td>48,900</td>
<td>41,632</td>
<td>16,079</td>
<td>38.6</td>
<td>1,247</td>
<td>3.0</td>
<td>4,624</td>
<td>11.1</td>
</tr>
<tr>
<td>Internet Choice</td>
<td>31,100</td>
<td>24,066</td>
<td>2,511</td>
<td>10.4</td>
<td>174</td>
<td>0.7</td>
<td>7,881</td>
<td>32.7</td>
</tr>
<tr>
<td>Total</td>
<td>80,000</td>
<td>65,698</td>
<td>18,590</td>
<td>28.3</td>
<td>1,421</td>
<td>2.2</td>
<td>12,523</td>
<td>19.1</td>
</tr>
</tbody>
</table>

*Individual components may not add to total due to rounding.

Telephone calls
• Total calls = 5,767
  • Calls referred to agents = 3,251 (56.4 percent)
2018 End-to-End Census Test

Overview

• April 1, 2018 Census Day

Goals
• Validate that the operations in scope for the 2018 End-to-End Census Test are ready to go into production for the 2020 Census
• Test and validate major operational threads, procedures, systems, and infrastructure (IT and non-IT) together to ensure proper integration and conformance with functional and non-functional requirements
• Produce a prototype of geographic and data products
2018 End-to-End Census Test
Operational Scope

FRAME
- Geographic Programs
- Local Update of Census Addresses
- Address Canvassing **

RESPONSE DATA
- Forms Printing and Distribution
- Paper Data Capture
- Integrated Partnership & Communications
- Internet Self-Response
- Non-ID Processing
- Update Enumerate
- Group Quarters *
- Enumeration at Transitory Locations
- Census Questionnaire Assistance
- Nonresponse Followup
- Response Processing
- Federally Affiliated Americans Count Overseas

PUBLISH DATA
- Data Products and Dissemination *
- Redistricting Data *
- Count Review
- Count Question Resolution
- Archiving

OTHER CENSUSES
- Island Areas Censuses

TEST AND EVALUATION
- Coverage Measurement Design & Estimation
- Coverage Measurement Matching
- Coverage Measurement Field Operations
- Evaluations and Experiments

(*) – Not in scope for test sites descoped from 2017 Census Test and 2017 Puerto Rico Census Test that may be added to the 2018 End-to-End Census Test.
(**) – For test sites descoped from 2017 Census Test and 2017 Puerto Rico Census Test that may be added to the 2018 End-to-End Census Test, only In-Office Address Canvassing is in scope.
Title 13 requires that the U.S. Census Bureau deliver to Congress:

- Subjects proposed for the decennial census program by **March 31, 2017**
- Questions proposed for the decennial census program by March 31, 2018

The Census Bureau submitted subjects planned for the decennial census program, *including*:

- 2020 Census Subjects
  - No new subjects (same set proposed for 2010 Census)
- American Community Survey (ACS) Subjects
  - No new subjects (same set asked on current survey)
- 2020 Island Area Censuses Subjects
  - No new subjects
  - Four subjects not on the ACS, but included on 2010 Island Areas Census
The 2020 Census
Looking Ahead

2017
Award Contract for the Decennial Device as a Service
Local Update of Census Addresses – Invitations sent to governmental entities to participate in review of our Master Address File and is complete in 2018
Begin Opening Regional Census Centers
Publish Final 2020 Residence Criteria and Situations

2018
2018 End-to-End Census Test (April 1st Census Day)
Partnership Program – Launch of the partnership program
Question Wording to Congress – by March 31, 2018

2019
Begin Opening Field Offices
Complete Count Committees – Formation of committee’s should be complete

2020
Advertising – Begins in early 2020
Census Day – April 1, 2020
Nonresponse Followup – Begins in early April and continues until late July
Apportionment Counts to the President – December 31, 2020

2021
Redistricting Counts to the States – by March 31, 2021
Connect with Us

Sign up for and manage alerts at https://public.govdelivery.com/accounts/USCENSUS/subscriber/new


More information on the 2020 Census: http://www.census.gov/2020Census

More information on the American Community Survey: http://www.census.gov/programs-surveys/acs/

facebook.com/uscensusbureau
twitter.com/uscensusbureau
youtube.com/user/uscensusbureau
instagram.com/uscensusbureau
pinterest.com/uscensusbureau
American Community Survey

Updates on Agility in Action

May 11, 2017

Tori Velkoff
Chief, American Community Survey Office
For being here today
For your work
For your support

THANK YOU
ACS Data are Foundational

- There is no more current, reliable, or accessible source for local statistics on topics such as age, children, veterans, income, and job skills than the ACS.
- ACS data are used every day to make important decisions that improve the quality of life for Americans.
- The ACS is the only source of comparable, quality information about the people in all of our communities.
- The Federal government uses ACS data to distribute over $400 billion per year to our communities, and make our government run smarter and more efficiently.
ACS is Expansive

- ACS samples approximately 3.5 million addresses annually, about 290,000 addresses per month
- ACS estimates, covering more than 35 topics, support more than 300 known federal uses and countless nonfederal uses
- ACS generates multiple data products along with 11 billion estimates
- Between 2015 and 2017, ACSO conducted numerous research projects and published over 30 papers on its findings
ACS Program Priorities

- Respondent Experience
- Data
- Survey

QUALITY
ACS Program Updates

- Content Review
- Agility in Action Research
- Collaboration
Content Review: Changes and Impacts

- **Removed** the questions
  - concerning business or medical office on property
  - about flush toilets
- **Retained** the question concerning undergraduate field of degree
- **Retained** the questions concerning marital history
- **Reworded** the questions on computer and internet usage
- **Streamlined** mailing procedures
- First version of “Agility in Action” written based on information gathered through 2014 Content Review
Agility In Action: Key Action Areas

- Reduce follow-up contacts
- Improve survey materials and the way we ask questions
- Obtain data from other sources
- Remove questions or ask questions less frequently
- Updated and published version 1.2 on September 19, 2016
- Agility 2.0 will be published Spring 2017
## Agility in Action: Reducing Respondent Burden

<table>
<thead>
<tr>
<th>Year</th>
<th>Accomplishment</th>
<th>Impact</th>
</tr>
</thead>
</table>
| 2015 | Reduced the number of mail contacts with respondents     | • $900,000 cost savings  
• Reduced the number of mail contacts with respondents by eliminating a pre-notice postcard |
| 2016 | CAPI Stopping Rules reduced personal visit attempts     | • Significantly limited personal visit attempts for households that have already received a high number of contacts by mail, telephone, and personal visits |
| 2017 | Reduced telephone contact attempts                       | • Anticipate changes will reduce the number of telephone contacts by approximately 3 million calls per year |
Agility in Action: Applying Research to Operations

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<tr>
<th>Year</th>
<th>Accomplishment</th>
<th>Impact</th>
</tr>
</thead>
</table>
| 2016 | Completed 2016 Content Test | • Tested 10 topics*  
          • Finished briefings, including the ICSP Subcommittee on the ACS  
          • Changes implemented in the 2019 ACS |
| 2017 | Introduced cell phones for CATI production workload | • Based on the January cell phone test results |

*The final recommendations for Relationship, Race, and Hispanic origin will be based on the results of the decennial tests.
## Agility in Action: Current Research

<table>
<thead>
<tr>
<th>Research</th>
<th>Status</th>
</tr>
</thead>
</table>
| CATI Cell Phone Test                                          | • January 2017 test completed  
• Analyzing results                                               |
| Cognitive Testing of Modified Income series                   | • February 2017 testing completed  
• Final report – April 13, 2017                                      |
| GQ Student Housing Definition Test                            | • In field, February through April 2017                               |
| Perceptions of respondent burden focus groups                 | • March and April, 2017                                               |
| Simulation of Housing Variables using Administrative Records  | • In progress                                                          |
## Agility in Action: Current Research

<table>
<thead>
<tr>
<th>Research</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Seal Test</td>
<td>• May 2017 test</td>
</tr>
</tbody>
</table>
| 2017 Mail Design Test                                                   | • August 2017 test  
  • Softened revised design  
  • Partial Redesign  
  • Full Redesign                                                        |
| Adaptive strategy for targeting Internet vs. paper questionnaire in the first mailing | • Oct 2017 test                                  |
Agility in Action 2.0: New Research

- Enhancing Respondent Mail Materials
- Employing Alternative Data Sources
- Modifying the Modes and Design of the ACS
- Ensuring Agile Design
- Improving Messaging and Communication
- Understanding the Respondent’s Experience
- Improving Group Quarters Data Collection and Products
Agility in Action: Enhancing Respondent Mail Materials

2017 ACS Mail Design Test

- Cognitive testing of revised materials
- Methodological Changes:
  - Use a revised ‘Why We Ask’ brochure in the initial mail packages
  - Revise the ACS paper questionnaire cover
  - Change the 5th mailing from a postcard to a letter to include Internet login information
- Evaluate significantly revised wording in the letters and postcards
## Agility in Action: Enhancing Respondent Mail Materials

<table>
<thead>
<tr>
<th>Treatment</th>
<th>ACS Methodology (materials provided)</th>
<th>Wording (messages on materials provided)</th>
<th>Envelope</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Control</td>
<td>Production</td>
<td>Hard</td>
<td>Mandatory</td>
</tr>
<tr>
<td>2. Softened Revised Design</td>
<td>Production (no FAQ)</td>
<td>Softened</td>
<td>Softened</td>
</tr>
<tr>
<td>3. Partial Redesign</td>
<td>Revised</td>
<td>Softened</td>
<td>Softened</td>
</tr>
<tr>
<td>4. Full Redesign</td>
<td>Revised</td>
<td>Personal</td>
<td>Softened</td>
</tr>
</tbody>
</table>
Agility in Action: Employing Alternative Data Sources

- Use select administrative records on housing to create a simulated 1-year and 5-year data product (e.g., property tax, property value, year built, and acreage)
- Use IRS data on income to create a simulated 1-year and 5-year data product (data are not in house yet for this)
- Evaluate a modified series of income questions to be asked if we can utilize the tax data to create income estimates
- Conduct a scoping exercise of the production system changes needed if we use administrative records
Agility in Action: Modifying the Modes and Design of the ACS

- Assess ways to enhance the cost benefit of Computer Assisted Telephone Interview (CATI) follow up, for example:
  - Introduced cell phones into CATI
  - Changed the number of cases going to CATI from 95,000 to 60,000
  - Changed the call parameters from 12 to 7
Average Cost per Interview by Mode: 2012 to 2017

- **Computer Assisted Telephone Interview (CATI)**
- **Computer Assisted Personal Interview (CAPI)**

<table>
<thead>
<tr>
<th>Year</th>
<th>CATI</th>
<th>CAPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$99</td>
<td>$172</td>
</tr>
<tr>
<td>2013</td>
<td>$118</td>
<td>$174</td>
</tr>
<tr>
<td>2014</td>
<td>$139</td>
<td>$173</td>
</tr>
<tr>
<td>2015</td>
<td>$153</td>
<td>$168</td>
</tr>
<tr>
<td>2016</td>
<td>$210</td>
<td>$204</td>
</tr>
<tr>
<td>2017</td>
<td>$222</td>
<td>$206</td>
</tr>
</tbody>
</table>
Average Interviews per Month by Mode: 2012 to 2017

- **Computer Assisted Telephone Interview (CATI)**
- **Computer Assisted Personal Interview (CAPI)**

<table>
<thead>
<tr>
<th>Year</th>
<th>CATI</th>
<th>CAPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>19,260</td>
<td>48,836</td>
</tr>
<tr>
<td>2013</td>
<td>13,396</td>
<td>45,177</td>
</tr>
<tr>
<td>2014</td>
<td>12,061</td>
<td>49,207</td>
</tr>
<tr>
<td>2015</td>
<td>10,278</td>
<td>47,732</td>
</tr>
<tr>
<td>2016</td>
<td>8,145</td>
<td>45,925</td>
</tr>
<tr>
<td>2017</td>
<td>6,816</td>
<td>44,253</td>
</tr>
</tbody>
</table>
Agility in Action: Understanding the Respondent’s Experience

- Literature review of how other surveys have conceptualized and measured respondent burden
- Focus groups with respondents – March and April 2017
- Develop and test a series of questions that we can add to a methods panel on the ACS to measure perceptions of burden
- Analyze the comments we have received from respondents
National Academy of Science Committee on National Statistics

The March 2016 NAS-CNSTAT public workshop focus shed light on ACS burden concerns and challenges and opportunities to address them through public discussion among a wide range of stakeholders.

We also had four expert meetings. These meetings covered the following topics:

- April 7th - Matrix Sampling
- April 21st – Administrative Records
- May 24th – Group Quarters Questionnaire
- June 2nd – Communication and Messaging
Collaboration: Harvard

Harvard Behavioral Insight Group (BIG)

- December 2016, Decennial Senior Staff met with professors from Harvard’s Behavioral Insight Group (BIG) to discuss how behavioral insight research could benefit 2020 and the ACS
- Some of the ideas from BIG include – testing putting a data wheel in the ACS mailing; targeted quick facts in the internet instrument; having an open-ended question on what is important to the respondent; decrease excuses to not fill it out
Collaboration: DPRG

Data Products Redesign Group

- ACSO formed the DPRG in December 2015
- Objective: to provide feedback on the ACS Data Products Redesign Plan and provide feedback on ACS data product types and usage
- DPRG participates in the ongoing CEDSCI testing of new dissemination system
- Input from DPRG was instrumental in developing and releasing the ACS supplemental tables
We Are Committed to Our Program Priorities

QUALITY

Respondent Experience

Data

Survey
Questions ?