

2020 Census Operational Plan, Version 3.0

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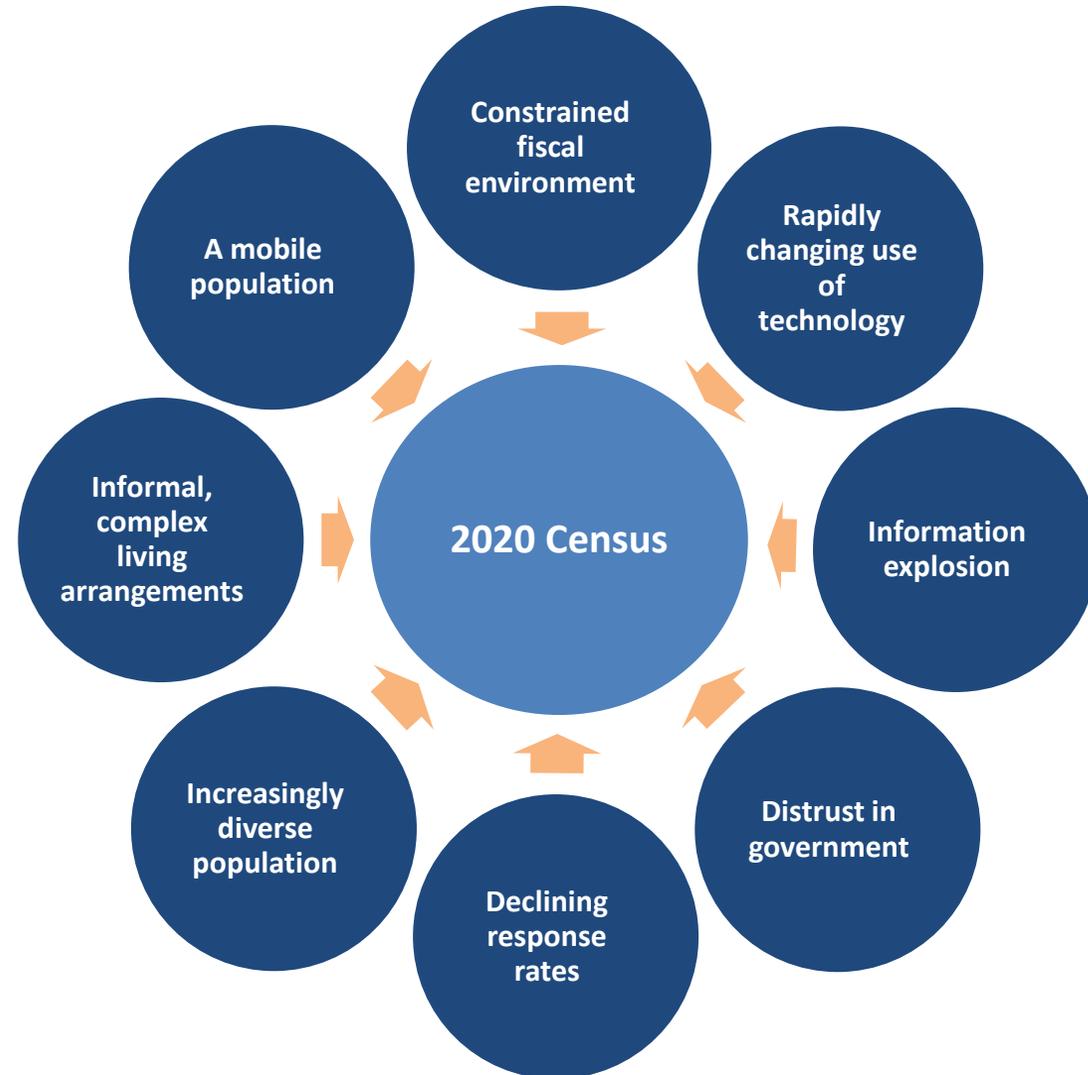
The 2020 Census Challenges

Each decade, planning for the decennial census requires balancing funding constraints and data accuracy against an official schedule fixed by statute.



Goal: Conduct a 2020 Census at a lower cost per housing unit (adjusted for inflation) than the 2010 Census, while maintaining high quality results and a fixed schedule of a Census Day of April 1, 2020.

Challenge: The 2020 Census is being conducted in a rapidly changing environment, requiring a flexible design that takes advantage of new technologies and data sources while minimizing risk to ensure a high quality population count.



The 2020 Census

Goal and Key Innovation Areas

To count everyone once, only once, and in the right place.

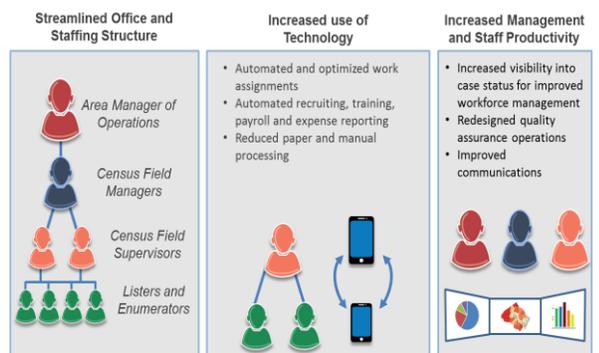
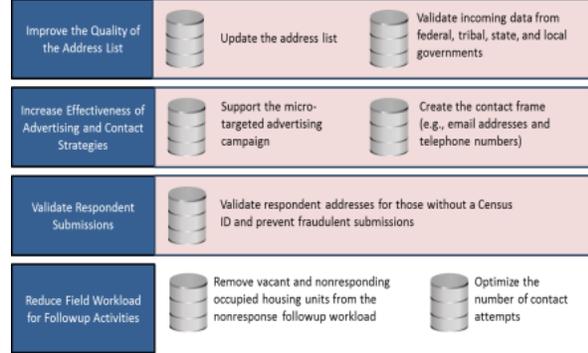
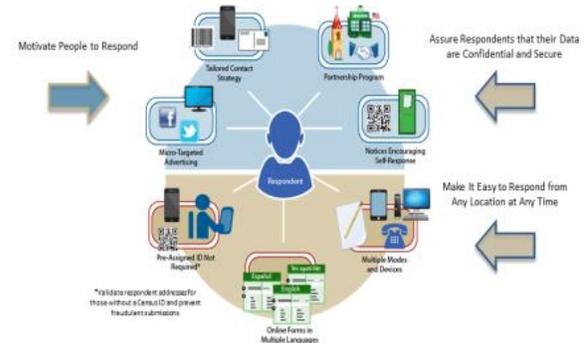
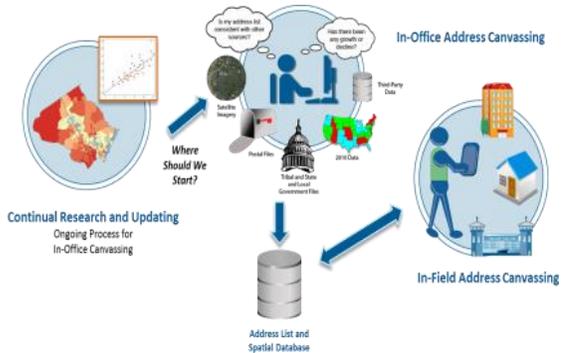
Focus on Four Key Innovation Areas

Reengineering Address Canvassing

Optimizing Self-Response

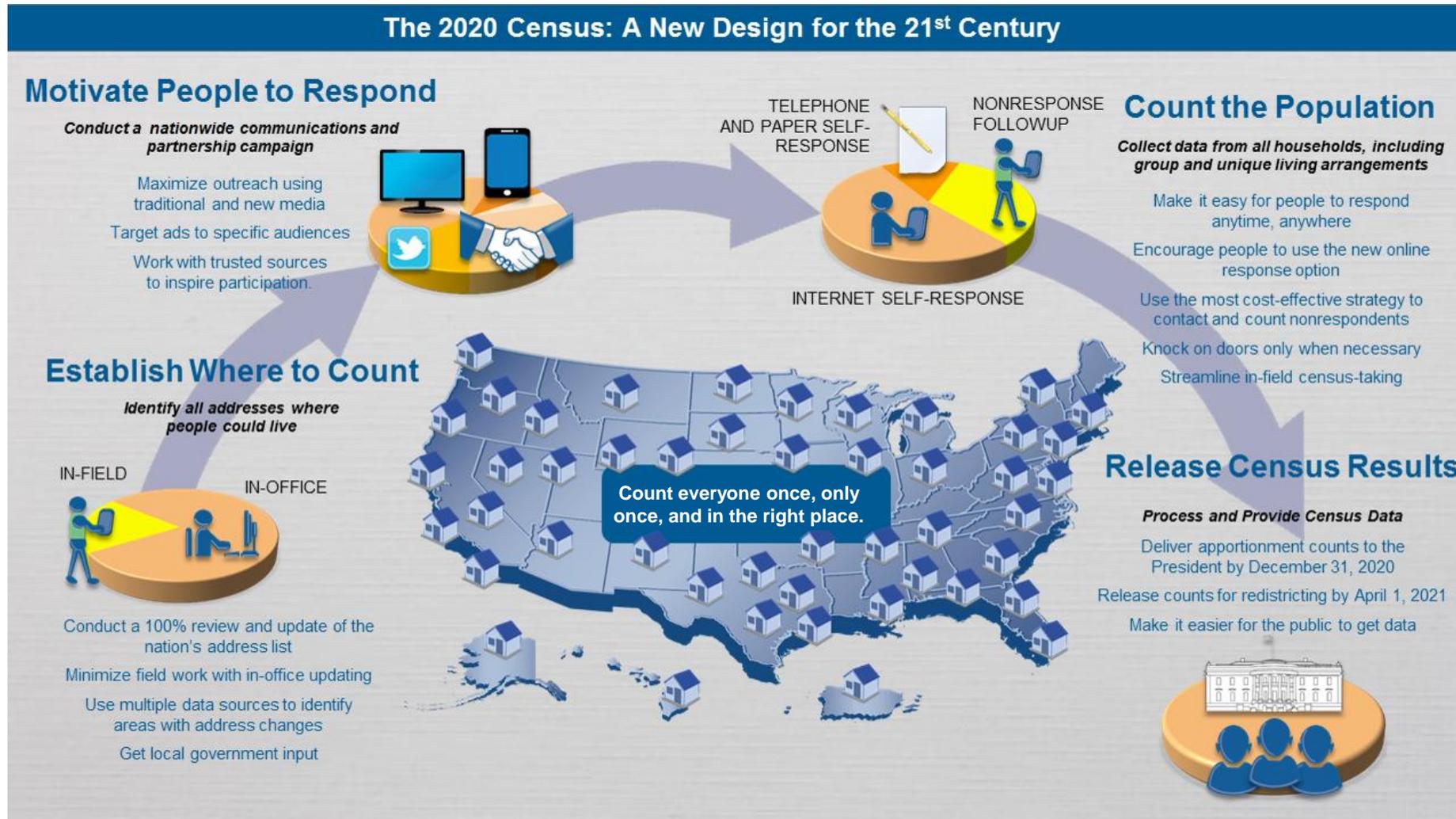
Utilizing Administrative Records and Third-Party Data

Reengineering Field Operations



The 2020 Census

A New Design for the 21st Century



The 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 the 2020 Census design, its 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 overall design did not change.

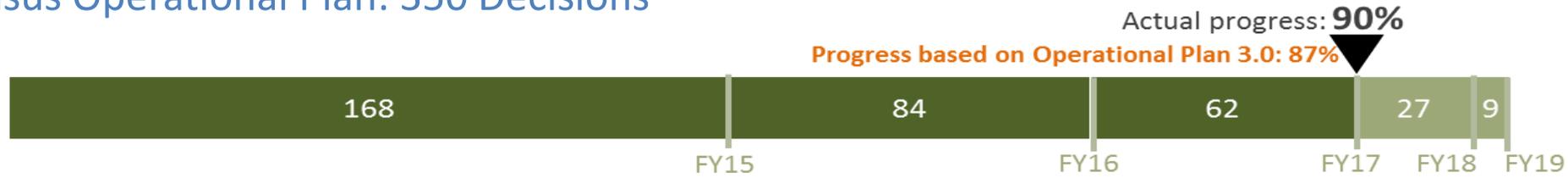
Version 3

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, overall design did not change.

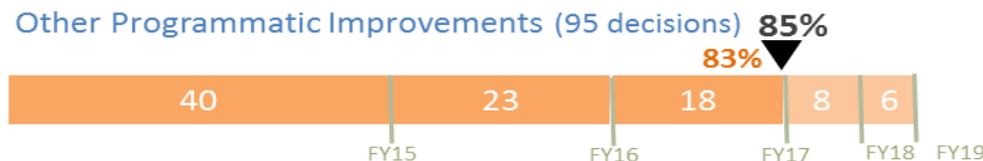
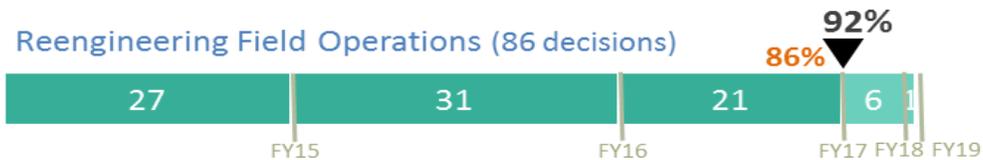
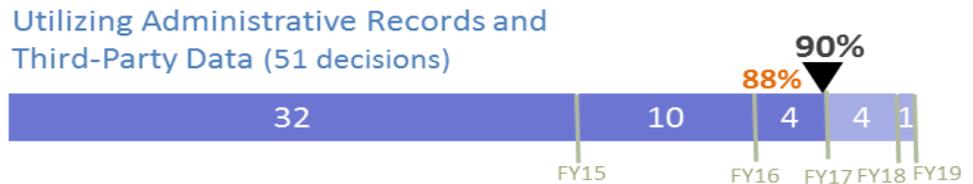
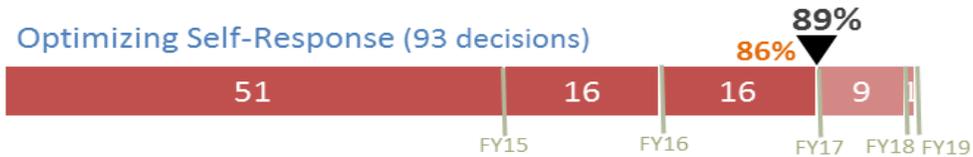
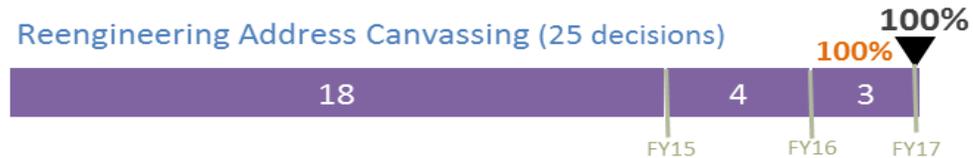
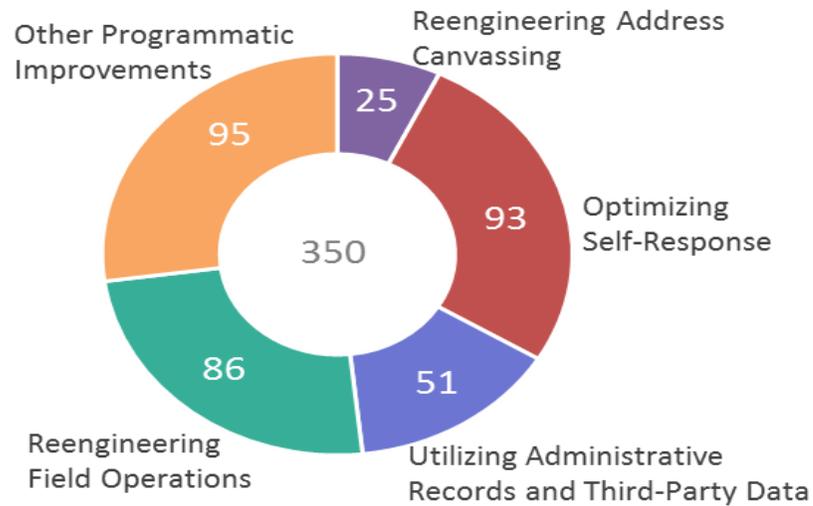


The 2020 Census

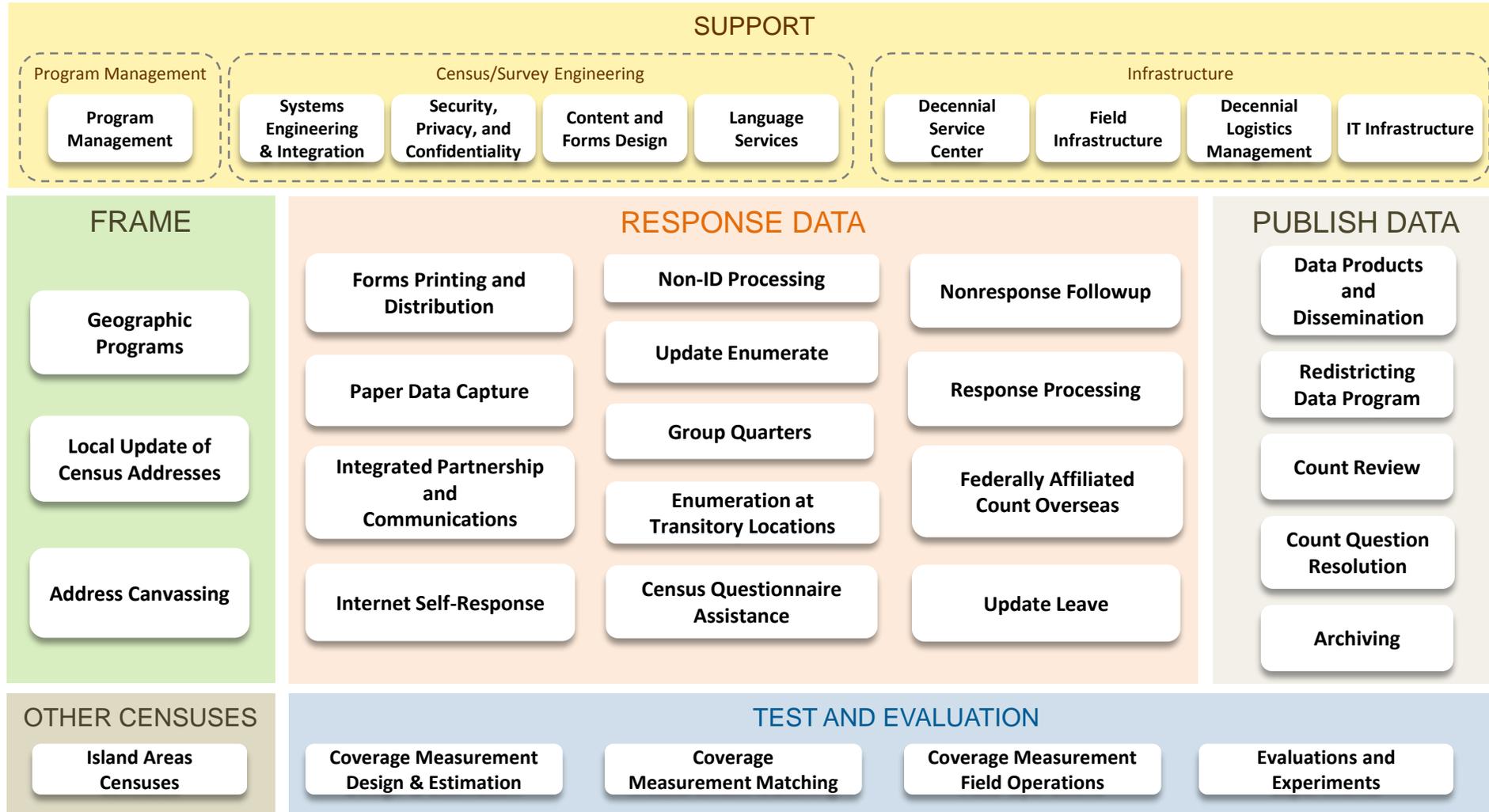
2020 Census Operational Plan: 350 Decisions



Decisions by Innovation Area



The 2020 Census Operations



The 2020 Census

2020 Census Operational Plan, Version 3.0: 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.

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.

Security, Privacy, and Confidentiality

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

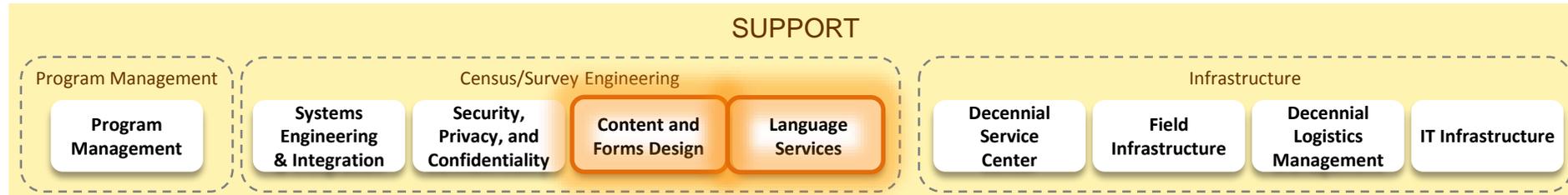
- Continued support of the 2020 Census Operational Plan, v.3.0
- Sixteen Detailed Operational Plans
- Awarded two new schedule contracts
- Continued Risk Management and Change Control Board support
- Developed new SEI framework for gateway reviews and testing

Key Design Changes

- No major design changes for these operations

The 2020 Census

2020 Census Operational Plan, Version 3.0: Support Operations



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 materials.

Selected Accomplishments

- Planned subjects for the 2020 Census were submitted to Congress on March 28, 2017, and are unchanged from the 2010 Census
 - Planned subjects for the 2020 Census include age, gender, race/ethnicity, relationship to householder, and tenure of occupied housing units
- Used 2016 American Community Survey data to update the list of languages in support of the 2020 Census

Key Design Changes

- No major design changes for these operations

The 2020 Census

2020 Census Operational Plan, Version 3.0: Support Operations



Decennial Service Center

The Decennial Service Center (DSC) will support 2020 Census Field operations for decennial staff (i.e., Headquarters, Paper Data Capture, Regional Census Centers, Area Census Offices, Island Areas Censuses, 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.

Decennial Logistics Management

The Decennial Logistics Management (DLM) operation coordinates space acquisition and lease management for the Regional Census Centers, Area Census Offices (ACO), and the Puerto Rico Area Office; and provides logistics management support services (e.g., kit assembly, supplies 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

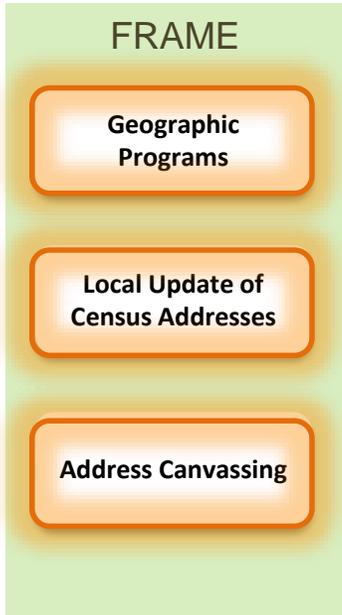
- Released 40 early ACOs to General Services Administration (GSA) to secure space acquisition and leasing
- Released 208 remaining ACOs to GSA
- Tested Cloud computing, as well as systems, for the 2017 Census Test

Key Design Changes

- Regional Census Centers are scheduled to open on or around April 1, 2018

The 2020 Census

2020 Census Operational Plan, Version 3.0: Frame Operations



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.

Local Update of Census Addresses

The Local Update of Census Addresses (LUCA) operation is the only opportunity offered to tribal, state, and local governments to review and comment on the Census Bureau's residential address list for their jurisdiction prior to the 2020 Census. The Census Bureau relies on a complete and accurate address list to reach every living quarters and associated population for inclusion in the census.

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

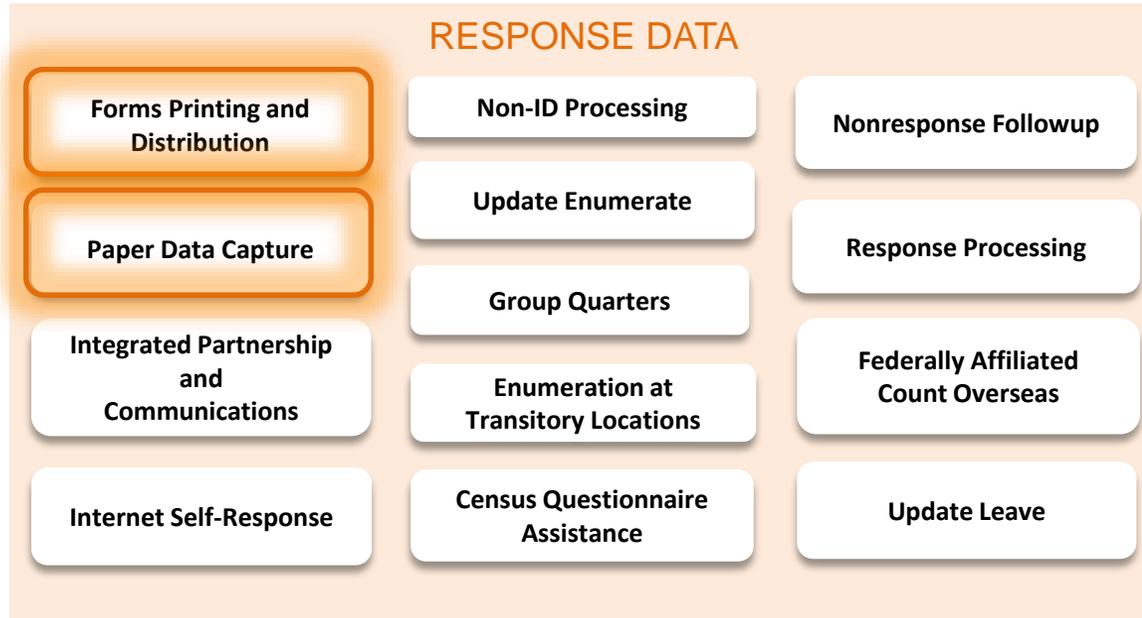
- Implementation of the 2020 LUCA operation began in January 2017
- LUCA invitation packages were mailed to over 39,000 elected officials and tribal chairs as well as courtesy copies to over 46,000 contacts in July 2017
- Address Canvassing operation tested in Address Canvassing Test as well as the 2018 End-to-End Census Test
- Added in Quality Control component to the Listing and Mapping Application (LiMA) for the 2018 End-to-End Census Test

Key Design Changes

- For the Geographic Programs operation, there were changes made to the TEA to accommodate the new Update Leave operation
- Based on funding uncertainty and reprioritization of critical components of the 2020 Census, Active Block Resolution (ABR) was discontinued for the Address Canvassing operation

The 2020 Census

2020 Census Operational Plan, Version 3.0: Response Data Operations



Forms Printing and Distribution

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.

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

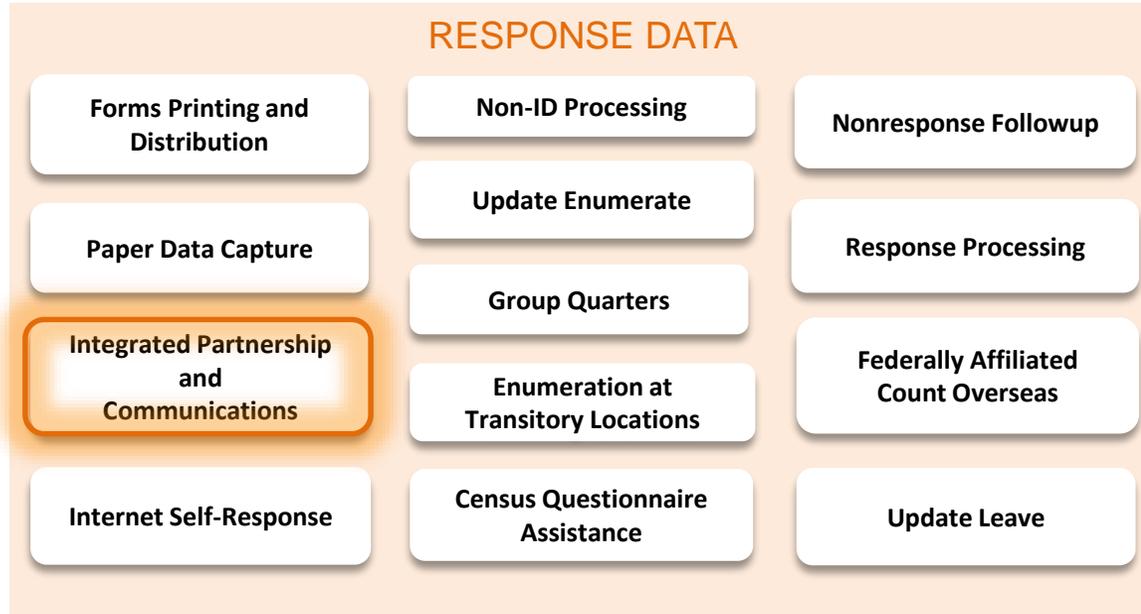
- Tested Forms Printing and Distribution operation in the 2017 Census Test
- Utilized Enterprise Censuses and Surveys Enabling–Operational Control System for the first time in the 2017 Census Test
- Tested Paper Data Capture operation in the 2017 Census Test

Key Design Changes

- In addition to supporting self-response, which includes Puerto Rico, the PDC operation will print materials for the Update Leave, Update Enumerate, Group Quarters, Nonresponse Followup, and Island Areas Censuses operations

The 2020 Census

2020 Census Operational Plan, Version 3.0: Response Data Operations



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 support field recruitment efforts, engage and motivate people to self-respond (preferably via the internet), raise and keep awareness high throughout the entire 2020 Census to encourage response, and effectively support dissemination of census data to stakeholders and the public.

Selected Accomplishments

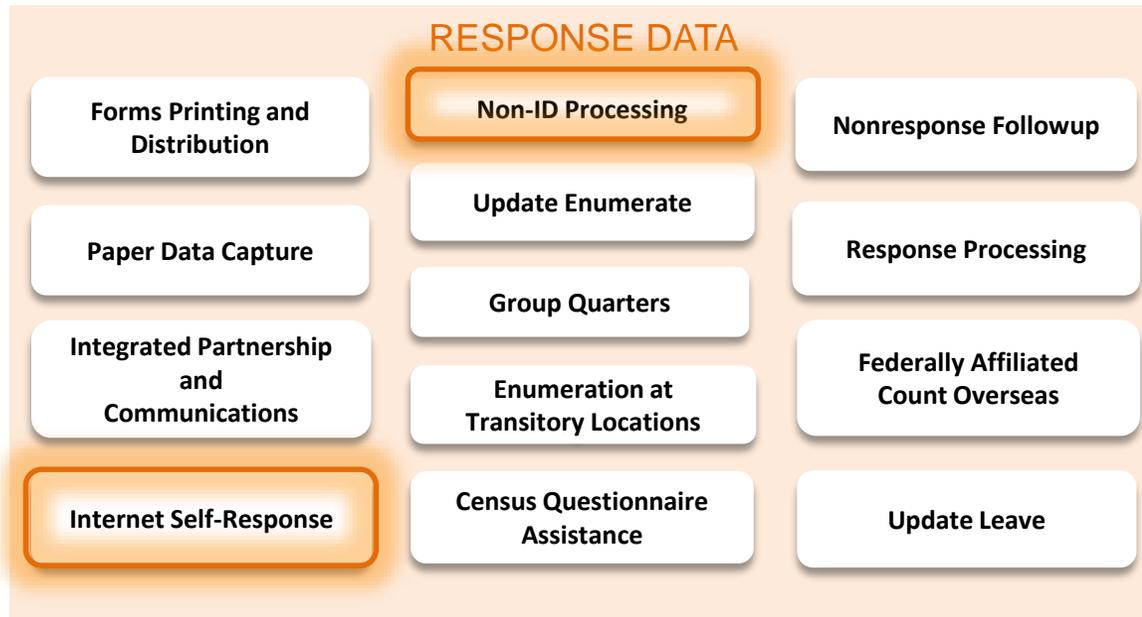
- Developed draft version 1.0 of the Communications Plan
- Published the Federal Register Notice (FRN) for conducting Census Barriers, Attitudes, and Motivators Survey

Key Design Changes

- Audience segmentation model will be done at the tract level rather than at the household level

The 2020 Census

2020 Census Operational Plan, Version 3.0: Response Data Operations



Internet Self-Response

The Internet Self-Response (ISR) operation maximizes online response to the 2020 Census via contact strategies and improved access for respondents while also reducing paper and Nonresponse Followup.

Non-ID Processing

The Non-ID Processing (NID) operation is focused on making it easy for people to respond by providing response options that do not require a previously assigned ID, maximizing real-time matching of non-ID respondent addresses to the census living quarters address inventory, and assigning nonmatching addresses to census blocks.

Selected Accomplishments

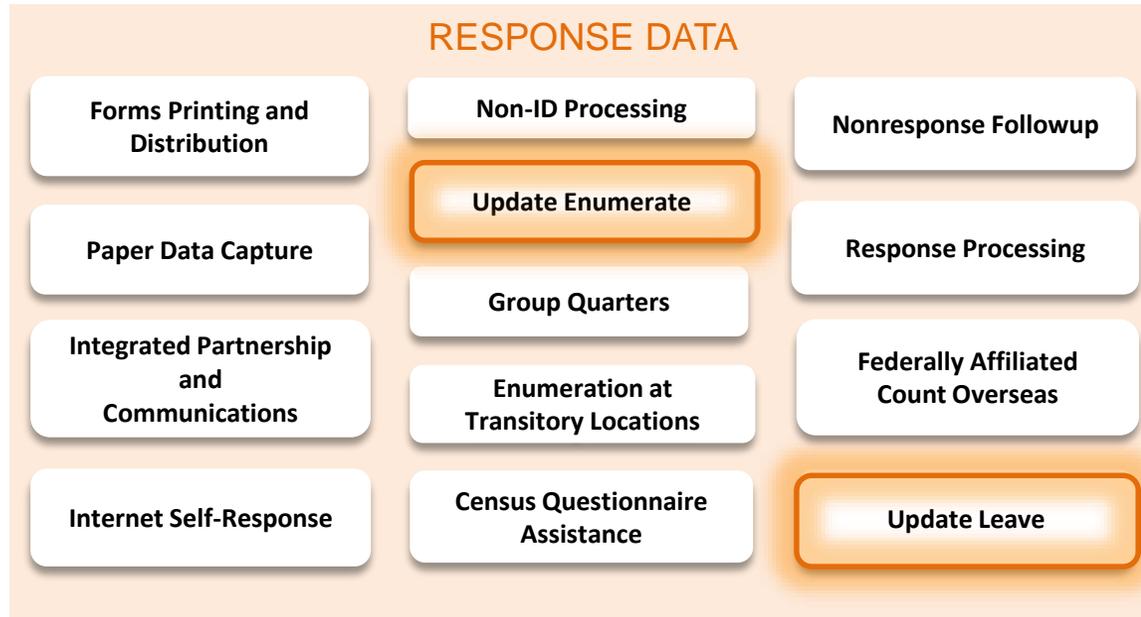
- Tested a new instrument as part of Enterprise Censuses and Surveys Enabling (ECaSE) platform during the 2017 Census Test
- Developed the mail strategy for the 2018 End-to-End Census Test
- Tested Non-ID Processing in the 2017 Census Test
- Integrated with ECaSE–Internet Self-Response solution

Key Design Changes

- The validation of NID responses is part of the scope of work for an overall self-response fraud detection activity

The 2020 Census

2020 Census Operational Plan, Version 3.0: Response Data Operations



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 (HU) identified to allow the household to self-respond. UL is designed to occur in areas where the majority of HU do not have either mail delivered to the physical location of the housing unit, or the mail delivery information for the HU cannot be verified.

Selected Accomplishments

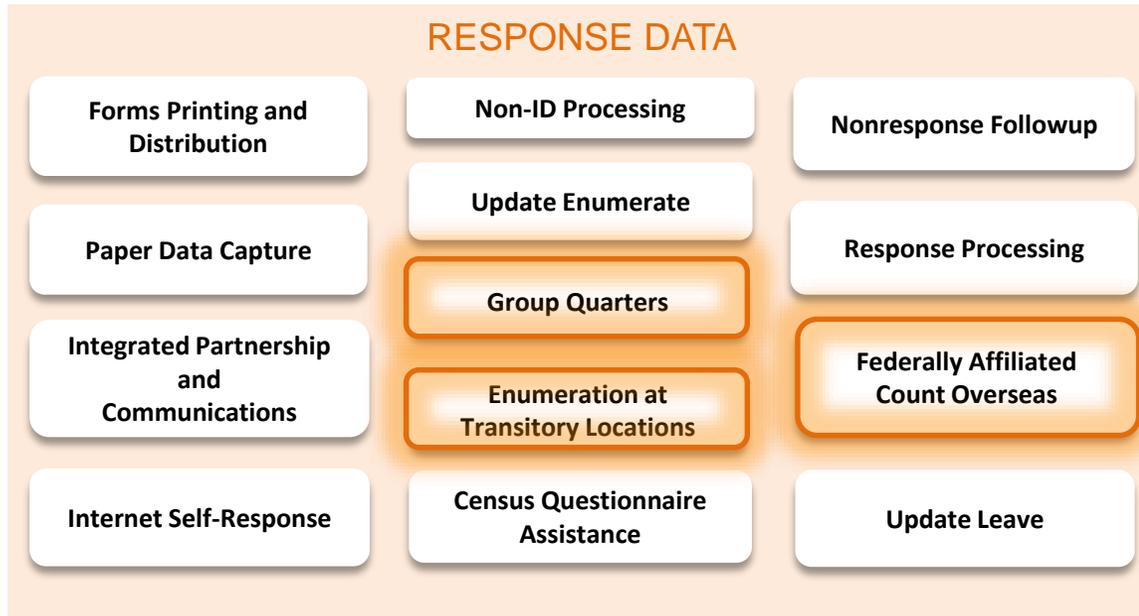
- Original Update Enumerate was split into two parts: Update Enumerate and Update Leave
- Creation of new Type of Enumeration Area (TEA)

Key Design Changes

- The UE Operation was modified in May 2017, when the new UL Operation was created. The majority of the living quarters that were originally designated in the UE TEA were moved to the UL TEA. UE will continue to update the address and feature data and enumerate respondents in person, but will deploy proven paper-based methodologies in the field.
- Remote Alaska will use the same listing and enumeration methodologies as in the 2010 Census

The 2020 Census

2020 Census Operational Plan, Version 3.0: Response Data Operations



Group Quarters

The Group Quarters (GQ) operation will enumerate people living 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.

Federally Affiliated Count Overseas

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

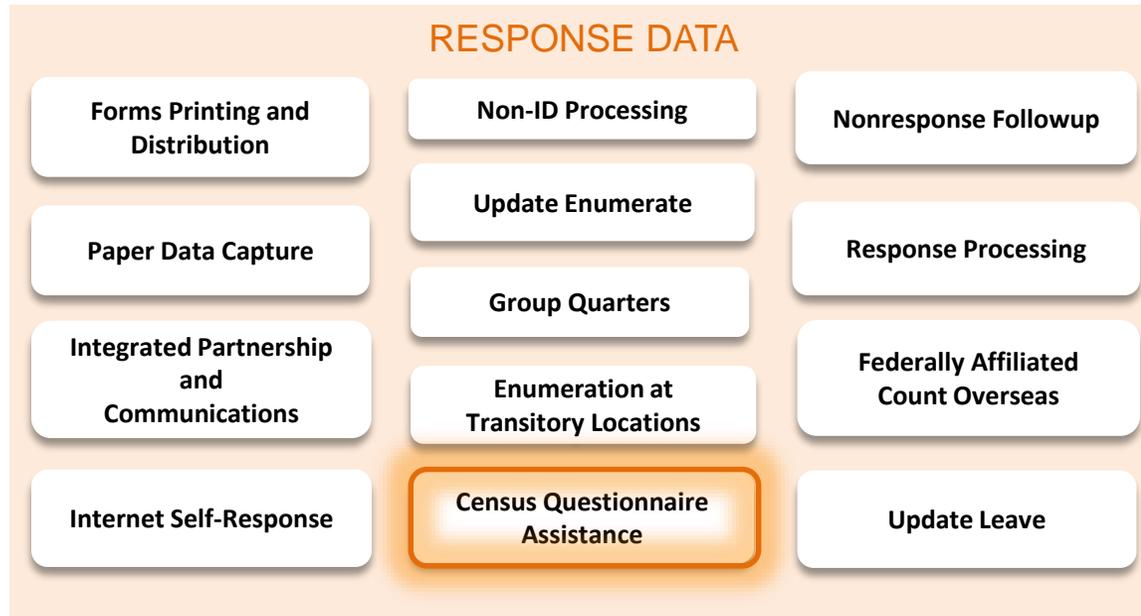
- Tested GQ eResponse in an independent 2016 and 2017 test
- Testing of military installations is also ongoing during 2017
- United States Marshalls Service and the Bureau of Prisons have agreed to provide eResponse for the 2020 Census

Key Design Changes

- In-Field Advance Contact component has been removed from the Group Quarters operation
- GQ Enumeration component will be mainly paper-based, but GQ contacts will be offered the option to provide electronic resident-level data (eResponse) via a secure server using a standardized template
- For the Federally Affiliated Count Overseas operation, the name and acronym of the operation have been changed to reflect that counts will not be exclusively for Americans, census counts include everyone who meets the residence criteria

The 2020 Census

2020 Census Operational Plan, Version 3.0: Response Data Operations



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. Additionally, CQA provides an option for respondents to complete a census interview over the telephone as well as provide outbound calling support of Nonresponse Followup Reinterview and Coverage Improvement.

Selected Accomplishments

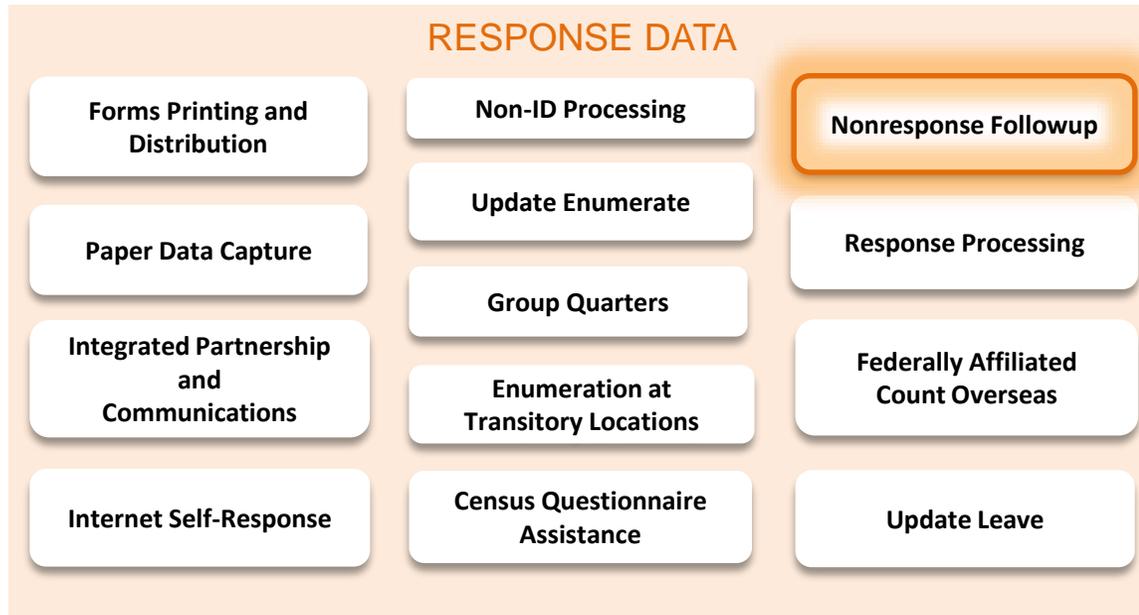
- Tested the new Census Questionnaire Assistance solution for Internet Self-Response inbound calls in the 2017 Census Test

Key Design Changes

- Census Questionnaire Assistance will support centralized outbound calling for Nonresponse Followup Reinterview and Coverage Improvement

The 2020 Census

2020 Census Operational Plan, Version 3.0: 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

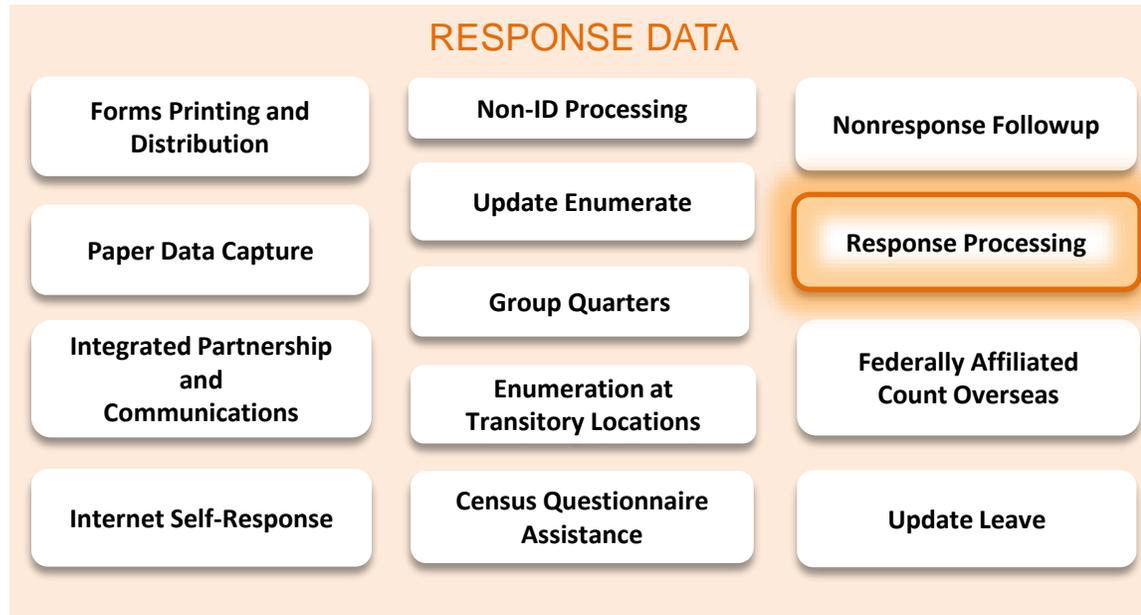
- Evolution and refinement of the operational design based on results from census tests, research, data analysis, development and integration of software, systems, and procedures

Key Design Changes

- Nonresponse Followup now includes follow-up to nonresponding housing units in Update Leave Type of Enumeration Areas (TEA 6)
- Nonresponse Followup now includes Coverage Improvement

The 2020 Census

2020 Census Operational Plan, Version 3.0: Response Data Operations



Response Processing

The Response Processing Operation (RPO) creates and distributes the initial 2020 Census enumeration universe, assign the specific enumeration strategy for each living quarter based on case status and associated paradata, create and distribute workload files required for enumeration operations, track case enumeration status, run postdata collection processing actions in preparation for producing the final 2020 Census results, and check for fraudulent returns.

Selected Accomplishments

- Tested response processing in the 2017 Census Test receiving output from the Enterprise Censuses and Surveys Enabling (ECaSE) platform

Key Design Changes

- The scope of the operation now includes processing of the Island Areas Censuses (IAC) response data and management of the operational functions of the Census Data Lake (CDL)

The 2020 Census

2020 Census Operational Plan, Version 3.0: Publish Data Operations

PUBLISH DATA

Data Products
and
Dissemination

Redistricting
Data Program

Count Review

Count Question
Resolution

Archiving

Data Products and Dissemination

The Data Products and Dissemination (DPD) operation prepares and delivers the 2020 Census population counts to the President of the United States for Congressional apportionment, tabulates and disseminates 2020 Census data products for use by the states for redistricting, and tabulates and disseminates 2020 Census data for use by the public.

Selected Accomplishments

- Determined the tabulation system supporting the American Community Survey (ACS) will be generalized and enhanced to support both the ACS and the 2020 Census
- Identified the enterprise data dissemination vehicle and began releasing beta versions on data.census.gov

Key Design Changes

- No major design changes for this operation

The 2020 Census

2020 Census Operational Plan, Version 3.0: Publish Data Operations

PUBLISH DATA

Data Products
and
Dissemination

Redistricting
Data Program

Count Review

Count Question
Resolution

Archiving

Redistricting Data Program

The purpose of the 2020 Census Redistricting Data Program (RDP), as required by P.L. 94-171, is to provide each state an opportunity to identify the geographic areas for which specific tabulations of population are desired and to deliver those tabulations by the mandated deadline of one year from Census Day: April 1, 2021.

Selected Accomplishments

- Successfully completed Phase 1 of the RDP, the Block Boundary Suggestion Project
 - This phase allowed states to provide suggestions to the upcoming 2020 Census tabulation blocks, as well as provide updates and corrections to features and areas in the census geographic database

Key Design Changes

- Phase 2 of the RDP has been modified
 - Original plan for Phase 2 included one round of voting district delineation and one round of verification of those updates
 - New plan adds a second round of verification, thereby extending the end of Phase 2 from May 2019 to March 2020

The 2020 Census

2020 Census Operational Plan, Version 3.0: Publish Data Operations

PUBLISH DATA

Data Products
and
Dissemination

Redistricting
Data Program

Count Review

Count Question
Resolution

Archiving

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 missing housing units and correct missing or geographically misallocated large group quarters and their population and positioning remaining count issues for a smooth transition to the Count Question Resolution operation.

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 the materials and data and provide 2020 Census records deemed permanent, including files containing individual responses, to the National Archives and Records Administration and 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

- Recently started working on the Geographic Updates Partnership Software (GUPS) that will be used for the Count Review operation
- Started early participants program with four Federal State Cooperative for Population Estimates (FSCPE) partnership states
 - Early participants will assist with both the administrative and operational aspects of the Count Review program.
- Planning has not yet begun for Count Question Resolution operation
- Led discussions this year with National Archives and Records Administration to discuss plans and records schedule for archiving materials for the 2020 Census for the Archiving operation

Key Design Changes

- No major design changes for these operations

The 2020 Census

2020 Census Operational Plan, Version 3.0: Other Censuses

OTHER CENSUSES

Island Areas Censuses

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

- Decision to use paper questionnaires, paper address registers, and paper maps

Key Design Changes

- Field enumerators will list addresses using paper address registers and paper maps
- Enumerators will conduct interviews with household members who are at home or leave paper questionnaires for the households' self-response
- Master Address File of Island Areas' addresses will not be produced

The 2020 Census

2020 Census Operational Plan, Version 3.0: 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 help understand census coverage and to detect erroneous enumerations.

Selected Accomplishments

- Recently changed the name to Post-Enumeration Survey (PES) because the PES is well recognized, and Census.gov provides information on the post-enumeration surveys the Census Bureau has conducted prior to 2010 under the heading "Post-Enumeration Surveys"

Key Design Change

- The Coverage Measurement Survey has been renamed the 2020 PES
- Recently replanned the PES Program to include the automation of two of the five field data collection operations (Independent Listing and Person Interviewing)
 - Remaining operations will be paper based

The 2020 Census

2020 Census Operational Plan, Version 3.0: Test and Evaluation Operations



Evaluations and Experiments

The 2020 Census Evaluations and Experiments (EAE) operation documents the execution of the 2020 Census through the design and development of operational assessments that measure the success of each 2020 Census operation. The EAE operation coordinates the design and development of evaluations that analyze, interpret, and synthesize the effectiveness of census components along with their impact on data quality or coverage or both. The EAE operation formulates and executes an experimentation program to support early planning and inform the transition and design of the 2030 Census. And, the EAE operation produces an independent assessment of population and housing unit coverage.

Selected Accomplishments

- Development of selected 2018 End-to-End Census Test operational study plans and operational assessments

Key Design Changes

- No major design changes for this operation

The 2020 Census

A New Design for the 21st Century



Count everyone once,
only once, and in the right place.



ESTABLISH WHERE TO COUNT

Identify all addresses
where people could live.

Conduct a 100 percent review
and update of the nation's
address list.

Minimize in-field work
with in-office updating.

Use multiple data sources
to identify areas with
address changes.

Get local government input.



MOTIVATE PEOPLE TO RESPOND

Conduct a nationwide
communications and
partnership campaign.

Work with trusted sources
to increase participation.

Maximize outreach using
traditional and new media.

Target advertisements to
specific audiences.



COUNT THE POPULATION

Collect data from all
households, including
group and unique living
arrangements.

Make it easy for people to
respond anytime, anywhere.

Encourage people to use the
online response option.

Use the most cost-effective
strategy to contact and
count nonrespondents.

Streamline in-field
census taking.

Knock on doors only
when necessary.



RELEASE CENSUS RESULTS

Process and provide Census data.

Deliver apportionment counts
to the President by
December 31, 2020.

Release counts for
redistricting by April 1, 2021.

Make it easier for the public
to get information.

Questions?