The 2020 Census: A New Design for the 21st Century

Sarah Konya, Mathematical Statistician
Census Experiments Branch
Decennial Statistical Studies Division
Decennial Census Programs
U.S. Census Bureau

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The Decennial Census

Purpose:
To conduct a census of population and housing and disseminate the results to the President, the States, and the American People

Primary Uses of Decennial Census Data:
• Apportion representation among states as mandated by Article 1, Section 2 of the United States Constitution:
  
  *Representatives and direct Taxes shall be apportioned among the several States which may be included within this union, according to their respective Numbers ... The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten years, in such Manner as they shall by Law direct.*

• Draw congressional and state legislative districts, school districts and voting precincts
• Enforce voting rights and civil rights legislation
• Distribute federal dollars to states
• Inform federal, tribal, state, and local government planning decisions
• Inform business and nonprofit organization decisions (e.g., where to locate, size of the market)
• Provide population benchmark for nearly every other United States survey
The 2020 Census is being conducted in a rapidly changing environment, requiring a flexible design that takes advantages of new technologies and data sources while minimizing risk to ensure a high quality population count.
The 2020 Census
Goals and Key Innovation Areas

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

**Challenge Goal:** Conduct a 2020 Census at a lower cost per housing unit (adjusted for inflation) than the 2010 Census, while maintaining high quality results

**Focus on Four Key Innovation Areas**

- **Reengineering Address Canvassing**
- **Optimizing Self-Response**
- **Utilizing Administrative Records and Third-Party Data**
- **Reengineering Field Operations**
The 2020 Census
Reengineering Address Canvassing

Reduce the nationwide In-Field Address Canvassing by developing innovative methodologies for updating and maintaining the Census Bureau’s address list and spatial database throughout the decade.
The 2020 Census
Optimizing Self Response

Generate the largest possible self-response, reducing the number of households requiring follow-up
## The 2020 Census

### Utilizing Administrative Records

Use information people have already provided to reduce expensive in-person follow-up

<table>
<thead>
<tr>
<th>Improve the quality of the Frame</th>
<th>Update the Frame</th>
<th>Validate incoming data from federal, tribal, state, and local governments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase effectiveness of advertising and contact strategies</td>
<td>Support the micro-targeted advertising campaign</td>
<td>Create the contact frame (e.g., email addresses and telephone numbers)</td>
</tr>
<tr>
<td>Validate Respondent Submissions</td>
<td>Validate respondent addresses for those without a Census ID and prevent fraudulent submissions</td>
<td></td>
</tr>
<tr>
<td>Reduce Field Workload for Followup Activities</td>
<td>Remove vacant and nonresponding occupied housing units from the nonresponse followup workload</td>
<td>Optimize the number of contact attempts</td>
</tr>
</tbody>
</table>
The 2020 Census
Reengineering Field Operations

Use technology to more efficiently and effectively manage the 2020 Census fieldwork

**Streamlined Office and Staffing Structure**
- Area Manager of Operations
- Census Field Managers
- Census Field Supervisors
- Listers and Enumerators

**Increased use of Technology**
- Automated and optimized work assignments
- Automated recruiting, training, payroll and expense reporting
- Ability to conduct address updates and enumeration on same device
- Reduced paper and manual processing

**Increased Management and Staff Productivity**
- Increased visibility into case status for improved workforce management
- Redesigned quality assurance operations
- Improved communications
The 2020 Census
Estimated Lifecycle Costs

- **1970:** $1.1 B
- **1980:** $3.0 B
- **1990:** $4.7 B
- **2000:** $9.4 B
- **2010:** $12.3 B
- **2020:** $17.8 B

**TRADITIONAL 2020 CENSUS**

- **1970:** $1.1 B
- **1980:** $3.0 B
- **1990:** $4.7 B
- **2000:** $9.4 B
- **2010:** $12.5 B
- **2020:** $17.8 B

**INNOVATIVE 2020 CENSUS**

- **1970:** $1.1 B
- **1980:** $3.0 B
- **1990:** $4.7 B
- **2000:** $9.4 B
- **2010:** $12.3 B
- **2020:** $12.5 B

**MORE THAN $5 BILLION IN SAVINGS**

Fewer Staff
Fewer Offices
Less Burden
The 2020 Census
A New Design for the 21st Century

Motivate People to Respond
- Conduct a nation-wide communications and partnership campaign
  - Maximize outreach using traditional and new media
  - Target ads to specific audiences
  - Work with trusted sources to inspire participation

Establish Where to Count
- Identify all addresses where people could live
  - Conduct a 100% review and update of the nation’s address list
  - Minimize field work with in-office updating
  - Use multiple data sources to identify areas with address changes
  - Get local government input

Count the Population
- Collect data from all households, including group and unique living arrangements
  - Make it easy for people to respond anytime, anywhere
  - Encourage people to use the new online response option
  - Use the most cost-effective strategy to contact and count nonrespondents
  - Knock on doors only when necessary
  - Streamline in-field census-taking

Release Census Results
- Process and Provide Census Data
  - Deliver apportionment counts to the President by December 31, 2020
  - Release counts for redistricting by April 1, 2021
  - Make it easier for the public to get data

United States Census Bureau
U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU
CENSUS.GOV
The 2020 Census
Where are we Today?

2020 Census Lifecycle

- Released the 2020 Census Memorandum Series which documents significant decisions, actions, and accomplishments of the 2020 Census Program
- Conducting the 2016 Census Test in part of Los Angeles County, CA and part of Harris County, TX

- Posted a Federal Register Notice on the 2010 Census Residence Rule in May 2015 and a summary of comments received in February 2016
- Began tribal consultations in October 2015 and will continue through April 2016
- Began the 2020 Census Redistricting Data Program Kick-off meetings in December 2015 and will continue through 2016
2016 Census Test

Overview

- Purpose: Refine technologies and methods associated with Self-Response and Nonresponse Followup operations
- April 1, 2016 Census Day
- A site test in parts of Harris County, TX and Los Angeles County, CA
  - Language diversity
  - Demographic diversity
  - High vacancy rates
  - Varying levels of Internet usage
  - Multiple locations across different time zones
  - Approximately 225,000 housing units in each test area
2016 Census Test
Self-Response: Overview

- Five Self-Response Contact Strategy Panels
- Multiple mailings to encourage self-response
- Provide language support to Limited English Proficient populations
  - Non-English questionnaires (Internet, paper, Census Questionnaire Assistance, Nonresponse Followup)
  - Multilingual brochures
  - Envelopes with messages written in non-English languages
- New Internet software application PRIMUS
- Refinement of Real-Time Non-ID Processing methods
- Partnerships to reach demographically diverse populations
## 2016 Census Test

**Self-Response: Contact Strategies**

Five Self-Response Contact Strategy Panels with Multiple Mailings

<table>
<thead>
<tr>
<th>Panel</th>
<th>Contact 1 March 21, 2016</th>
<th>Contact 2 March 24, 2016</th>
<th>Contact 3 April 4, 2016</th>
<th>Contact 4 April 11, 2016</th>
<th>Contact 5 Nonresponse Followup</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Internet Push</td>
<td>Letter</td>
<td>Postcard</td>
<td>Postcard</td>
<td>Mail Questionnaire + Letter</td>
<td>Postcard*</td>
</tr>
<tr>
<td>2 Internet Push with reminder letter</td>
<td>Letter</td>
<td>Letter</td>
<td>Postcard</td>
<td>Mail Questionnaire + Letter</td>
<td>Postcard*</td>
</tr>
<tr>
<td>3 Internet Push with language brochure</td>
<td>Brochure</td>
<td>Postcard</td>
<td>Postcard</td>
<td>Mail Questionnaire + Brochure</td>
<td>Postcard*</td>
</tr>
<tr>
<td>4 Internet Push with language insert</td>
<td>Letter + Insert</td>
<td>Postcard</td>
<td>Postcard</td>
<td>Mail Questionnaire + Letter/Insert</td>
<td>Postcard*</td>
</tr>
<tr>
<td>5 Internet Choice</td>
<td>Mail Questionnaire + Letter</td>
<td>Postcard</td>
<td>Postcard</td>
<td>Mail Questionnaire + Letter</td>
<td>Postcard*</td>
</tr>
</tbody>
</table>

*Weekly NRFU mailings will occur to any addresses removed from the NRFU workload as a result of our administrative records modeling process.*
## 2016 Census Test

### Self-Response: Language Materials

Language Materials Provided for the 2016 Census Test

<table>
<thead>
<tr>
<th>Operation/Materials</th>
<th>Non-English Languages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Questionnaire</td>
<td>Spanish, Chinese (Simplified), Korean</td>
</tr>
<tr>
<td>Paper Questionnaire (and mailing materials)</td>
<td>Spanish, Chinese (Simplified), Korean</td>
</tr>
<tr>
<td>Nonresponse Followup Questionnaire (and field materials)</td>
<td>Spanish, Chinese (Simplified), Korean</td>
</tr>
<tr>
<td>Census Questionnaire Assistance Interview</td>
<td>Spanish, Chinese (Mandarin, Cantonese), Korean, Vietnamese, Tagalog, Arabic, French</td>
</tr>
<tr>
<td>Web Pages with Fact Sheet and FAQs</td>
<td>Spanish, Chinese (Simplified), Korean, Vietnamese, Japanese, Tagalog, Arabic, Farsi, Dari, French, Burmese, Thai</td>
</tr>
</tbody>
</table>
2016 Census Test
Self-Response: Internet (CEDCaP System)

New Internet Software Application PRIMUS

Where will you be living on April 1, 2016?
Please select the type of address associated with your residence.

Note: If you have a street address associated with your residence, such as one you would provide to have a package delivered to your home, then please provide it here; not your P.O. Box or Rural Route address.

- Street Address
- Rural Route
- P.O. Box

Address Number
000

Street Name
Main Street

Apt/Unit
Apt1

City
Anytown

State
District Of Co

ZIP Code
00000

United States Census

Home > Household > Residence

Where will you be living on April 1, 2016?
Please select the type of address associated with your residence.

Note: If you have a street address associated with your residence, such as one you would provide to have a package delivered to your home, then please provide it here; not your P.O. Box or Rural Route address.

- Street Address
- Rural Route
- P.O. Box

Address Number
000

Street Name
Main Street

Apt/Unit
Apt#
2016 Census Test
Self-Response: Non-ID Processing
Spanish

Comience aquí 0 visite "https://www.census.gov\clas\ingles para completar la Prueba del Censo del 2016.

1. ¿Cuántas personas viven en su hogar? 
   Número de personas =

2. ¿Cuántas personas adicionales vivieron aquí el 1 de abril de 2016, que no estaban viviendo en el hogar? 
   Marque y, luego, dé algunas explicaciones.
   Nivel de la casa: No, Casa, Apartamento, Casa con sobrepoblación de edad, Casa con sobrepoblación de género, Casa con sobrepoblación de raza, Casa con sobrepoblación de origen, Casa con sobrepoblación de nacionalidad, Casa con sobrepoblación de ciudad en el exterior, Casa con sobrepoblación de país de origen, Casa con sobrepoblación de ciudad en el interior, Casa con sobrepoblación de país de origen.

3. ¿Casa, apartamento o casa móvil? — Marque y, si es casero.
   Pregúntese sobre si el hogar es una casa móvil en una carretera o una casa móvil en un lago.
   Nivel de la casa: No, Casa, Apartamento, Casa con sobrepoblación de edad, Casa con sobrepoblación de género, Casa con sobrepoblación de raza, Casa con sobrepoblación de origen, Casa con sobrepoblación de nacionalidad, Casa con sobrepoblación de ciudad en el exterior, Casa con sobrepoblación de país de origen, Casa con sobrepoblación de ciudad en el interior, Casa con sobrepoblación de país de origen.

4. ¿Cuántos habitantes de 15 años o más de edad tienen que estar en el hogar para que estén en la jornada laboral, por lo general? 
   ¿Cuántos habitantes de 15 años o más de edad tienen que estar en el hogar para que estén en la jornada laboral, por lo general?

5. Cuántos habitantes de 15 años o más de edad tienen que estar en el hogar para que estén en la jornada laboral, por lo general?
   ¿Cuántos habitantes de 15 años o más de edad tienen que estar en el hogar para que estén en la jornada laboral, por lo general?

Chinese

1. 问题：您住在哪里？
   答：我在家里。

2. 问题：您家有多少人？
   答：我家里有两个人。

3. 问题：您家有几辆车？
   答：我们家有两辆车。

4. 问题：您家有几个孩子？
   答：我们家有几个孩子。

5. 问题：您家的地址是什么？
   答：我们的地址是。

Korean

1. 문항: 당신이 살아가는 집은 어디인가요?
   대답: 집.

2. 문항: 집에 몇 명이 살고 있나요?
   대답: 가족.

3. 문항: 집에는 몇 대의 차가 있나요?
   대답: 가족.

4. 문항: 집에 몇 명의 아이가 있는가요?
   대답: 가족.

5. 문항: 집의 주소는 어디인가요?
   대답: 집 주소.
### 2016 Census Test

**Preliminary Response Rates as of April 22, 2016**

<table>
<thead>
<tr>
<th>Panel</th>
<th>Los Angeles County Site</th>
<th>Harris County Site</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internet</td>
<td>Telephone</td>
</tr>
<tr>
<td>1</td>
<td>Internet Push</td>
<td>30.5%</td>
</tr>
<tr>
<td>2</td>
<td>Internet Push with Reminder Letter</td>
<td>31.7%</td>
</tr>
<tr>
<td>3</td>
<td>Internet Push with Language Brochure</td>
<td>31.2%</td>
</tr>
<tr>
<td>4</td>
<td>Internet Push with Language FAQ Insert</td>
<td>33.6%</td>
</tr>
<tr>
<td>5</td>
<td>Internet Choice</td>
<td>15.9%</td>
</tr>
<tr>
<td>Total</td>
<td>28.5%</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

*Individual components may not add to total due to rounding.*
2016 Census Test
Partnership and Outreach

• Partners for the 2016 Census Test Sites
• Partnership Commitment Activities for the 2016 Census Test Sites
• Partnership specialists have also provided recruiting support for the Field staff
Partnerships Toolkit
Partnership Toolkits were developed for both Harris County, TX and Los Angeles County, CA

Contents include:
• Fast facts about the 2016 Census Test
• Email Samples
• Article Samples
• Event Hosting Tips
• Social Media Content
• A list of places with public computers
• Important Internet URLs
2016 Census Test
Reengineering Field Operations

The 2016 Census Test is allowing us to operationalize our new methods and new technology across multiple locations and time zones during nonresponse followup.

Our objectives related to nonresponse follow up include:

• Determine the nonresponse followup strategy for the 2020 Census – how do we use administrative records to reduce the nonresponse followup universe and to determine the number of contacts we make with each nonresponding housing unit
• Refinement of the field management staffing structure
  • What is the best ratio of enumerators to local supervisors of operations and local supervisors of operations to field managers of operations
• Enhancements to the Operational Control System and COMPASS
• Refinement of the path in COMPASS to conduct proxy interviews
• Automated applications for field recruiting and administration
• Multi-unit accessibility and contact procedures

We are focusing on quality control in this test:

• Use of paradata and GPS points collected during interview
• Reinterview functionality
• Use of administrative records for in-house quality control
2016 Census Test
Reengineering Field Operations

Streamlined Office and Staffing Structure

- Area Manager of Operations
- Census Field Managers
- Census Field Supervisors
- Listers and Enumerators

Increased use of Technology

- Automated and optimized work assignments
- Automated recruiting, training, payroll and expense reporting
- Ability to conduct address updates and enumeration on same device
- Reduced paper and manual processing

Increased Management and Staff Productivity

- Increased visibility into case status for improved workforce management
- Redesigned quality assurance operations
- Improved communications
2016 Census Test
Reengineering Field Operations: COMPASS (CEDCaP System)

Note: Screenshot contains test data.
2016 Census Test

Milestones

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Date</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Announced 2016 Site Selections Area Operations Support Center (AOSC)</td>
<td>June 26, 2015</td>
<td>✓</td>
</tr>
<tr>
<td>Published Federal Register Pre-Submission Notice</td>
<td>August 4, 2015</td>
<td>✓</td>
</tr>
<tr>
<td>Opened Regional Census Centers</td>
<td>September 24, 2015</td>
<td>✓</td>
</tr>
<tr>
<td>Began Recruiting</td>
<td>November 2, 2015</td>
<td>✓</td>
</tr>
<tr>
<td>Received OMB Approval</td>
<td>January 14, 2016</td>
<td>✓</td>
</tr>
<tr>
<td>Opened Houston, TX AOSC</td>
<td>January 25, 2016</td>
<td>✓</td>
</tr>
<tr>
<td>Opened Los Angeles, CA AOSC</td>
<td>February 23, 2016</td>
<td>✓</td>
</tr>
<tr>
<td>Began Self-Response Data Collection</td>
<td>March 21, 2016</td>
<td>✓</td>
</tr>
<tr>
<td>Census Day</td>
<td>April 1, 2016</td>
<td>✓</td>
</tr>
<tr>
<td>Began Nonresponse Followup (NRFU)</td>
<td>May 12, 2016</td>
<td>✓</td>
</tr>
</tbody>
</table>
Upcoming Tests
Address Canvassing Test

Overview

- Begins in the Fall 2016
- Two contiguous sites, approximately 12,600 blocks in total
  - One site is a mix of urban, suburban and rural territories
  - One site is a principal city of a metropolitan statistical area

Purpose

- Measure the effectiveness of In-Office Address Canvassing through In-Field Address Canvassing
- Measure the effectiveness of In-Field Address Canvassing
- Understand the implications of moving from Assignment Areas to Basic Collection Units (BCU)
- Conduct an In-Field Relisting to collect data to refine future Quality Control operations
2017 Census Test

Overview

• April 1, 2017 Census Day
• A site test on tribal lands with Update Enumerate
• Additional testing through a nation-wide self-response test

Purpose

• Test the integration of operations and systems for Update Enumerate
• Test the integration of operations and systems for Self-Response
• Test the feasibility of collecting tribal enrollment information
2017 Puerto Rico Census Test

Overview

• April 1, 2017 Census Day
• A site test in Puerto Rico

Purpose

• Test the Address Canvassing operation in Puerto Rico
• Integrate Self-Response, Update Enumerate (UE), and Nonresponse Followup operations
• Test adaptive design and use of administrative records and third-party data in Puerto Rico
• Test Spanish versions of the software/systems needed to support Census activities
2018 End-to-End Test

Overview

• April 1, 2018 Census Day

Purpose

• Test and validate 2020 Census operations, procedures, systems, and field infrastructure together to ensure proper integration and conformance with functional and non-functional requirements
• Produce a prototype of geographic and data products
The 2020 Census

The 2020 Census Key Upcoming Activities

**2016 Census Test (April 1st Census Day)**

- **2016 Address Canvassing Test**
  - Boundary and Annexation Survey – Governmental entities receive their annual invitation to update their legal boundaries
  - Award Contract for the 2020 Census Questionnaire Assistance (CQA)
  - Award Integrated Communications Contract

**2017 Census Test (April 1st Census Day)**

- **Topics to Congress** – by March 31, 2017
  - Local Update of Census Addresses – Invitations sent to governmental entities to participate in review of our Master Address File and is complete in 2018

**2018 End-to-End Test (April 1st Census Day)**

- **Question Wording to Congress** – by March 31, 2018.

**2019**

- **Partnership Program** – Launch of the partnership program
  - 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 late April and continues until late June/early July
  - **Apportionment Counts to the President** – by December 31, 2020

**2021**

- **Redistricting Counts to the States** – by March 31, 2021
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

facebook.com/uscensusbureau
twitter.com/uscensusbureau
youtube.com/user/uscensusbureau
instagram.com/uscensusbureau
pinterest.com/uscensusbureau