2020 Census Program Management Review
Decennial Census Programs
U.S. Census Bureau

February 1, 2019
Welcome

Albert E. Fontenot, Jr.
Associate Director for Decennial Census Programs
Welcome
Housekeeping Items

• Meeting is being broadcast via a publicly available web broadcast
  – Consider all microphones live at all times when having sidebar conversations

• For questions, please remember to speak directly into the microphones for the benefit of other participants, including those watching via any external broadcast
  – 2020.census.pmr@census.gov

• There are legal requirements we must follow when talking with contractors or potential contractors
  – Information from Molly A. Shea, Chief, Acquisition Division

• Location of restrooms – next to elevators in green (just outside the auditorium)

• Emergency exits
The U.S. Senate on January 2 unanimously confirmed Steven Dillingham to be the next Director of the U.S. Census Bureau. He was then sworn in on January 7, and he is now in the office.

Dillingham has more than 25 years of statistical, research, senior management, and legal experience in the federal government.

He previously served as the Director of the Office of Strategic Information, Research, and Planning for the Peace Corps, and as Director of the Bureau of Justice Statistics and the Bureau of Transportation Statistics.
Welcome

Today’s Agenda

• Welcome and High-Level Program Updates
• 2020 Census Operational Plan
• 2019 Census Test
• 2020 Census Barriers, Attitudes, and Motivators Study (CBAMS) Survey and Focus Groups Report Findings
• 2020 Census Systems Readiness Update
• Wrap-Up
## 2020 Census
### Key Milestones

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Begin 2020 Census Program</td>
<td>November 18, 2011</td>
</tr>
<tr>
<td>Begin Local Update of Census Addresses (LUCA) Program</td>
<td>January 2017</td>
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<tr>
<td>Deliver 2020 Census Topics to Congress</td>
<td>March 28, 2017</td>
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<tr>
<td>Deliver 2020 Census Questions to Congress</td>
<td>By March 31, 2018</td>
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<tr>
<td>Open Regional Census Centers</td>
<td>April 2018</td>
</tr>
<tr>
<td>Conduct 2018 End-to-End Census Test</td>
<td>August 28, 2017 – August 31, 2018*</td>
</tr>
<tr>
<td>Begin Opening Area Census Offices</td>
<td>January 7, 2019</td>
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<tr>
<td>Begin In-Field Address Canvassing</td>
<td>August 18, 2019</td>
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<tr>
<td>Launch Advertising Campaign</td>
<td>January 2020</td>
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<tr>
<td>Begin Remote Alaska</td>
<td>January 21, 2020</td>
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<tr>
<td>Begin Group Quarters – Advance Contact</td>
<td>February 3, 2020</td>
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<tr>
<td>Begin Self-Response</td>
<td>March 12, 2020</td>
</tr>
<tr>
<td>Begin Update Leave</td>
<td>March 16, 2020</td>
</tr>
<tr>
<td>Begin Update Enumerate</td>
<td>March 16, 2020</td>
</tr>
<tr>
<td>Begin Group Quarters – Service Based Enumeration</td>
<td>March 30, 2020</td>
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<tr>
<td>2020 Census Day</td>
<td>April 1, 2020</td>
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<tr>
<td>Begin Group Quarters Enumeration</td>
<td>April 2, 2020</td>
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<tr>
<td>Begin Coverage Improvement</td>
<td>April 7, 2020</td>
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<tr>
<td>Begin Early Nonresponse Followup</td>
<td>April 9, 2020</td>
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<tr>
<td>Begin Nonresponse Followup</td>
<td>May 13, 2020</td>
</tr>
<tr>
<td>Deliver Apportionment Counts to the President</td>
<td>By December 31, 2020</td>
</tr>
<tr>
<td>Complete Delivery of Redistricting Counts to the States</td>
<td>By March 31, 2021</td>
</tr>
<tr>
<td>Complete 2020 Census Program</td>
<td>September 29, 2023</td>
</tr>
</tbody>
</table>

*Duration represents the time frame for data collection.
In-Field Address Canvassing begins in 198 days
In-Field Address Canvassing begins in 198 days

First enumeration in Toksook Bay, Alaska begins in 354 days
First enumeration in Toksook Bay, Alaska begins in 354 days

Census Day 2020 is in 425 days
Census Day 2020 is in 425 days

Apportionment counts are given to the President in 699 days
Apportionment counts are given to the President in 699 days
2020 Census

Major Contracts*

Technical Integrator
Vendor: T-REX Solutions, LLC
Ensures 2020 Census System of Systems (SoS) integrates, performs, scales, is secure, and meets business objectives.
Provides 2020 Census Cloud and On Premise Infrastructure.
Provides systems integration and testing.

Decennial Device as a Service (dDaas)
Vendor: CDW-G
Provides Mobile Devices for Field Data Collection Operations.
Software Integration, Cellular, Logistics, Shipping, Asset Management, Break/Fix and Disposition.

Field IT Deployment (FITd)
Vendor: Unisys Corporation
Provides the IT infrastructure for 2020 Census field sites.
IT & Telecommunications Hardware, Image Integration, Logistics, Shipping, Installation, Break/Fix and Disposition.
Regional Census Centers
Area Census Offices
Island Area Censuses Offices
Paper Data Capture Centers

Census Questionnaire Assistance (CQA)
Vendor: GDIT
Provides call center capability for self-response, assist respondents with responding to and completing census questionnaire, and provides Interactive Voice Response.

Integrated Communications
Vendor: Team Y&R
Supports the advertising and partnership program.

CENSUS Questionnaire Assistance (CQA)
Vendor: GDIT
Provides call center capability for self-response, assist respondents with responding to and completing census questionnaire, and provides Interactive Voice Response.

C-SHaRPS – Recruiting & Selection
Vendor: CSRA
Provides recruiting and selection and Learning Management System COTS for up to 400K concurrent Schedule A Field Staff.

C-SHaRPS Fingerprinting
Vendor: IndraSoft, Inc
Provides fingerprinting services for field staff.

CEDCaP - ECaSE
Vendor: ImmixGroup/Pega
ECaSE development services support new data collection systems. These systems support the operational control systems for Address Canvassing and Nonresponse Followup, and the data collections systems for Nonresponse Followup and Self-Response which includes internet and telephone.

Census Print and Mail
Vendor: RR Donnelly, Inc.
Provides the majority of printing and mailing services for the 2020 Census.

Note: Decennial Service Center (DSC) is removed from DCEO contracts and functions will be fulfilled by other areas

*This slide represents the status of major contracts for the 2020 Census and is not an exhaustive list of contracts or contract opportunities.
2020 Census
Major Accomplishments

Hiring

- As of January 29, 2019, over 100,000 applications were transmitted into the Decennial Applicant Personnel and Payroll System (DAPPS)

Operational Plan Update

- The final 2020 Census Operational Plan is being released
- Will highlight key design changes and selected accomplishments

CBAMS Findings

- Findings from the CBAMs Survey and Focus Groups report findings
- Quantitative survey and qualitative focus groups inform and inspire creative strategy.
- Report available on our website
• The U.S. Census Bureau will celebrate Census Day 2019 on Monday, April 1.
• This marks the one year out milestone for the 2020 Census.
• More details about our plan and how to access the event via livestream will be coming in the near future.

• Final push into execution phase, and away from planning
• Census Director Steven Dillingham will be giving periodic operational press briefings.
Completed determination of Type of Enumeration Areas (TEAs) for the 2020 Census

A national map is now available, displaying the TEAs for the Fifty States and Puerto Rico, and is available at www.Census.gov/2020census

This information will also be available with an interactive map that includes other geographic boundary information, such as counties or even census tracts.
2020 Census
How the 2020 Census Will Invite Everyone to Respond

Every household will have the option of responding online, by mail, or by phone.

Nearly every household will receive an invitation to participate in the 2020 Census from either a postal worker or a census worker.

95% of households will receive their census invitation in the mail.

Almost 5% of households will receive their census invitation when a census taker drops it off. In these areas, the majority of households may not receive mail at their home's physical location (like households that use PO boxes or areas recently affected by natural disasters).

Less than 1% of households will be counted in person by a census taker, instead of being invited to respond on their own. We do this in very remote areas like parts of northern Maine, remote Alaska, and in select American Indian areas that ask to be counted in person.
2020 Census Operational Status Updates

James B. Treat
Assistant Director for Decennial Census Programs, Operations and Schedule Management
2020 Census
Where are We Now

Key Activities:

- Area Census Offices (ACOs)
- Recruiting and Hiring
- State Complete Count Commissions/Complete Count Committees
- Community Partnership and Engagement Program (CPEP)
- National Partnership Program
Lease awards have been granted to all Wave 1 ACOs. All have complete design intent drawings, complete construction drawings, and approved tenant improvement costs and have been given a notice to proceed.

As of January 28, 18 Wave 1 ACOs are either open or ready for business. All Wave 1 ACOs are scheduled to open between January and March 2019.

The Wave 2 offices are scheduled to open between June and September 2019. As of January 31, all have space identified, 204 have an occupancy agreement signed, and of those, 203 have leases awarded. So far, 176 of the Wave 2 ACOs have complete design intent drawings, 118 have complete construction drawings, and 14 have approved tenant improvement costs and have been given a notice to proceed.
Because we need to fill thousands of positions across the country, recruiting efforts begin months before job offers are made. Applicants stay in the applicant pool for the entire 2020 Census, so we can reach out to them as we need to fill jobs.

The field recruitment webpage went live on September 4, allowing the public to review and apply for positions in the six regional census centers and the early opening area census offices. This will also get applicants into the hiring pool for the Address Canvassing listing positions.

More than 128,000 applicants have created a profile in the Recruiting and Assessment application to become temporary workers for the 2020 Census. As of January 31, more than 104,000 of those have completed the assessments.
Complete Count Commissions

- Complete Count Commissions (CCCs) are underway with 42 states or state-equivalents having formed 2020 Census State CCCs.
- In addition to the state complete count commissions, there is significant work being done to establish complete count committees at the tribal, county, city, and community level, with 1000+ local CCCs established nationwide. This includes 41 tribal committees.

Community Partnership and Engagement Program

- The Census Bureau is working toward meeting the goal of hiring 1,501 partnership specialists by June 30, 2019; these partnership specialists will work out of the six regional census centers (RCCs).
- The RCCs have hired 397 partnership specialists to date.

National Partnership Program

- The 2020 Census National Partnership Program is building a list of several hundred “keystone partners”.
- Keystone partners are an initial group of national organizations being approached to support the 2020 Census.
- Notable national partners include the YMCA and the Boys and Girls Clubs of America.
2020 Census Operational Plan

Deborah Stempowski
Chief, Decennial Management Division
2020 Census
2020 Census Operational Plan

The 2020 Census Operational Plan documents the design for conducting the 2020 Census. It reflects and supports evidence-based decision-making by describing design concepts and their rationale, identifying any remaining decisions and describing remaining risks related to the implementation of the 2020 Census Operational Plan. This Plan covers all operations to execute the 2020 Census, starting with precensus address and geographic updates, and ending once census data products are disseminated and coverage and quality are measured. It describes what will be done during the 2020 Census and, at a high-level, how the work will be conducted.

Version 1
Provides the initial design for the 2020 Census. This plan reflects and supports evidence-based decision making by describing design concepts and their rationale, identifying decisions still to be made, and describing significant issues and risks related to the implementation of the Operational Plan.

Version 2
The scope and design of the 2020 Census Operational Plan was reviewed and updated to reflect decisions and updates, however, the key concepts of the design did not change.

Version 3
Provides the design of the 2020 Census and is consistent with how it will be tested in the 2018 End-to-End Census Test. It was reviewed and updated to reflect decisions and updates, however, the key concepts of the design did not change.

Version 4
This is the final operational plan and reflects our final design which incorporates lessons learned from the 2018 End-to-End Census Test.
## 2020 Census Operations

### SUPPORT

- **Program Management**
  - Program Management
- **Census/Survey Engineering**
  - Systems Engineering & Integration
  - Security, Privacy, and Confidentiality
  - Content and Forms Design
  - Language Services
- **Infrastructure**
  - Decennial Service Center
  - Field Infrastructure
  - Decennial Logistics Management
  - IT Infrastructure

### FRAME

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

### RESPONSE DATA

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

### PUBLISH DATA

- **Data Products and Dissemination**
- **Redistricting Data Program**
- **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**
2020 Census
2020 Census Operational Plan, Version 4.0: Support Operations

Program Management
The Program Management (PM) operation defines and implements program management policies, processes, and the control functions for planning and implementing the 2020 Census in order to ensure an efficient and well-managed program.

Selected Accomplishments
• 98% of all decisions have been made to date.

Key Design Changes and Decisions
• No major changes or decisions since Version 3.0.
Systems Engineering & Integration

The Systems Engineering and Integration (SEI) operation is an IT operation that manages the delivery of a System of Systems that meets 2020 Census Program business and capability requirements.

Selected Accomplishments

- Deployed and supported operations, such as Address Canvassing, Internet Self Response, Coverage Improvement, Update Leave, Non-Response Follow-Up, Group Quarters.
- Utilizing commercial Cloud Service Provider.
- Stood up internet-based application for recruiting applicants, Network Operations Centers and Security Operations Center, a software deployment process and testing framework, Service-Oriented Architecture based mechanism for transacting data between systems.

Key Design Changes and Decisions

- The 2020 Census IIP was enhanced from the original four (4) releases into sixteen (16) Operational Deliveries. This provided better alignment between the detailed schedule for the various operations with delivery of the specific functionality needed to support each operation.
The Security, Privacy, and Confidentiality (SPC) operation ensures that all operations and systems used in the 2020 Census adhere to laws, policies, and regulations that ensure appropriate systems and data security, and protect respondent and employee privacy and confidentiality.

**Selected Accomplishments**
- Working closely with the Office of Information Security (OIS) as well as the Privacy Coordination Office (PCO) to ensure systems and infrastructure have the appropriate authorization to operate.
- Working with OIS on Risk Management Framework (RMF) related activities to ensure systems and data security, and respondent and employee privacy and confidentiality.

**Key Design Changes and Decisions**
- No major changes or decisions since Version 3.0.
**Content and Forms Design**

The Content and Forms Design (CFD) operation identifies and finalizes content and design of questionnaires and other associated nonquestionnaire materials, ensures consistency across data collection modes and operations, and provides the optimal design and content of the questionnaires to encourage high response rates.

**Language Services**

The Language Services (LNG) operation assesses and supports language needs of non-English speaking populations, determines the number of non-English languages and level of support for the 2020 Census, optimizes the non-English content of questionnaires and associated nonquestionnaire materials across data collection modes and operations, and ensures cultural relevancy and meaningful translation of 2020 Census questionnaires and materials.

**Selected Accomplishments**

- Finalized the questions planned for the 2020 Census and submitted this documentation to Congress.
- Finalized paper and internet questionnaire content for the 2018 End-to-End Census Test.
- Issued the 2020 Census Non-English Language Support memorandum, specifying the non-English languages and level of support provided during the 2020 Census.
- Supported 2018 End-to-End Census Test ISR in Spanish and CQA in Spanish, Chinese, Vietnamese, Korean, Russian, Arabic, and Tagalog.

**Key Design Changes and Decisions**

- No major changes or decisions since Version 3.0.
Decennial Service Center
The Decennial Service Center (DSC) will support 2020 Census Field operations for decennial staff (i.e., Headquarters, Paper Data Capture Centers, Regional Census Centers, Area Census Offices, Island Areas Census Offices, remote workers, and listers/enumerators).

Field Infrastructure
The Field Infrastructure (FLDI) operation provides the administrative infrastructure for data collection operations covering the 50 states, the District of Columbia, and Puerto Rico.

Selected Accomplishments
- Supported the 2018 End to End Census Test (including use of the online Learning Management System for training).
- Trained IT Support staff in all 6 Regional Census Centers and 3 Area Census Offices.
- Began DSC support for early Area Census Offices.
- Began DSC support for 2020 Census Recruiting.
- Recruiting Toll Free Jobs Line went live.
- 2020 online Jobs Website went live.
- Officially started recruiting and jobs application process for 2020 Census early operations positions.
- Officially started selections and fingerprinting for 2020 Census early operations positions.

Key Design Changes and Decisions
- No major changes or decisions since Version 3.0.
Decennial Logistics Management
The Decennial Logistics Management (DLM) operation coordinates space acquisition and lease management for the Regional Census Centers, Area Census Offices, and the Puerto Rico Area Office; and provides logistics management support services (e.g., kit assembly, supplies and interfaces to field staff).

IT Infrastructure
The IT Infrastructure (ITIN) operation provides the IT-related Infrastructure support to the 2020 Census, including enterprise systems and applications, 2020 Census-specific applications, field IT infrastructure, mobile computing, and cloud computing.

Selected Accomplishments
• Opened 6 Regional Census Center Offices.
• Signed leases for all Wave 1 Area Census Offices.
• Opened the additional Logistics support facility in Jeffersonville, IN.
• Began IT buildout of Wave 1 Area Census Offices.
• Began delivery of remote workers kits

Key Design Changes and Decisions
• No major changes or decisions since Version 3.0.
Geographic Programs
The Geographic Programs (GEOP) operation provides the geographic foundation in support of the 2020 Census data collection and tabulation activities, within the Master Address File (MAF)/Topologically Integrated Geographic Encoding and Referencing (TIGER) System.

Selected Accomplishments
- Completed delineation of Type of Enumeration Areas for the 2020 Census
- Participant Statistical Areas Program registration

Key Design Changes and Decisions
- No major changes or decisions since Version 3.0.
Local Update of Census Addresses

The Local Update of Census Addresses (LUCA) operation provides an opportunity for tribal, state, and local governments to review and improve the address lists and maps used to conduct the 2020 Census as required by Public Law (P.L.) 103-430.

Selected Accomplishments

• 11,550 entities registered to participate in 2020 LUCA.
• The 2020 LUCA participant materials were shipped.
• 8,408 entities returned their participant materials covering 95.7% of the housing and 95.5% of the population, and of those 6,863 entities submitted changes.

Key Design Changes and Decisions

• The New Construction Program will be conducted within the 2020 LUCA Operation. The New Construction Program utilizes the expertise of tribal, state and local governments to submit city-style addresses for newly built housing units in self-response areas.
Address Canvassing
The Address Canvassing (ADC) operation delivers a complete and accurate address list and spatial database for enumeration and for determining the type of address characteristics for each living quarter.

Selected Accomplishments
- Finalized plan to determine the In-Field Address Canvassing universe.

Key Design Changes and Decisions
- To support the 2020 Census, In-Field Address Canvassing will begin 2 weeks early in select Area Census Offices (ACO) in each of the six regions. The early start will begin with Census Field Supervisor training and will be a full start to the operation in those select ACOs. All other ACOs will begin activities as scheduled.
The Forms Printing and Distribution (FPD) operation prints and distributes internet invitation letters, reminder cards or letters or both, questionnaire mailing packages, and materials for other special operations, as required.

Selected Accomplishments

- Awarded main 2020 print/mail contract which will support self-response, Update Leave, and other operations.
- Printed and distributed 3.2 million pieces of mail in support of the 2018 End-to-End Census Test.
- Refined print/mail and quality control procedures.

Key Design Changes and Decisions

- No major changes or decisions since Version 3.0.
**Paper Data Capture**
The Paper Data Capture (PDC) operation captures and converts data from the 2020 Census paper questionnaires, including mail receipt, document preparation, scanning, Optical Character Recognition, Optical Mark Recognition, Key from Image, data delivery, checkout, and form destruction.

**Selected Accomplishments**
- Stood up a Paper Data Capture operation for the 2018 Test in preparation for the 2020 Census, integrating and utilizing a new scanner.
- Signed leases for PDCC East and PDCC West.

**Key Design Changes and Decisions**
- No major changes or decisions since Version 3.0.
Integrated Partnership and Communications
The Integrated Partnership and Communications (IPC) operation communicates the importance of participating in the 2020 Census to the entire population of the 50 states, the District of Columbia, and Puerto Rico to engage and motivate people to self-respond (preferably via the Internet), raise and keep awareness high throughout the entire 2020 Census to encourage response, support field recruitment efforts, and effectively support dissemination of census data to stakeholders and the public.

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

Selected Accomplishments
- Completed the data collection for the Census Barriers Attitudes and Motivators Study (CBAMS) and results were released.
- Census Bureau staff and Team Y&R have been working together in the development of a creative platform for the campaign, which will be released over the next couple of weeks.
- Phase 1 Recruitment Advertising was completed ahead of schedule and it currently includes, digital, radio and print advertisements and promotional materials available for our regional office to conduct localized recruitment outreach efforts.

Key Design Changes and Decisions
- In response to how crucial local partnerships efforts have been to the Census Bureau through the years, we decided to increase the amount of partnerships specialists from 800 to 1,500.
Internet Self-Response
The Internet Self-Response (ISR) operation maximizes online response to the 2020 Census via contact strategies and improved access for respondents and collect response data via the Internet to reduce paper and the Nonresponse Followup Operation workload.

Selected Accomplishments
- Successfully re-deployed an Internet Self-Response data collection instrument in English and Spanish in support of the 2018 End-to-End Census Test.
- Successfully implemented a staggered mail strategy to multiple cohorts with conditional mailings to nonresponding households.

Key Design Changes and Decisions
- Finalized 2020 Census Self-Response Mailing Strategy, including the final number of cohorts and the mail in-home dates.
## 2020 Census
### Self-Response Mail Strategy

**Self-Response**

- Two-panel design: Internet First (invitation letter on first contact) and Internet Choice (questionnaire on first contact)
- Internet First panel is divided into four cohorts to best distribute calls to Census Questionnaire Assistance
- Internet Choice panel is in a single cohort, mailed on the same schedule as Internet First, Cohort 2

<table>
<thead>
<tr>
<th>Panel</th>
<th>Cohort</th>
<th>Mailing 1</th>
<th>Mailing 2</th>
<th>Mailing 3*</th>
<th>Mailing 4*</th>
<th>Mailing 5*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Letter (Internet First) or Letter + Questionnaire (Internet Choice)</td>
<td>Letter</td>
<td>Postcard</td>
<td>Letter + Questionnaire</td>
<td>“It’s not too late” Postcard</td>
</tr>
<tr>
<td>Internet First</td>
<td>1</td>
<td>March 12, 2020</td>
<td>March 16, 2020</td>
<td>March 26, 2020</td>
<td>April 8, 2020</td>
<td>April 20, 2020</td>
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<tr>
<td></td>
<td>2</td>
<td>March 13, 2020</td>
<td>March 17, 2020</td>
<td>March 27, 2020</td>
<td>April 9, 2020</td>
<td>April 20, 2020</td>
</tr>
<tr>
<td>Internet Choice</td>
<td>N/A</td>
<td>March 13, 2020</td>
<td>March 17, 2020</td>
<td>March 27, 2020</td>
<td>April 9, 2020</td>
<td>April 20, 2020</td>
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Dates in the table below are in-home dates.

(*) Targeted only to nonresponding households
Non-ID Processing
The Non-ID Processing (NID) operation is focused on making it easy for people to respond anytime, anywhere to increase self-response rates by providing response options that do not require a unique Census ID, maximizing real-time matching of non-ID respondent addresses to the census living quarters address inventory, and accurately assigning nonmatching addresses to census blocks.

Selected Accomplishments
• Tested Clerical Non-ID Processing at the National Processing Center in the 2018 End-to-End Census Test.

Key Design Changes and Decisions
• No major changes or decisions since Version 3.0.
Update Enumerate
The Update Enumeration (UE) operation is designed to update the address and feature data and enumerate respondents in person. UE is designated to occur in areas where the initial visit requires enumerating while updating the address frame, in particular in remote geographic areas that have unique challenges associated with accessibility.

Update Leave
The Update Leave (UL) operation is designed to update the address and feature data and leave a choice questionnaire package at every housing unit identified to allow the household to self-respond. UL occurs in areas where the majority of housing units do not have a city-style address to receive mail.

Selected Accomplishments
• Deployed the new Update Leave operation in the 2018 End-to-End Census Test.

Key Design Changes and Decisions
• No major changes or decisions since Version 3.0.
Group Quarters
The Group Quarters (GQ) operation will enumerate people living or staying in group quarters and provides an opportunity for people experiencing homelessness and receiving service at service-based locations, such as soup kitchens, to be counted in the census.

Enumeration at Transitory Locations
Enumeration at Transitory Locations (ETL) operation is to enumerate individuals in occupied units at transitory locations who do not have a usual home elsewhere, such as recreational vehicle parks, campgrounds, racetracks, circuses, carnivals, marinas, hotels, and motels.

Selected Accomplishments
- Deployed the Group Quarters operation, including advanced contact, in the 2018 End-to-End Census Test.
- 2020 GQAC In-Office and In-Field for ACO training materials completed and circulated to internal stakeholders for review.
- 2020 TL Advance Contact for ACO training materials completed and circulated to internal stakeholders for review.

Key Design Changes and Decisions
- The Advance Contact will have two components: In-Office Advance Contact and In-Field Advance Contact.
The Federally Affiliated Count Overseas (FACO) operation obtains counts by home state of United States military and federal civilian employees stationed or deployed overseas and their dependents living with them.

Selected Accomplishments
• Work began on the tool that will be used to ingest counts for military and federal civilian employees stationed or deployed overseas.

Key Design Changes and Decisions
• No major changes or decisions since Version 3.0.
Census Questionnaire Assistance
The Census Questionnaire Assistance (CQA) operation provides questionnaire assistance for respondents by answering questions about specific items on the census form or other frequently asked questions about the 2020 Census, as well as an option for respondents to complete a census interview over the telephone. Additionally, CQA provides outbound calling in support of Coverage Improvement.

Selected Accomplishments
• Negotiated and signed the final phase of the CQA Contract for the 2020 Census.
• Progress is well underway for the Identification and property leasing of the 10 CQA contact center sites.
• Completed solution requirement validation and initial design reviews for the CQA telephony system build.

Key Design Changes and Decisions
• Web chat, as a formal communication channel, was eliminated based on logistics and feasibility.
• Support for callers requesting information about 2020 Census jobs was moved out of the CQA Operation and into the Field Infrastructure Operation.
• Outbound telephone calling to collect Nonresponse Followup (NRFU) Reinterview data for NRFU quality control was eliminated. Findings in the 2018 End-to-End Census Test led to the decision.
2020 Census
2020 Census Operational Plan, Version 4.0: Response Data Operations

Nonresponse Followup
The Nonresponse Followup (NRFU) operation determines or resolves the housing unit status for addresses that do not self-respond to the 2020 Census and enumerates housing units that have a status of occupied.

Selected Accomplishments
- Successfully completed 2018 End-to-End Census Test of NRFU procedures, applications, and systems.

Key Design Changes and Decisions
- Use of a Three-Phase Contact Strategy, with each phase implementing more control and restrictions on case assignments and management to ensure effective and efficient completion of the operation.
- Administrative Record Vacant and Delete cases will receive at least one visit during the NRFU field operation, and are removed only if visit indicates housing unit is vacant or nonexistent.
- Eliminate telephone contact for NRFU Reinterview operation and complete all reinterview via personal visit.
Response Processing

The Response Processing Operation (RPO) creates and distributes the initial 2020 Census enumeration universe, assigns the specific enumeration strategy for each living quarter based on case status and associated paradata, creates and distributes workload files required for enumeration operations, tracks case enumeration status, runs postdata collection processing actions in preparation for producing the final 2020 Census results, and identifies potential suspicious returns.

Selected Accomplishments

• Created the 2018 End-to-End Census Test Census Unedited File.
• Created the initial 2018 End-to-End Census Test Census Edited File.

Key Design Changes and Decisions

• The scope of the operation no longer includes the creation and delivery of the Microdata Detail File. This process is now being managed by the Data Products and Dissemination Operation.
Data Products and Dissemination
The Data Products and Dissemination operation covers the preparation and delivery of the 2020 Census apportionment data to the President of the United States to provide to Congress, tabulation of 2020 Census data products for use by the states for redistricting, and tabulation and dissemination of 2020 Census data for use by the public.

Selected Accomplishments
• The Census Bureau issued a Federal Register Notice for use cases for 2020 Census data using the 2010 data product framework (with revisions). We collected and analyzed the input since the 2020 design work is included in the implementation of the differential privacy system.
• The 2018 Prototype P.L. 94-171 (redistricting data) is planned for public release through CEDSCI in late March 2019. Currently, CEDSCI is running in parallel with American FactFinder for production releases of the American Community Survey.

Key Design Changes and Decisions
• The Census Bureau is transitioning to a Modern Disclosure Avoidance System with the 2020 Census and future data products using a new privacy protection system known in scientific circles as “differential privacy,” designed specifically for the digital age.
Redistricting Data Program

Through the 2020 Census Redistricting Data Program operation, the Census Bureau will provide to each state the legally required P.L. 94-171 redistricting data tabulations by the mandated deadline of April 1, 2021, 1 year from Census Day.

Selected Accomplishments

- Completed initial collection of voting districts from the states as part of Phase 2 – the Voting District Project.
- Successfully started the first round of verification of voting districts with the states as part of Phase 2 – the Voting District Project.

Key Design Changes and Decisions

- No major changes or decisions since Version 3.0.
Count Review

The 2020 Census Count Review Operation (CRO) enhances the accuracy of the 2020 Census through remediating potential gaps in coverage by implementing an efficient and equitable process to identify and incorporate housing units that are missing from the Census Bureau Master Address File, identify and include or correct large group quarters that are missing from the Master Address File or geographically misallocated, and position unresolved cases for a smooth transition to the Count Question Resolution Operation.

Selected Accomplishments

• Awarded contracts for the 4 early participants states (NY, PA, WA, CO) and completed the onboarding activities, including access to VDI/VDesk accounts and Data Stewardship/T13 training.
• Completed GUPS testing by the FSCPEs early participants.
• Started drafting and awarding contract process for 31 states.
• Started development of the CCFR tool.

Key Design Changes and Decisions

• The Data Stewardship Executive Policy Committee approved a remote review option for both Federal-State Cooperative for Population Estimates (FSCPE) Count Review events.
Count Question Resolution
The Count Question Resolution (CQR) operation provides a mechanism for governmental units to challenge their official 2020 Census results.

Archiving
The Archiving (ARC) operation coordinates storage of materials and data and provide 2020 Census records deemed permanent, include files containing individual responses, to the National Archives and Records Administration and provide similar files to the National Processing Center to use as source materials to conduct the Age Search Service. Also store data to cover in-house needs.

Selected Accomplishments
- Began preliminary planning of CQR by drafting Business Process Models and Capability Requirements.
- Continue to meet with National Archives and Records Administration to discuss plans, the records schedule, and the transferring of records for the 2020 Census.

Key Design Changes and Decisions
- No major changes or decisions since Version 3.0.
Island Areas Censuses
The purpose of the Island Areas Censuses (IAC) operation is to enumerate all residents of American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, and the U.S. Virgin Islands; process and tabulate the collected data; and disseminate data products to the public.

Selected Accomplishments
• Awarded contracts to the Island Area governments to conduct data collection activities.
• Finalized plans for the IAC operations.
• Determined which stateside systems will be used for the 2020 IAC operations.

Key Design Changes and Decisions
• No major changes or decisions since Version 3.0.
2020 Census
2020 Census Operational Plan, Version 4.0: Test and Evaluation Operations

Coverage Measurement Design & Estimation
The Coverage Measurement Design and Estimation (CMDE) operation develops the survey design and sample for the Post-Enumeration Survey of the 2020 Census and produce estimates of census coverage based on the Post-Enumeration Survey.

Coverage Measurement Matching
The Coverage Measurement Matching (CMM) operation identifies matches, nonmatches, and discrepancies between the 2020 Census and the Post-Enumeration Survey for both housing units and people in the same areas. Both computer and clerical components of matching are conducted.

Coverage Measurement Field Operations
The Coverage Measurement Field Operation (CMFO) collects person and housing unit information (independent from the 2020 Census operations) for the sample of housing units in the Post-Enumeration Survey to provide estimates of census net coverage error and components of census coverage for the United States and Puerto Rico, excluding Remote Alaska.

Selected Accomplishments
• Conducted test readiness review for Release 15.1 initial sample of basic collection units (BCUs) for independent listing (IL).

Key Design Changes and Decisions
• Independent Listing will use the Listing and Mapping Application automated listing instrument. Person Interview will use the BLAISE instrument. Initial Housing Unit Followup, Person Followup, and Final Housing Unit Followup will use paper maps.
• The Clerical Match and Map Update system will be developed for the Housing Unit Clerical Matching System.
Evaluations and Experiments

The 2020 Census Evaluations and Experiments (EAE) operation documents the execution of the 2020 Census was conducted, and analyze, interpret, and synthesize the effectiveness of census components and their impact on data quality, coverage, or both. Assess the 2020 Census operations. Formulate and execute an experimentation program to support early planning and inform the transition and design of the 2030 Census and produce an independent assessment of population and housing unit coverage.

Selected Accomplishments
• Finalized scope and inventory of studies for the 2020 Census Program for Evaluations and Experiments.

Key Design Changes and Decisions
• No major changes or decisions since Version 3.0.
QUESTIONS?
In-Office and In-Field Address Canvassing for the 2020 Census

Michael Ratcliffe
Geography Division
In-Office and In-Field Address Canvassing

Agenda

• Developing and Maintaining an Accurate Address List
• In-Office Address Canvassing Results
• Identifying the In-Field Address Canvassing Universe
On-going Maintenance and Update

US Postal Service’s Delivery Sequence File (DSF).
Tribal, state, and local government address lists.
Continuous identification of stability and change.

Address Canvassing

Nationwide In-Office Address Canvassing.
Annual in-field data collection, checks, and tests.
In-Field Address Canvassing.

LUCA

Opportunity to review and update the Census Bureau’s address list for the 2020 Census.
• US Postal Service’s Delivery Sequence File (DSF).
  • 5.3 million new residential addresses added to the Master Address File (MAF) since 2010.
  • 2.3 million residential addresses that were new to the DSF matched addresses already in the MAF.

• Tribal, state, and local government address lists provided through the Geographic Support System Program.
  • 106.7 million addresses acquired between 2012 and 2018.
  • 106.2 million (99.5 percent) matched addresses already in the MAF.
  • Geospatial locations improved and/or corrected for 75.1 million addresses.

• Ungeocoded Resolution Project.
  • 810,899 addresses (72 percent of addresses reviewed) that previously were not assigned to a census block have been geocoded since 2017.

• Local Update of Census Addresses (LUCA) Program.
  • 22 million addresses received from 8,395 entities.
  • 17.87 million (81.2 percent) matched to the MAF.
  • 3.46 million unmatched addresses.
The goal of In-Office Address Canvassing is to manage as much of the review and validation of the address list as possible in the office, allowing resources to be focused on areas in which fieldwork is necessary to assure a complete and accurate address list.

- 100 percent review in the office.
- Started Execution: September 2015.
- Completed Initial Pass of the Nation: June 8, 2017.
- **Status in June 2017:** 11,155,486 - All US Blocks reviewed.

<table>
<thead>
<tr>
<th>Status</th>
<th>Block Counts</th>
<th>Percent of Blocks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>1,893,310</td>
<td>17.0</td>
</tr>
<tr>
<td>Passive</td>
<td>7,921,288</td>
<td>71.0</td>
</tr>
<tr>
<td>On Hold</td>
<td>1,340,888</td>
<td>12.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11,155,486</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
In-Office Address Canvassing
Interactive Review-Current Status (as of January 23, 2019)

<table>
<thead>
<tr>
<th>Status</th>
<th>Census Blocks</th>
<th>Percentage of Census Blocks</th>
<th>Housing Units</th>
<th>Percentage of Housing Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active</td>
<td>1,076,166</td>
<td>9.6</td>
<td>29,765,961</td>
<td>20.7</td>
</tr>
<tr>
<td>Passive</td>
<td>9,645,344</td>
<td>86.5</td>
<td>102,119,166</td>
<td>70.9</td>
</tr>
<tr>
<td>On Hold</td>
<td>351,622</td>
<td>3.2</td>
<td>11,510,560</td>
<td>8.0</td>
</tr>
<tr>
<td>Triggered</td>
<td>82,354</td>
<td>0.7</td>
<td>656,468</td>
<td>0.4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>11,155,486</td>
<td>100.0</td>
<td>144,052,155</td>
<td>100.0</td>
</tr>
</tbody>
</table>

- **Triggered Blocks**
  - A trigger is an “event” that provides information and/or data that suggest the need to send a block, or area of blocks, back through Interactive Review (IR).

- **Triggers**
  - To date, 48 trigger events have resulted in blocks returning to IR. For example:
    - Changes to the count of residential addresses in a block due to updates from the DSF or other address update process.
    - New imagery triggers blocks that had been placed on hold due to cloud cover or other issues affecting the clarity of imagery during an earlier review.
In-Office Address Canvassing

Analysis of Results

In-Office Address Canvassing

Addresses in "Passive" Blocks as a Percentage of All Addresses
(as of January 17, 2019)

Percent by county

United States Census Bureau
U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU
census.gov
In-Office Address Canvassing
Analysis of Results
Identifying the In-Field Address Canvassing Universe

- Geography Division will identify the final In-Field Address Canvassing (IFAC) workload at the end of March 2019.
- Will include all addresses in tabulation blocks that are identified as requiring verification in the field within the Self-Response Type of Enumeration Area (TEA 1).
- Because fieldwork is organized and conducted by Basic Collection Unit (BCU), IFAC-qualifying tabulation blocks are “translated” to BCU.
- Determination of the IFAC workload universe consists of two stages:
  - Identification of tabulation blocks that meet the criteria for inclusion in the IFAC workload.
  - Identification of BCUs containing qualifying IFAC blocks.
Identifying the In-Field Address Canvassing Universe
Changes to Block Statuses Requiring In-Field Address Canvassing (i.e., blocks that can be managed through ongoing in-office update processes)

- Undercoverage blocks that contain only single-family housing and have a Delivery Sequence File (DSF) Reliability Index of 1.0.
  - Blocks classified as single-family blocks are those that contain only single-family housing units.
  - DSF Reliable blocks are those in which 100 percent of the addresses have the DSF as the original source code or, if added to the MAF from another source, appeared on the DSF within 200 days.
  - Taking the two conditions together identifies a set of blocks that are easy to manage in the office using a reliable source of addresses.

- Blocks with overcoverage of only one housing unit (and no undercoverage).
  - There are 404,823 blocks in this category, containing 5,139,420 housing units. The cost of sending these blocks to IFAC, and their approximately 4.7 million valid housing units, outweighs the gain from correcting the overcoverage.

- Growth blocks with DSF Reliability Index of 1.0.
  - These are blocks in which IR reviewers observed growth between two vintages of imagery, but did not detect undercoverage in the MAF. Because these blocks also have a DSF Reliability Index of 1.0, we can rely on the DSF to continue to update the MAF if additional growth occurs.
Identifying the In-Field Address Canvassing Universe

At the time the In-Field Address Canvassing workload is identified, any basic collection unit containing a block:

- With undercoverage detected in IR, with the exception of those that contain only single-family housing and have a DSF Reliability Index of 1.0.
- With observed overcoverage (and no undercoverage) of two or more housing units.
- With growth detected in IR (but no undercoverage) and DSF Reliability Index of less than 1.0.
- With decline detected in IR (but no overcoverage or undercoverage).
- That is in On-Hold status.
- That is in Triggered status.
- That is triggered for fieldwork status.
### Identifying the In-Field Address Canvassing Workload

**Estimated Universe as of January 18, 2019**

<table>
<thead>
<tr>
<th></th>
<th>Basic Collection Units</th>
<th>Housing Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td><strong>Total TEA 1 Universe</strong></td>
<td>5,022,177</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>TEA 1 IFAC Universe</strong></td>
<td>1,156,852</td>
<td>23.0</td>
</tr>
</tbody>
</table>
QUESTIONS?
2020 Census Nonresponse Followup Operation: Contact Strategy

Jennifer W. Reichert
Decennial Census Management Division
2020 NRFU Contact Strategy

Overview

• Primary issues to resolve from mid-decade testing
  • Low resolution rate for telephone reinterview operation
  • Occupied status for Administrative Record (AdRec) vacant/delete determinations
    • 18% of AdRec Vacants were found to be occupied
    • 30% of AdRec Deletes were found to be occupied
  • High unresolved rate-cases closed without minimal information

• Solution strategies
  • Eliminate telephone mode for reinterview and send all reinterview cases to field for personal visits
  • At least one visit for AdRec Vacant/Delete cases
    • If visit indicates the housing unit may be occupied, the case will remain in the NRFU for additional contact attempts
  • Phased contact strategy-Phase 1, Phase 2, Closeout
2020 NRFU Contact Strategy
Phase 1 – Full Optimization

• 2018 End-to-End Census Test approach-full optimization through MOJO
• Remove most holds/sleep after the 2
  attempt-day
  • Hold/sleep for two days after 1
  attempt-day
  • The 5-day hold for paper self-respondents that request an envelope from enumerators remains active throughout the Phase
• Best-time-to-contact only used for 1
  and 2
  attempt-days
• Conduct one visit for all AdRec occupied, vacant, and delete cases
• All cases are put on hold after 4
  attempt-day in preparation for Phase 2
2020 NRFU Contact Strategy
Phase 2 – Semi-Permanent Assignment

• Criteria
  • Census Field Supervisor (CFS) areas are eligible when 60% of cases have reached 4 attempt-days or are resolved
  • June 5, 2020 is the earliest a CFS area can enter Phase 2
  • All CFS areas will be eligible on June 17, 2020

• Details
  • CFMs use Field Operations Control Systems (FOCS) to put a CFS area into Phase 2 and designate the enumerators that will work that area
  • Enumerators’ assignment will be semi-permanently assigned (case assignments will be re-balanced nightly so some cases may move between enumerators)
  • MOJO will optimize all cases within a CFS area using enumerator-based clusters
  • Reinterview and Self-Response Quality Assurance cases will continued to be prioritized
2020 NRFU Contact Strategy
Closeout – Get to done

• Criteria
  • CFS Area eligible when 85% of cases are closed (resolved and unresolved)
  • June 23, 2020 is the earliest a CFS area can enter Closeout
  • All CFS areas will be eligible on July 10, 2020

• Details*
  • CFMs use FOCS to put a CFS area into Closeout and designate the enumerators that will work that area
  • Cases are assigned and optimized using the same methodology as in Phase 2
  • Unresolved cases are re-opened and the maximum attempt-days are extended (unlimited) for all cases
  • Cases will close once they get the minimal information to support apportionment

*Details continued on the next slide
2020 NRFU Contact Strategy
Closeout – Get to done

• Details-continued
  • Loosened administrative record modeling criteria are used to reduce the NRFU Closeout workload
    • Cases modeled as occupied, vacant, or delete with the loosened criteria will be closed if they have had at least one contact attempt-day

• CFS Areas close out upon 100% completion or on July 24. The operation may be extended to reach acceptable completion
## 2020 NRFU Contact Strategy

### Key Milestones

### Early NRFU

<table>
<thead>
<tr>
<th>Activity</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Begin Census Field Supervisor Training</td>
<td>03/10/2020</td>
</tr>
<tr>
<td>Begin Enumerator Training</td>
<td>03/27/2020</td>
</tr>
<tr>
<td>Census Day</td>
<td>04/01/2020</td>
</tr>
<tr>
<td>Begin Early NRFU</td>
<td>04/09/2020</td>
</tr>
<tr>
<td>Begin Early NRFU RI</td>
<td>04/10/2020</td>
</tr>
</tbody>
</table>

### NRFU

<table>
<thead>
<tr>
<th>Activity</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Begin Census Field Supervisor Training</td>
<td>04/14/2020</td>
</tr>
<tr>
<td>Begin Enumerator Training</td>
<td>04/30/2020</td>
</tr>
<tr>
<td>Begin NRFU</td>
<td>05/13/2020</td>
</tr>
<tr>
<td>Begin NRFU RI</td>
<td>05/14/2020</td>
</tr>
<tr>
<td>NRFU Supplemental Workload Added</td>
<td>06/01/2020</td>
</tr>
<tr>
<td>Eligible CFS Areas May Begin Phase 2 Contact Strategy</td>
<td>06/05/2020</td>
</tr>
<tr>
<td>All CFS Areas will be Eligible to Begin Phase 2 Contact Strategy</td>
<td>06/17/2020</td>
</tr>
<tr>
<td>Eligible CFS Areas May Begin Closeout Phase</td>
<td>06/23/2020</td>
</tr>
<tr>
<td>All CFS Areas will be Eligible to Begin Closeout Phase</td>
<td>07/10/2020</td>
</tr>
<tr>
<td>NRFU Production Ends</td>
<td>07/24/2020</td>
</tr>
<tr>
<td>NRFU RI Ends</td>
<td>07/31/2020</td>
</tr>
</tbody>
</table>
QUESTIONS?
2019 Census Test

Dr. Victoria A. Velkoff
Associate Director, Demographic Programs
2019 Census Test

Background

• In March 2018, Secretary Ross made the decision to reinstate a citizenship question on the 2020 Census.
• After the reinstatement of the citizenship question to the 2020 Census, the Census Bureau decided to measure the operational effect of including this question on self-response rates in order to inform the Nonresponse Followup (NRFU) operation and the Integrated Partnership and Communications Campaign.
• In order to do the test, the Census Bureau is utilizing existing American Community Survey platforms and processes.
  • The American Community Survey has the infrastructure and resources to conduct this type of test.
  • Allows the 2020 Census staff to continue to focus on the execution of the 2020 Census.
2019 Census Test

Overview

Purpose

• Results will help plan for the Nonresponse Followup operation, the operation designed to collect a response in person from housing units that do not self-respond.
• The test will inform the Integrated Partnership and Communications Campaign.

Design

• July 1, 2019 Census Day
• Designed to measure the operational effect of reinstating a citizenship question on self-response rates
  • Treatment 1 includes all planned 2020 Census questions – the number of people, tenure, sex, age, date of birth, Hispanic origin, race, citizenship, relationship, and coverage questions
  • Treatment 2 includes all planned 2020 Census questions except the question on citizenship
• This test will mirror the design of the 2020 Census, to the extent possible.
• Responses will be accepted via internet, paper questionnaire, or telephone.
• Telephone Questionnaire Assistance will be available in 10 of the 12 non-English languages that will be supported during the 2020 Census. Those languages include: Spanish, Chinese (Mandarin and Cantonese), Vietnamese, Korean, Russian, Arabic, Tagalog, French, Haitian Creole, and Portuguese.
2019 Census Test
Sample Design

• A nationwide self-response test of approximately 480,000 housing units.
  • Excludes Remote Alaska, Puerto Rico, and the population living in Group Quarters.
  • The Nonresponse Followup and the Integrated Partnership and Communications operations will not be conducted for this test.

• Designed to measure a 0.5 percentage point difference in self-response rates at the national level.

• Designed to oversample housing units in areas with high proportions of non-citizens and historically low self-response.

• The sample will support limited analysis for race and Hispanic origin subpopulations.
2019 Census Test
Contact Strategy: National Sample

Internet First
1. Letter
2. Letter
3*. Postcard
4*. Paper Questionnaire + Letter
5*. “It’s not too late” Postcard

Internet Choice
1. Paper Questionnaire + Letter
2. Letter
3*. Postcard
4*. Paper Questionnaire + Letter
5*. “It’s not too late” Postcard

*Mailed only to nonrespondents

<table>
<thead>
<tr>
<th>Mailing 1</th>
<th>Mailing 2</th>
<th>Mailing 3*</th>
<th>Mailing 4*</th>
<th>Mailing 5*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter (Internet First) or Letter + Questionnaire (Internet Choice)</td>
<td>Letter</td>
<td>Postcard</td>
<td>Letter + Questionnaire</td>
<td>“It’s not too late” Postcard</td>
</tr>
<tr>
<td>June 13, 2019</td>
<td>June 17, 2019</td>
<td>June 27, 2019</td>
<td>July 10, 2019</td>
<td>July 22, 2019</td>
</tr>
</tbody>
</table>
2019 Census Test
High-Level Timeline for Data Collection and Analysis

Mailing 1: June 13, 2019
Mailing 2: June 17, 2019
Mailing 3: June 27, 2019
Mailing 4: July 10, 2019
Mailing 5: July 22, 2019

Mailout for the 2019 Census Test

Recruitment Begins for the 2020 Census

Preliminary Response Rates

Analysis and Reporting (Preliminary Results by October 2019)

Final Results from Analysis and Reporting

2019 Census Test Activities

2020 Census Activities

2019 Census Test Activities

2020 Census Activities

2019

2020

Jun  Jul  Aug  Sep  Oct  Nov  Dec  Jan  Feb  Mar

CENSUS DAY
July 1, 2019

Data Collection Ends

Deliver Analysis Files

NRFU Training Begins for the 2020 Census
## 2019 Census Test
### Key Activities

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kick-off of the 2019 Census Test</td>
<td>November 1, 2018</td>
</tr>
<tr>
<td>Finalize sample design</td>
<td>November 19, 2018</td>
</tr>
<tr>
<td>Finalize design of the 2019 Census Test questionnaires and mail materials</td>
<td>December 12, 2018</td>
</tr>
<tr>
<td>Award print contract</td>
<td>January 2, 2019</td>
</tr>
<tr>
<td>Publish 30-day Federal Register Notice</td>
<td>February 28, 2019</td>
</tr>
<tr>
<td>Data Collection Period</td>
<td>June 13 – August 15, 2019</td>
</tr>
<tr>
<td>Census Day</td>
<td>July 1, 2019</td>
</tr>
<tr>
<td>Preliminary response rates for the test</td>
<td>August 15 – 30, 2019</td>
</tr>
<tr>
<td>Preliminary results for the test</td>
<td>October 2019</td>
</tr>
<tr>
<td>Inform 2020 Census operations using test results</td>
<td>Fall 2019</td>
</tr>
</tbody>
</table>
QUESTIONS?
2020 Census Barriers, Attitudes, and Motivators Study (CBAMS) Survey and Focus Groups Report Findings Presentation
Outline

1. CBAMS Overview
2. Study Design
3. Key Findings
   A. Intent to Respond
   B. Knowledge Gaps
   C. Potential Concerns & Attitudinal Barriers
   D. Potential Motivators & Facilitators
4. 2020 CBAMS Conclusions & Recommendations
5. 2020 CBAMS Mindsets
**Purpose**

- Understand attitudes, barriers, & motivators toward the census
- Inform & inspire creative strategy
- Increase self-response to the 2020 Census

**Research Questions**

1. Who intends to respond to the census?
2. Where do gaps in knowledge about the census exist?
3. What barriers would prevent people from completing the census?
4. What would motivate people to complete the census?

**Methodology**

- Quantitative Survey
- Qualitative Focus Groups
Study Design
Study Design: CBAMS Survey

The 2020 CBAMS Survey was administered from February to April 2018 to 50,000 addresses in all 50 states and Washington, D.C.

- Questionnaire consisted of 61 questions
- Adults 18+ were eligible to participate via mail or web
- Households in the sample received a prepaid incentive and up to five mailings inviting them to participate
- Oversampled Asians, Blacks, Hispanics, and other small-sample races.
- Roughly 17,500 people responded to the survey
Study Design: CBAMS Focus Groups

2020 CBAMS Focus Groups held in March and April 2018.

- **42 focus groups** conducted with **11 audiences** across **14 locations**
- **16 focus groups** were non-English
- **Focus group transcripts** went through a rigorous process to ensure intercoder reliability
- Transcripts were analyzed to **identify themes** among response barriers and motivators
**Study Design:** CBAMS Focus Groups

2020 CBAMS Focus Groups conducted among the 11 audiences.

<table>
<thead>
<tr>
<th>Audience Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian and Alaska Native</td>
</tr>
<tr>
<td>Black or African American</td>
</tr>
<tr>
<td>Chinese – Cantonese and Mandarin</td>
</tr>
<tr>
<td>Low Internet Proficiency</td>
</tr>
<tr>
<td>Middle Eastern and North African</td>
</tr>
<tr>
<td>Native Hawaiian and Pacific Islander (NHPI)</td>
</tr>
<tr>
<td>Rural</td>
</tr>
<tr>
<td>Spanish (Puerto Rico)</td>
</tr>
<tr>
<td>Spanish (U.S. Mainland)</td>
</tr>
<tr>
<td>Vietnamese</td>
</tr>
<tr>
<td>Young and Mobile</td>
</tr>
</tbody>
</table>
3 Key Findings
Key Findings Areas

- Intent to Respond
- Knowledge Gaps
- Potential Concerns & Attitudinal Barriers
- Potential Motivators & Facilitators
Intent to Respond
Two out of three said they were likely to respond

CBAMS Survey and Decennial Census
Measured vs Observed Response Rate

<table>
<thead>
<tr>
<th>Survey</th>
<th>Likely to Respond</th>
<th>Unlikely to Respond</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008 CBAMS Survey</td>
<td>86%</td>
<td>14%</td>
</tr>
<tr>
<td>2010 Census</td>
<td>76%</td>
<td>24%</td>
</tr>
<tr>
<td>2018 CBAMS Survey</td>
<td>67%</td>
<td>33%</td>
</tr>
<tr>
<td>2020 Census</td>
<td>TBD</td>
<td></td>
</tr>
</tbody>
</table>

The mail return rate to the 2010 Census was **10 pts lower** than measured in the 2008 CBAMS Survey.

CBAMS measures those who are “extremely” or “very” likely to fill out the census form if the census were held today.

*Note: Due to methodological differences, direct statistical comparisons between 2008 and 2018 survey are not appropriate.*
Knowledge Gaps
Many know the census basics but not much more

How familiar are you with the U.S. census?

- Extremely familiar: 9%
- Very familiar: 24%
- Somewhat familiar: 46%
- Not too familiar: 13%
- Not at all familiar: 8%

In their own words

"[What comes to mind when I hear ‘census’?] I don’t know. Isn’t that like the people that want to know like everything? They send you letters to your house.”
— American Indian and Alaska Native
Overview of knowledge gaps

<table>
<thead>
<tr>
<th>Question</th>
<th>Correct (%)</th>
<th>Don't know (%)</th>
<th>Incorrect (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>To determine changes in the size, location, and characteristics of the U.S.</td>
<td>80</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>To help the police and FBI keep track of people who break the law</td>
<td>63</td>
<td>31</td>
<td>6</td>
</tr>
<tr>
<td>To determine how many representatives each state will have in Congress</td>
<td>57</td>
<td>31</td>
<td>12</td>
</tr>
<tr>
<td>Counts both citizens and non-citizens</td>
<td>55</td>
<td>29</td>
<td>16</td>
</tr>
<tr>
<td>To locate people living in the country without documentation</td>
<td>53</td>
<td>37</td>
<td>10</td>
</tr>
<tr>
<td>To determine property taxes</td>
<td>52</td>
<td>38</td>
<td>10</td>
</tr>
<tr>
<td>To determine how much money communities will get from the gov't</td>
<td>45</td>
<td>39</td>
<td>16</td>
</tr>
<tr>
<td>To determine the rate of unemployment</td>
<td>29</td>
<td>41</td>
<td>30</td>
</tr>
</tbody>
</table>
Knowledge about funding from census data varies little by race and ethnicity

As you understand it, will the 2020 Census be used in any of the following ways or not?

<table>
<thead>
<tr>
<th>Use of Census Data</th>
<th>% Correct</th>
<th>Don't know</th>
<th>Incorrect</th>
</tr>
</thead>
<tbody>
<tr>
<td>To determine changes in the size, location, and... (True)</td>
<td>80%</td>
<td>17%</td>
<td>3%</td>
</tr>
<tr>
<td>To help the police and FBI keep track of people who... (False)</td>
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<td>12%</td>
<td></td>
</tr>
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<td>16%</td>
<td></td>
</tr>
<tr>
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<td>10%</td>
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<td>45%</td>
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<td>16%</td>
</tr>
<tr>
<td>To determine the rate of unemployment (False)</td>
<td>29%</td>
<td>41%</td>
<td>30%</td>
</tr>
</tbody>
</table>
Hispanics & Asians more likely to know census counts citizens and non-citizens than others

As you understand it, will the 2020 Census be used in any of the following ways or not?

<table>
<thead>
<tr>
<th>Description</th>
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<td></td>
</tr>
</tbody>
</table>

% Correct by Race/Ethnicity:
- Hispanic, any-race: 68%
- Asian, NH: 64%
- Small sample race, NH: 57%
- White, NH: 54%
- Black/AA, NH: 48%
Some misperceive the census’ purpose

As you understand it, will the 2020 Census be used in any of the following ways or not?

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<td>To locate people living in the country without documentation (False)</td>
<td>53%</td>
<td>37%</td>
<td>10%</td>
</tr>
</tbody>
</table>

37% are unsure if it used this way

10% mistakenly think that the census is used to locate people living in the country without documentation
Potential barriers to participation in the 2020 Census

- Apathy & Efficacy
- Concerns about data confidentiality & privacy
- Fear of Repercussions
- Distrust in Government
- Few Perceived Personal Benefits
Does it matter if I’m personally counted?

- A great deal: 33%
- A lot: 26%
- A moderate amount: 23%
- A little: 10%
- Not at all: 8%

How much, if at all, do you think it matters if you personally are counted in the 2020 Census?
Does it matter if I’m personally counted?

Lack of Efficacy

_They won’t ever come into the hood, give us stuff that we need, or give us anything._ You go out where she at [a suburb] and you see parks and they get cleaned up, you see areas and centers and everything. Well, we have none of that. That’s why I see a thousand kids on the block every day...So many high schools been closed. [It’s connected to the census] because they not helping. _They not giving us no money. Then they up there counting, taking counts for everybody for what?_”

— Black or African American
Does it matter if I’m personally counted?

Apathy

“I would not fill it out] just for not wanting to do it. Just not feeling like it... it kind of seems like taking a survey or something. Almost kind of pointless, like it doesn’t mean anything. It’s not going to help anyways or do anything. It’s more bothersome or more of a nuisance than anything, I guess.” — Low Internet Proficiency

“I would not fill out the census because] I just don’t care.” — Chinese
About one-quarter of respondents worry about confidentiality.

28% were “extremely concerned” or “very concerned” that the Census Bureau would not keep their answers confidential.
About one-quarter of respondents are concerned the census shares data.

24% were “extremely concerned” or “very concerned” that the Census Bureau would share their answers with other government agencies.
Privacy concerns in focus groups

Privacy Concerns

“Privacy [is a reason why people would not fill out the census]. I think there’s a lot of people that are out there – I work in health and we have to keep things private – they probably think, ‘Why do I have to give you this?’”

— American Indian and Alaska Native
Privacy and confidentiality concerns in focus groups

Confidentiality Concerns

“Every single scrap of information that the government gets goes to every single intelligence agency, that’s how it works…individual level data. Like, the city government gets information and then the FBI and then the CIA and then ICE and military…”

— Middle Eastern and North African
Nearly 1 in 4 respondents fear that their answers to the 2020 Census will be used against them.

22% were “extremely concerned” or “very concerned” that their answers would be used against them.
Some focus group participants felt the government would use their data against their community.

Harm to the Community

“They could say, ‘Look, this community has, like, X amount of race or something; let’s avoid them, or let’s define that area’… you can see it sometimes where they don’t fund certain schools because it’s in certain ‘bad areas.’”

— Middle Eastern and North African
or them personally

Harm to them Personally

[Someone might choose not to participate because] **it can come back and haunt them**...Like if you get food stamps, ...and they will be afraid that it's going to affect their food stamps if they report somebody else is there.”

— Native Hawaiian and Pacific Islander
The citizenship question may be a major barrier

1. **Its purpose is to find undocumented immigrants**
2. **The political discourse is targeting their ethnic group** – residents and citizens may also feel endangered

"[The purpose is] to make people panic… Some people will panic because they are afraid that they might be deported."
— Vietnamese

"For this census, a lot of people are afraid. It doesn’t matter if they ask you whether or not you’re a citizen. The first question they ask you, are you Hispanic or Latino? And that’s enough. That’s all they need. And people are scared."
— Spanish (U.S. Mainland)

"ICE is working with different groups on deportation sweeps, and it would make me feel like I’m aiding in that. They’re doing a lot of illegal stuff, and so I wouldn’t fill out any of the questions."
— Middle Eastern and North African

"[Latinos will not participate] out of fear…[there] is practically a hunt [for us] …Latinos are going to be afraid to be counted because of the retaliation that could happen - it’s like giving the government information, saying, ‘Oh, there are more here.’"
— Spanish (U.S. Mainland)
Distrust is highest for the federal government

- 59% said they did not trust the federal government
- 55% said they did not trust their state government
- 47% said they did not trust their local government
Focus group participants who distrust the government do so strongly

“The government will sell personal information] in a heartbeat.”
— Rural

“The government has always been intrusive as it is, and it’s probably a level of intrusion. That’s why people are like, ‘Hold on, what you want to know what’s in my bed, at my house, and who’s using my toilet? You should go mind your business.’”
— Native Hawaiian and Pacific Islander

The U.S. Census Bureau is connected to the U.S. government. I don’t trust the government not one bit, so I wouldn’t even if they told me this is what we’re going to do I wouldn’t.”
— Black or African American
More feel the 2020 Census benefits the **community** than them personally

Do you believe answering your 2020 Census form could benefit or harm [your community/you] in any way?

- **Benefits**
  - Your Community: 54%
  - You: 37%
- **Neither benefit nor harm**
  - Your Community: 21%
  - You: 44%
- **Both benefit and harm**
  - Your Community: 24%
  - You: 18%
- **Harm**
  - Your Community: 1%
  - You: 1%
Potential Motivators & Facilitators
Survey respondents chose **funding for public services** as the single most important reason to respond.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helps determine funding for public services in my community</td>
<td>30%</td>
</tr>
<tr>
<td>It is my civic duty</td>
<td>25%</td>
</tr>
<tr>
<td>Contributes to a better future for my community</td>
<td>17%</td>
</tr>
<tr>
<td>Provides information for my local government to plan for changes</td>
<td>15%</td>
</tr>
<tr>
<td>Determines my state’s number of elected representatives</td>
<td>9%</td>
</tr>
</tbody>
</table>
Public services are important to nearly all respondents

<table>
<thead>
<tr>
<th>Most Important Motivators</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitals and healthcare</td>
<td>94%</td>
</tr>
<tr>
<td>Fire departments</td>
<td>94%</td>
</tr>
<tr>
<td>Police departments</td>
<td>92%</td>
</tr>
<tr>
<td>Roads and highways</td>
<td>92%</td>
</tr>
<tr>
<td>Enforcement of civil rights laws</td>
<td>86%</td>
</tr>
<tr>
<td>Schools and education system</td>
<td>85%</td>
</tr>
<tr>
<td>Civic duty</td>
<td>82%</td>
</tr>
<tr>
<td>Contributing to a better future for community</td>
<td>81%</td>
</tr>
</tbody>
</table>
According to the focus groups, what would motivate people to participate?

**Conditions that need to be met to be most compelling**

1. Information about the census and its impact

2. Tangible evidence

3. Connection to a better future

---

**Schools & Education System**

Our schools need help. **The schools here do need help.** It hasn’t been that long since the school system was shook up pretty bad, so it does need help, and I don’t know about the fire departments.”

— Low Internet Proficiency

**Better Future for Community**

[I would fill it out] because **that data is going to impact my community.** And if it’s not my community, because I die, then **my grandchildren and my children.**”

— Spanish (U.S. Mainland)
According to many focus group participants, trusted voices and organizations with deep community roots may facilitate participation among the most skeptical by:

- **Providing information** about the community funding and the general census process
- **Assuring people** that participation is safe
Trusted voices and organizations

Those who are representing and helping the Hispanic communities [would assure me my information is safe]…Those who are independent, who support all the Hispanics. Those who are now helping [with] DACA and all those young people.” — Spanish (U.S. Mainland)

Most definitely [my church would assure me if I had concerns about filling out the census form].” — Rural

Somebody raised in the city, knows the hardships, and something like that, not somebody that just got elected to be somebody.” — Black or African American
2020 CBAMS
Conclusions & Recommendations
Connecting Census & Community Funding

Although people identified “helps determine funding for public services in my community” as the most important reason to fill out the census...

...only 45% of people know that the census is used to determine community funding.

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</tr>
</tbody>
</table>
Big Picture Conclusions

Knowledge Gaps
• There is a general lack of knowledge about the census’ scope, purpose, and constitutional foundation

Barriers
• Apathy and lack of efficacy
• Privacy concerns
• Fear of repercussions
• Distrust of government
• Few Perceived Personal Benefits

Motivators
• Funding for community needs is the most influential motivator across audiences
• Services such as hospitals, fire departments, and schools are important to many respondents

✓ Connecting census participation to support for *local* communities may address apathy and lack of efficacy
✓ Informing the public on the census’ scope, purpose, and process may address privacy and confidentiality concerns and fear of repercussions
✓ Engaging trusted voices may address trust-based concerns, especially among the most skeptical and disaffected
2020 CBAMS Mindsets
Creating Candidate Mindsets

For the 2020 mindsets, we used a mathematical approach to balance two goals:

1. Cluster individuals into cohesive groups with similar attitudes/behaviors.
2. Have mindset groupings that are distinct from each other.

Creating the candidate mindsets involved five steps:

• Step 1: Use principal component analysis (PCA) to distill 50+ CBAMS questions into a smaller number of factors.
• Step 2: Cluster algorithms to group into candidate mindsets.
• Step 3: Select a final mindset solution.
• Step 4: Name the mindsets and develop easy-to-understand personas.
• Step 5: Use mindsets to inform the communications program.
Big Picture: Mindsets

- **Eager Engagers**
  - 19% of U.S. Population
  - Intent to Respond: 82%

- **Fence Sitters**
  - 32% of U.S. Population
  - Intent to Respond: 71%

- **Confidentiality Minded**
  - 15% of U.S. Population
  - Intent to Respond: 63%

- **Head Nodders**
  - 9% of U.S. Population
  - Intent to Respond: 60%

- **Wary Skeptics**
  - 14% of U.S. Population
  - Intent to Respond: 59%

- **Disconnected Doubters**
  - 10% of U.S. Population
  - Intent to Respond: 51%

Note: U.S. population percentages do not add to 100% due to rounding error.
Questions?

monica.j.vines@census.gov
gina.k.walejko@census.gov
Integrated Partnerships and Communications Operations Update

Maria Olmedo-Malagon, Assistant Division Chief
Decennial Communications and Coordination Office
2020 Census Integrated Partnership and Communications Operation

Overview

• The Integrated Partnership and Communications operation communicates the importance of participating in the 2020 Census to the entire population of the 50 states, the District of Columbia, Puerto Rico and the island areas to:
  • Engage and motivate people to self-respond, preferably via the internet.
  • Raise and keep awareness high throughout the entire 2020 Census to encourage response.
2020 Census Integrated Partnership and Communications Operation

Additional Updates

• Web and Digital

• Partnerships and Promotional Materials

• Earned, Shared and Owned Media

• Statistics in Schools
2020 Census Integrated Partnership and Communications Operation
Executive Timeline and Next Steps

FY 2018 Q3 | Q4 | FY 2019 Q1 | Q2 | Q3 | Q4 | FY 2020 Q1 | Q2 | Q3 | Q4

- National Partnership Program Kickoff
- CBAMS Reports Released
- Census Materials 1st Shipment
- Media Vendor Day & RFP
- Audience Segment Report Complete
- Produce Assets to Engage in Census Comms
- Awareness Phase Begins
- Reminder Phase Begins
- Thank You Phase Begins
- Conduct Creative Testing
- Early Partner Comm. Begins
- Upfront Negotiations Begin
- Communication Plan Version 2
- National Partnership Program Kickoff
- 2020 Census Site Live (v1.0)
- SIS Count of Young Children Campaign Begins
- Motivation Phase Begins
- Audience Segment Report Complete
- Release Tagline in English & Other Languages

U.S. Department of Commerce Economics and Statistics Administration U.S. CENSUS BUREAU

census.gov

United States Census Bureau

Status As of 01/09/2019
QUESTIONS?
2020 Systems Readiness

Atri Kalluri
Decennial Information Technology Division
2020 Census Systems Readiness

Agenda

• Update on 2018 End-to-End Census Test
• Update on 2020 Census
• Update on Performance & Scalability Testing
• Update on Field IT Deployment
### 2020 Census Systems Readiness

#### 2018 End-to-End Census Test

**Key Systems Supporting Ongoing Operation**

<table>
<thead>
<tr>
<th>Operation (Release)</th>
<th>Key Systems Supporting Operation</th>
<th>Conduct Operation Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tabulation, Product Creation, and Dissemination</td>
<td>CaRDS, CDL, CEDSCI, DRPS, MAF/TIGER, PEARSIS, Tabulation, SOA</td>
<td>January 7, 2019</td>
</tr>
</tbody>
</table>
2020 Census Systems Readiness
2018 End-to-End Census Test
Key Functions Supported by Systems

**Administrative Records**
- Electronic Recruiting, Hiring, Onboarding, Training, Payroll
  - Application Processing
  - Learning Management System
  - Time and Expense
  - Payroll

**Address Canvassing**
- In-office
- In-field
- Optimized Case Assignments
- Quality Control (QC)

**Self Response**
- Internet (Non-ID)
- Telephone
- Paper

**Update/Leave**
- Listing and Mapping
- Leave and Track Paper Forms

**Field Enumeration**
- iPhones
- Optimized Case Assignments
- Housing Units and Group Quarters
- QC (re-interview, field verification)

**Tabulation**
- Response Processing
- Disclosure Avoidance

**Dissemination**
- Demonstration Products

Cloud, Data Center, Cybersecurity, Field Deployment, Operations Center(s)

**Systems, Engineering & Integration**
- 2020 Census Systems Readiness
- 2018 End-to-End Census Test
- Key Functions Supported by Systems

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U.S. CENSUS BUREAU
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## 2020 Census Systems Readiness

### 2020 Census Operational Deliveries

<table>
<thead>
<tr>
<th>2020 CENSUS OPERATIONAL DELIVERY</th>
<th>Test Readiness Review</th>
<th>Production Readiness Review</th>
<th>Conduct Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1 2020 Census Early Ops Preparation</td>
<td>07/23/2018</td>
<td>10/19/2018</td>
<td>10/23/2018</td>
</tr>
<tr>
<td>D2 Address Canvassing</td>
<td>01/04/2019</td>
<td>05/17/2019</td>
<td>08/19/2019</td>
</tr>
<tr>
<td>D3 Peak Recruiting &amp; Hiring</td>
<td>01/18/2019</td>
<td>06/07/2019</td>
<td>09/03/2019</td>
</tr>
<tr>
<td>D4 Self-Response</td>
<td>06/28/2019</td>
<td>12/13/2019</td>
<td>03/09/2020</td>
</tr>
<tr>
<td>D5 Integrated Partnership and Communications (IPC)</td>
<td>05/17/2019</td>
<td>11/01/2019</td>
<td>01/15/2020</td>
</tr>
<tr>
<td>D6 Count Review (CR) &amp; Remote Alaska (RA)</td>
<td>05/10/2019</td>
<td>10/25/2019</td>
<td>01/21/2020</td>
</tr>
<tr>
<td>D7 Group Quarters Advance Contact (GQAC) &amp; ETL Advance Contact (ETL AC) &amp; Federally Affiliated Count Overseas (FACO)</td>
<td>05/24/2019</td>
<td>11/08/2019</td>
<td>02/03/2020</td>
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<tr>
<td>D8 GQ Enumeration (GQE) &amp; Service Based Enumeration (SBE) &amp; Enumeration at Transitory Locations (ETL)</td>
<td>06/17/2019</td>
<td>01/24/2020</td>
<td>03/30/2020</td>
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<tr>
<td>D9 Update Enumerate (UE) &amp; Update Leave (UL)</td>
<td>07/12/2019</td>
<td>01/03/2020</td>
<td>03/16/2020</td>
</tr>
<tr>
<td>D10 Nonresponse Followup (NRFU)</td>
<td>07/19/2019</td>
<td>01/17/2020</td>
<td>04/09/2020</td>
</tr>
<tr>
<td>D11 Archiving &amp; Count Question Resolution (CQR)</td>
<td>09/18/2020</td>
<td>03/05/2021</td>
<td>06/01/2021</td>
</tr>
<tr>
<td>D12 Response Processing</td>
<td>04/27/2020</td>
<td>06/17/2020</td>
<td>09/15/2020</td>
</tr>
<tr>
<td>D13 Data Products / Dissemination</td>
<td>06/15/2020</td>
<td>10/05/2020</td>
<td>11/25/2020</td>
</tr>
<tr>
<td>D14 Redistricting</td>
<td>08/28/2020</td>
<td>12/18/2020</td>
<td>02/17/2021</td>
</tr>
<tr>
<td>D15 Post Enumeration Survey (PES)</td>
<td>03/05/2021</td>
<td>05/28/2021</td>
<td>07/23/2021</td>
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<tr>
<td>D16 Island Areas</td>
<td>10/16/2020</td>
<td>04/02/2021</td>
<td>06/30/2021</td>
</tr>
</tbody>
</table>
2020 Census Systems Readiness

2020 Census Operational Deliveries

**20 systems are in production for Early Ops Preparation**

- 2020 Website
- ATAC
- CBS
- CDL
- CENDOCS
- CHEC
- CHRIS
- CRM
- DAPPS
- Desktop Services
- DPACS
- DSC
- ECaSE-FLD-OCS
- iCADE
- IDMS
- MAF/TIGER
- MOJO Field Processing
- R&A
- SOA
- UTS

**8 more systems will go into production as part of Address Canvassing**

- ECaSE-OCS
- Geospatial Service
- ILMS
- LiMA
- MCM
- MOJO Optimizer
- NPC Printing
- SMaRCS

**17 systems for Peak Recruiting & Hiring**

Same as Early Ops Prep minus ATAC, CRM, iCADE
2020 Census Systems Readiness

2020 Census Systems Readiness – Remaining Key Work

Delta Functionality Development
Integration Testing of Systems (delta from 18 test)
Performance and Scalability Testing
Finalize Cloud Deployment Architecture
Strengthen Security Posture as necessary
Field Deployment (Area Census Offices)
Update the Demand Models semi-annually every January and July

Gain approval of updated inputs and outputs of the models from Operational Teams, Decennial and SE&I leadership

Design and execute tests, monitor Performance and Scalability tasks in the Integrated Master Schedule

Analyze test results, modify infrastructure and design, and re-test with updated assumptions

Issue Test Analysis Reports (TAR)
2020 Census Systems Readiness
Performance and Scalability Readiness Plan

Phase 1
- Priorities Identification
- Architecture & Design Reviews
- Scalability Approach & System Sizing
- Performance Test Tools Selection & Environment Plan

Phase 2
- System Level Baseline Performance Tests
- Performance Eng / Arch / Infra support: monitor, troubleshoot, & validate performance test results
- Iterative design

Phase 3
- Integrated Performance Tests
- Operational Thread End-to-End Performance Tests
- Scalability Test
- Full production infrastructure tests
- Regression Testing

Phase 4
- Multi-operational testing
- Scalability Tests
- Soak Tests
- Failover Tests
- Regression Testing

Staging Environment
Project Test Env
Phase 1
• Completed for 39 systems so far.
• 15 systems were determined to be ready for production loads and do not need to go through all aspects of remaining phases.

Phase 2
• Completed phase 2 testing for 15 systems and more in progress

Phase 3
• 24 systems are in scope
• Focus on Address Canvassing, Peak Recruiting and Hiring, Internet Self Response, and Non-Response Follow-up

Phase 4
• 24 systems are in scope
• Operations and interactions of operations are stacked against one another
2020 Census Systems Readiness
Field IT Deployment (FITd)

Program Scope

Acquire and deploy vendor services to assist in the planning, coordination, and execution of logistics services for IT equipment and support at the 2020 Census Sites, which includes:

Regional Census Centers
  • Providing technical support

Area Census Offices, Puerto Rico Area Office, Island Area Offices Remote Workers
  • Providing, staging, provisioning, packaging, shipping, installing, testing and tracking IT equipment
  • Performing predictive site surveys to support Wi-Fi connectivity and equipment placement
  • Providing technical support

Paper Data Capture Centers
  • Providing, staging, provisioning, packaging, shipping, installing, testing and tracking IT equipment
  • Providing personnel for help desk and system administration support for all equipment and software
2020 Census Systems Readiness
Field IT Deployment (FITd) Schedule

Dec-18 - Apr-19
Area Census Office (ACO) - Phase 1

Feb-19 - Mar-19
Puerto Rico Area Office

Apr-19 - Apr-19
Paper Data Capture Center (PDCC) - East

Jun-19 - Jun-19
PDCC-West

Jun-19 - Sep-19
ACO - Phase 2

Aug-19 - Sep-19
Island Area Office

Jan-19 - Dec-19
Remote Worker Kits (all)
QUESTIONS?
Back Up Slides
# 2020 Census Systems Readiness

## 2020 Census Systems List

<table>
<thead>
<tr>
<th>System</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> 2020 Website</td>
<td>2020 website provides a public web interface and allows partners to publish content.</td>
</tr>
<tr>
<td><strong>2</strong> ATAC (Automated Tracking and Control)</td>
<td>ATAC provides customer, employee, and workflow management. It also provides outbound call tracking for Geographic Partnership Programs and material tracking and check-in.</td>
</tr>
<tr>
<td><strong>3</strong> BARCA (Block Assessment, Research, and Classification Application)</td>
<td>BARCA is an interactive review tool, which is designed to assist an analyst in assessing present, past, and future housing units for a set of geographic work units. It is used for in-office address canvassing.</td>
</tr>
<tr>
<td><strong>4</strong> CAES (Concurrent Analysis and Estimation System)</td>
<td>CAES is a high speed processing environment used to make fast decisions during the data collection phase of the Census.</td>
</tr>
<tr>
<td><strong>5</strong> CaRDS (Control and Response Data System)</td>
<td>CaRDS provides sample design and universe determination.</td>
</tr>
<tr>
<td><strong>6</strong> CBS (Commerce Business System)</td>
<td>CBS is an electronic financial tracking and approval system. CBS collects and reports labor hours and costs for activities that the National Processing Center (NPC) performs.</td>
</tr>
<tr>
<td><strong>7</strong> CDL (Commerce Data Lake)</td>
<td>CDL serves as the repository for paradata and response data. It is built on a distributed, scalable platform to support data ingest, storage, and access for reporting and analytics applications.</td>
</tr>
<tr>
<td><strong>8</strong> CEDSCI (Center for Enterprise Dissemination Services and Consumer Innovation)</td>
<td>CEDSCI is an enterprise dissemination platform with search capability and access to surveys and censuses data.</td>
</tr>
<tr>
<td><strong>9</strong> CEM (Customer Experience Management)</td>
<td>CEM is an enterprise platform, which is used to provide dashboards providing insight into customer-focused performance metrics.</td>
</tr>
<tr>
<td><strong>10</strong> CENDOCS (Census Document System)</td>
<td>CENDOCS is a web-based system for requesting forms design services, publications and graphics services, and printing services which includes CD-ROM replication.</td>
</tr>
<tr>
<td><strong>11</strong> Centurion</td>
<td>Centurion provides for the upload of GQ eResponse data, LUCA address updates, and FACO data.</td>
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<tr>
<td>12 CHEC (Census Hiring and Employment Check System)</td>
<td>CHEC is an administrative system that automates clearance processing of all personnel at the Census Bureau Headquarters, the Bureau of Economic Analysis (BEA), the Regional Offices (ROs), the National Processing Center (NPC), and Computer Assisted Telephone Interview (CATI) sites. This system supports fingerprint processing with the Federal Bureau of Investigation (FBI), the Office of Personnel Management (OPM), the Department of Homeland Security (DHS), the Office of Management and Budget (OMB), and the Department of Commerce (DOC).</td>
</tr>
<tr>
<td>13 CHRIS (Census Human Resources Information System)</td>
<td>CHRIS is a web-based personal information tool which provides personnel and payroll information on desktops. It creates a contact file for the Emergency Notification System (ENS).</td>
</tr>
<tr>
<td>14 CIRA (Census Image Retrieval Application)</td>
<td>CIRA stores decennial census images as well as raw and edited data. It provides a user interface for reviewing the images and data and is used for age match research at NPC.</td>
</tr>
<tr>
<td>15 CQA (Census Questionnaire Assistance)</td>
<td>CQA is a system that collects response data through inbound respondent-initiated calls, assists respondents with completing their questionnaires, including capturing their responses over the phone, and answering questions. CQA also provides outbound calling and data capture for reconciliation of response inconsistencies and follow-up QC operations.</td>
</tr>
<tr>
<td>16 CRM (Customer Relationship Management)</td>
<td>CRM is a suite of applications that provide the management of partnership activities, and case management for customer service.</td>
</tr>
<tr>
<td>17 DAPPS (Decennial Applicant, Personnel and Payroll Systems)</td>
<td>DAPPS is the system of record for the C-SHaRPS system of systems. It supports selection, hiring, personnel actions, time and expense processing, and payroll administration for temporary Census Bureau employees.</td>
</tr>
<tr>
<td>18 Desktop Services</td>
<td>Desktop Services is a set of office automation applications and tools for field office staff and remote workers.</td>
</tr>
<tr>
<td>19 DMP (Data Management Platform)</td>
<td>DMP provides centralized data analytics service to support decision-making for the Census advertising campaign.</td>
</tr>
<tr>
<td>20 DRPS (Decennial Response Processing System)</td>
<td>DRPS provides autocoding, clerical coding, data editing, and imputation for the post-data-collection response processing.</td>
</tr>
<tr>
<td>21 DPACS (Decennial Physical Access Control System)</td>
<td>DPACS maintains information relating to physical access control to facilities.</td>
</tr>
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<tr>
<td><strong>22</strong></td>
<td><strong>DSC (Decennial Service Center)</strong></td>
</tr>
<tr>
<td><strong>23</strong></td>
<td><strong>ECaSE Enum (Enterprise Censuses and Surveys Enabling Platform – Enumeration)</strong></td>
</tr>
<tr>
<td><strong>24</strong></td>
<td><strong>ECaSE FLD OCS (Enterprise Censuses and Surveys Enabling Platform – Field Operational Control System)</strong></td>
</tr>
<tr>
<td><strong>25</strong></td>
<td><strong>ECaSE ISR (Enterprise Censuses and Surveys Enabling Platform – Internet Self-Response)</strong></td>
</tr>
<tr>
<td><strong>26</strong></td>
<td><strong>ECaSE OCS (Enterprise Censuses and Surveys Enabling Platform – Operational Control System)</strong></td>
</tr>
<tr>
<td><strong>27</strong></td>
<td><strong>Geospatial Services</strong></td>
</tr>
<tr>
<td><strong>28</strong></td>
<td><strong>GUPS (Geographic Update Partnership Software)</strong></td>
</tr>
<tr>
<td><strong>29</strong></td>
<td><strong>ICADE (Integrated Computer Assisted Data Entry)</strong></td>
</tr>
<tr>
<td><strong>30</strong></td>
<td><strong>IDMS (Identity Management System)</strong></td>
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<td>31</td>
<td>ILMS (Integrated Logistics Management System)</td>
<td>ILMS is used to manage logistics and resource planning.</td>
</tr>
<tr>
<td>32</td>
<td>IPTS (Intelligent Postal Tracking System)</td>
<td>IPTS is a mail tracking system that traces individual mail pieces through the USPS mailstream.</td>
</tr>
<tr>
<td>33</td>
<td>LiMA (Listing and Mapping Application)</td>
<td>LiMA provides address and map feature collection in support of surveys and censuses.</td>
</tr>
<tr>
<td>34</td>
<td>MaCS (Matching and Coding Software)</td>
<td>MaCS provides interactive clerical matching and coding. This application supports Non-ID processing.</td>
</tr>
<tr>
<td>35</td>
<td>MAF/TIGER (Master Address File/Topologically Integrated Geographic Encoding and Referencing Database)</td>
<td>MAF/TIGER is a repository of spatial and address data and is used to provide spatial and address products and services in support of survey and census operations.</td>
</tr>
<tr>
<td>36</td>
<td>MCM (Mobile Case Management)</td>
<td>MCM provides mobile device-level survey case management.</td>
</tr>
<tr>
<td>37</td>
<td>MOJO Optimizer/Modeling</td>
<td>MOJO Optimizer/Modeling is a route optimizer for field case assignments.</td>
</tr>
<tr>
<td>38</td>
<td>MOJO Field Processing</td>
<td>MOJO Field Processing provides a dashboard for recruiting and performance reports.</td>
</tr>
<tr>
<td>39</td>
<td>NPC Printing (Printing at the National Processing Center)</td>
<td>NPC Printing provides printing services.</td>
</tr>
<tr>
<td>40</td>
<td>OneForm Designer Plus</td>
<td>OneForm Designer Plus is a tool used to create paper forms including decennial questionnaires, letters, envelopes, notice of visit, language guides, and other decennial field and public materials.</td>
</tr>
<tr>
<td>41</td>
<td>PEARSIS (Production Environment for Administrative Records, Staging, Integration, and Storage)</td>
<td>PEARSIS manages administrative records and services associated with these records.</td>
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<td>42 PES Clerical Match and Map Update (Post-Enumeration Survey - Clerical Matching System and Map Update)</td>
<td>PES Clerical Match and Map Update provides clerical address and person matching, and residential unit location updates to support the Coverage Measurement operation.</td>
</tr>
<tr>
<td>43 PES Imputation and Estimation (Post-Enumeration Survey - Imputation and Estimation System)</td>
<td>PES Imputation and Estimation provides coding, imputation of responses, and estimation of coverage for the Coverage Measurement operation.</td>
</tr>
<tr>
<td>44 PES PCS (Post-Enumeration Survey - Processing and Control System)</td>
<td>PES PCS provides sampling, automated matching, and workload control for the Coverage Measurement operation.</td>
</tr>
<tr>
<td>45 R&amp;A (Recruiting and Assessment)</td>
<td>R&amp;A provides online job application capability for temporary positions, online training, and applicant pre-selection assessments.</td>
</tr>
<tr>
<td>46 RTNP (Real Time Non-ID Processing)</td>
<td>RTNP standardizes, matches, and geocodes addresses in real-time.</td>
</tr>
<tr>
<td>47 SMaRCS (Sampling, Matching, Reviewing, and Coding System)</td>
<td>SMaRCS applies quality control algorithms to the field address canvassing and enumeration operations.</td>
</tr>
<tr>
<td>49 SOA (Service Oriented Architecture)</td>
<td>SOA, along with the enterprise service bus, is a web service infrastructure that facilitates data transport, communication, and integration of systems.</td>
</tr>
<tr>
<td>49 SRQA (Self-Response Quality Assurance)</td>
<td>SRQA identifies fraudulent cases of self-response using analytical models.</td>
</tr>
<tr>
<td>50 Tabulation (Decennial Tabulation System)</td>
<td>Tabulation produces tabulated response data for redistricting and other purposes.</td>
</tr>
<tr>
<td>51 UTS (Unified Tracking System)</td>
<td>UTS provides operational and cost &amp; progress reports.</td>
</tr>
<tr>
<td>52 WebTQA (Web Telephone Questionnaire Assistance)</td>
<td>WebTQA provides telephone assistance for Geographic Partnership Programs.</td>
</tr>
</tbody>
</table>