



# **2020 Census**

## **July 2017**

### **Monthly Status Report**

All information in this report is as of July 31, 2017  
unless otherwise stated in the title of the page.

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## Key Program Updates

Successes and lessons learned from the **2017 Census Test** were presented at the 2020 Census Program Management Review on July 11, 2017. Most User Acceptance Testing for response processing and data file creation from this test was also completed.

Activities continue for next month's (August 2017) start of the first major operation of the **2018 End-to-End Census Test** (pp. 10-18) -- Address Canvassing. The Beckley, West Virginia; and Seattle, Washington, Area Census Offices (ACOs) opened on July 17, 2017. (The Providence ACO opened May 26, 2017). Address Canvassing Production Classroom training modules were completed and uploaded to the laptops to be used for Census Field Supervisor Training on July 31, 2017. The Field Dry Run of provisioning and training with Computer Assisted Personal Interviewing laptops for Address Canvassing operations was completed. All equipment was configured and deployed to the Beckley, West Virginia, and Pierce County, Washington, Area Census Offices by July 14, 2017. (This had been completed for the Providence, Rhode Island ACO on May 26, 2017). A successful Operational Readiness Review (ORR) for Training Release 1: Address Canvassing was held, and the Production Readiness Review for Release A (Address Canvassing) was conducted on July 26, 2017. The Census Enterprise Data Collection and Processing (CEDCaP) capabilities for Training Release 1 for Address Canvassing was also released to production. Recruiting and selection of staff for the operation continued with no major issues in any of the three sites.

For **2020 Census operations**, the Local Update of Census Addresses (LUCA) program for the 2020 Census continues (see p. 25-27). The LUCA Promotional Outreach events continued, with a total of 500 completed to date and 106 more scheduled. Printing and shipping LUCA Invitation packages to eligible governmental units was also started on July 17, 2017. In addition, Geographic Partnership Support Desk training to support this mailing was completed at the National Processing Center.

The 2020 Census In-Office Address Canvassing Interactive Review production continues, and is meeting the expected production goals. The clerks have reviewed 11,155,309 blocks during Interactive Review from the beginning of production in September 2015 through July 31, 2017. They have completed 100 percent of the 11,155,486 total blocks nationally through the first pass of Interactive Review. As of July 31, 2017, 74.7 percent of the blocks were classified as Passive, 18.2 percent were classified as Active, and 4.6 percent were classified as On-Hold.

The Redistricting Data Program (RDP)'s Federal Register Notice announcing Phase 2 – the Voting District Project, 30-day comment period closed on July 28, 2017.

For the Census Enterprise Data Collection and Processing (CEDCaP) program (p. 38), work continues on Increment 21 commitments. (Commitments refer to part of the Scalable Agile Framework methodology that CEDCaP and the Office of Innovation and Implementation are using as part of the CEDCaP Release Train. The objective of the Release Train is to deliver “potentially shippable” integrated software at the end of each 40-day developmental cycle called Program Increment. At the start of each Program Increment, all the CEDCaP project teams participate in a planning session to identify the work, or commitments, that their team

## Key Program Updates Cont'd

plans to get completed in the next 40 days.) For Program Increment 21, the focus of the CEDCaP project teams is Releases A, C, and D for the 2018 End-to-End Census Test. Release A covers In-Field Address Canvassing, Release C is Self-Response, and Release D is Field Enumeration.

For the Census Bureau-United States Postal Service Partnership effort, development of core program management documentation, including an integrated project plan, common reporting process, risk register, and roles and responsibilities matrix, began on July 6, 2017, with a targeted completion of August 2017.

From the 2020 Census Integrated Master Schedule, through July 31, 2017, 93.6 percent of 2017 Census Test activities, and 37.4 percent of 2018 End-to-End Census Test activities had been completed.

Extensive engagements with stakeholders and oversight also continued. The quarterly Program Management Review (PMR) was held on July 11, 2017, and was broadcast live on the internet (and the video will be archived). Ron Jarmin and Enrique Lamas, are respectively fulfilling the non-exclusive duties of Director and Deputy Director, met with Rep. Gowdy, the new chair of our House Oversight Committee, and briefed him on the status of IT systems development, budget, and other 2020 Census matters. The Census Bureau provided comments to GAO on their draft report about our planned uses of administrative records, and they issued their final report on our 2020 Census address canvassing plans. GAO currently has one 2020 Census audit in progress, and the Office of Inspector General has three. Both OIG and GAO plan to launch a new audit next month on the address canvassing portion of the 2018 End-to-End Census Test. Finally, the Census Bureau held a meeting with GAO on July 20, 2017, to review its open recommendation list. This was the first of planned quarterly meetings to discuss open recommendations,

Some specific program updates include:

### **2017 Census Test**

- Finalized and accepted the 2017 Census Test closeout documentation from the Census Questionnaire Assistance contractor on July 19, 2017. This provided the final documentation needed to “close out” work on the 2017 Census Test. Contents included the final successes and lessons learned, as well as final equipment dispositions and final deliverables.
- Completed most User Acceptance Testing for response processing and data file creation.
- Provided the draft Paper Data Capture (PDC) lessons learned document to the PDC Integrated Project Team (IPT) on July 12, 2017 for review and feedback.

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

- At the 2020 Census Program Management Review on July 11, 2017, the Census Bureau discussed plans to conduct Address Canvassing in three sites and continue peak operations in the Providence, Rhode Island, site.

## **Key Program Updates Cont'd**

### **2018 End-to-End Census Test Cont'd**

- Opened Beckley, West Virginia; and Seattle, Washington, Area Census Offices (ACOs) on July 17, 2017. (Providence ACO opened May 26, 2017.)
- Completed Address Canvassing Production Classroom training modules and uploaded to the laptops to be used for Census Field Supervisor Training on July 31, 2017.
- Submitted the full Paperwork Reduction Act package for the 2018 End-to-End Census Test to the Office of Management and Budget.
- Held the Operational Readiness Review (ORR) for Training Release 1: Address Canvassing.
- Developed Frequently Asked Questions document for use by Census Questionnaire Assistance agents on July 6, 2017.
- The Government Publishing Office (GPO) posted the solicitation (contract terms) to acquire the necessary printing and mailing services for the 2018 End-to-End Census Test, with an option for extending through the 2020 Census. An award is planned on or about September 15, 2017.
- Delivered key geographic test files to operations teams on July 27, 2017.
- Conducted the Production Readiness Review for Release A (Address Canvassing) on July 26, 2017 and Recruiting Release 2 (Nonresponse Followup, Update Leave, Group Quarters recruiting) on July 31, 2017.
- Completed the Field Dry Run of provisioning and training with Computer Assisted Personal Interviewing (CAPI) laptops for Address Canvassing operations by July 14, 2017. All equipment was configured and deployed to the Beckley, West Virginia, and Pierce County, Washington, Area Census Offices (ACO) by July 14, 2017. (All equipment was configured and deployed to the Providence, Rhode Island ACO by May 26, 2017.)
- Released to production Census Enterprise Data Collection and Processing (CEDCaP) capabilities for Training Release 1 for Address Canvassing. All Training systems were deployed to production by July 10, 2017. All Production systems required for Training were deployed to production by July 28, 2017

### **2020 Census Operations**

- The LUCA Integrated Project Team's (IPT) LUCA Promotional Outreach events continued to occur in July 2017. A total of 500 promotional presentations have been completed to date by staff, and another 106 promotional events are scheduled for August 2017 through November 2017.
- Publically released the 2020 Census Response Processing Detailed Operational Plan on July 11, 2017.
- Received approval on July 12, 2017 to proceed with acquisition activities with the General Services Administration for Wave 1 Area Census Offices (ACOs).
- Completed Geographic Partnership Support Desk (GPSD) training to support the Local Update of Census Addresses (LUCA) invitation mailing at the National Processing Center (NPC) on July 13, 2017.
- Released the Paper Data Capture Detailed Operational Plan on July 14, 2017.
- Started printing and shipping of LUCA Invitation packages on July 17, 2017.

## **Key Program Updates Cont'd**

### **2020 Census Operations Cont'd**

- Reviewed the first deliverable for TD013, the Technical Integrator's (TI) Paper Data Capture (PDC) Business Process Model (BPM) during the July 20-27, 2017, period, and accepted (it) with comments. TD013 is the 13<sup>th</sup> TD issued under the 2020 Census Technical Integrator (TI) contract. The scope of TD013 provides for assessment, build, and technical integration support for Paper Data Capture Solution for the 2020 Census.
- The Redistricting Data Program (RDP)'s Federal Register Notice announcing Phase 2 – the Voting District Project, 30-day comment period closed on July 28, 2017.
- Completed the 2020 Software Requirements Review #2 (SRR2) on July 31, 2017. Recent Systems Engineering and Integration (SE&I) and Program-Level Change Requests proposed four 2020 System Requirement Reviews, Critical Design Reviews, Test Readiness Reviews, and Production Readiness Reviews (the original plan was for one of each).
- Participated in System Readiness Review for the 2020 Census on July 31, 2017.
- Baselined all Address Canvassing capability requirements for the 2020 Census July 31, 2017.
- Completed a revision of the 2020 Census Questionnaire Assistance (CQA) Business Process Model in support of the revised CQA Detailed Operational Plan.
- The Cloud team delivered a secure solution for the Disclosure Avoidance System (DAS) compliant with Title 13 requirements.
- The Technical Evaluation Team (TET) and Price Evaluation Team (PET) evaluated Third Party Vendor (3PV) Fingerprinting Proposals.

## **Status of Major Tests**

## 2017 Census Test

### **Description**

Pursuant to 2020 Census Program Memorandum 2016.21, the scope of the 2017 Census Test was reduced in response to the uncertainty surrounding the final Fiscal Year (FY) 2017 appropriations. As a result, the 2020 Census Program did not conduct the FY2017 field testing operations in the Standing Rock Reservation in North Dakota and South Dakota and the Colville Reservation and Off-Reservation Trust Land in Washington state. Field tests planned for three areas in Puerto Rico were also cancelled.

### **Key Activities**

Conduct Census Questionnaire Assistance (CQA) – March 20, 2017 – May 12, 2017 (completed May 12, 2017)

Conduct Self-Response, Including Non-ID Processing – March 20, 2017 – May 12, 2017 (completed May 12, 2017)

Census Day – April 1, 2017

Conduct Reinterview Operations – April 10, 2017 – July 10, 2017 (completed July 10, 2017)

### **Summary of Activities (Last 30 Days)**

#### *Census Questionnaire Assistance*

Finalized and accepted the 2017 Census Test closeout documentation from the Census Questionnaire Assistance contractor on July 19, 2017. This provides the final documentation needed to “close out” work on the 2017 Census Test. Contents include the final successes and lessons learned, as well as final equipment dispositions and final deliverables.

#### *Internet Self-Response*

Continued analysis of 2017 Census Test data.

#### *Response Processing*

Completed the Census Unedited File on July 20, 2017.

#### *Paper Data Capture*

Provided the draft Paper Data Capture (PDC) lessons learned document to the PDC Integrated Project Team (IPT) on July 12, 2017 for review and feedback.

### **Look Ahead (Next 60 Days)**

#### *Program Management*

Conduct lessons learned activities.

#### *Non-ID Processing*

1. Conclude analysis of automated and clerical processing results.
2. Complete initial draft of 2017 Census Test Analysis Report for Non-ID Processing operation.

## 2017 Census Test

### Look Ahead (Next 60 Days) Cont'd

#### *Internet Self-Response*

Continue analysis of 2017 Census Test data.

## 2018 End-to-End Census Test

### Description

The 2018 End-to-End Census Test objectives are to:

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

The Test includes aspects of all four key innovation areas of the 2020 Census Program: reengineering address canvassing, optimizing self-response, utilizing administrative records and third-party data, and reengineering field operations. Additionally, the Test will introduce enterprise systems that were not used in earlier census tests, expand systems already in use, and enhance system use of Cloud technologies.

The Test will take place, with an April 1, 2018 Census Day, in portions of three areas: Providence County, Rhode Island; Pierce County, Washington; and Bluefield-Beckley-Oak Hill, West Virginia. Providence County's demographics mirror those of the nation, providing a microcosm of the 2020 Census experience. Pierce County offers a large military population, while Bluefield-Beckley-Oak Hill provides a very rural environment, simulating unique challenges that the Census Bureau will face in 2020. The Address Canvassing Operation will be conducted in all three sites, and remaining operations will continue in the Providence County site.

### Key Activities

Publish Paperwork Reduction Act Presubmission Federal Register Notice for Early Operations – October 7, 2016 (published on October 19, 2016)

Conduct In-Office Address Canvassing – November 16, 2016 – February 2, 2017 (started on September 26, 2016; completed on January 27, 2017)

Open Regional Census Centers (RCC) – January 3, 2017 (completed on January 3, 2017)

Deliver Office of Management and Budget (OMB) (Paperwork Reduction Act) Clearance Package for Early Operations – January 24, 2017 (published January 10, 2017)

Receive OMB (Paperwork Reduction Act) Approval for Early Operations – March 27, 2017 (completed on March 23, 2017)

Publish Presubmission Federal Register Notice for Peak Operations – March 1, 2017 (completed on March 29, 2017)

Begin Recruiting for Early Operations – March 10, 2017 (begun on March 31, 2017)

Open Area Census Offices (ACO) – March 31, 2017 (Providence ACO opened May 26, 2017; Beckley and Seattle ACOs opened July 17, 2017)

Finalize Partnership Staff Selection – August 18, 2017 (cancelled; due to FY17 budget constraints, partnership activities were descoped from the 2018 End-to-End Census Test)

Deliver OMB (Paperwork Reduction Act) Clearance Package for Peak Operations – July 21, 2017 (completed on July 14, 2017)

Receive OMB (Paperwork Reduction Act) Approval for Peak Operations – September 12, 2017

Conduct In-Field Address Canvassing – August 28, 2017 – September 29, 2017

Conduct In-Field Address Canvassing Listing Quality Control (QC) – September 5, 2017 – October 6, 2017

## 2018 End-to-End Census Test

### **Key Activities Cont'd**

Conduct Group Quarters (GQ) Advance Contact – February 5, 2018 – March 9, 2018  
Conduct Census Questionnaire Assistance (CQA) – March 16, 2018 – July 31, 2018  
Conduct Self-Response, Including Non-ID Processing – March 16, 2018 – July 31, 2018  
Conduct GQ Enumeration – March 28, 2018 – June 8, 2018 (Including SBE)  
Conduct GQ Enumeration QC – April 4, 2018 – July 31, 2018  
Census Day – April 1, 2018  
Conduct Early Nonresponse Followup (NRFU) – April 3, 2018 – May 9, 2018  
Conduct Nonresponse Followup (NRFU) – May 10, 2018 – July 24, 2018  
Conduct NRFU Reinterview – April 4, 2018 – July 31, 2018  
Conduct Update Leave (UL) – April 16, 2018 – May 16, 2018  
Conduct UL Reinterview – April 19, 2018 – July 17, 2018 (cancelled as separate activity; merged with NRFU Reinterview due to similar operational needs)  
Conduct UL Listing QC – April 23, 2018 – May 23, 2018  
Conduct GQ Enumeration, Late Production – June 11, 2018 – July 24, 2018\*  
Publish Prototype P.L. 94-171 Data and Support Products – no later than April 1, 2019  
\*Adjusted finish date to reflect operation schedule.

### **Summary of Activities (Last 30 Days)**

#### *Evaluations and Experiments*

The Change Control Board is reviewing global schedule change requests to ensure all 2018 End-to-End Census Test operations follow the standard activities listed in the operational assessment study plan template.

#### *Decennial Logistics Management*

1. Opened Beckley, West Virginia, and Seattle Washington, Area Census Offices (ACOs) on July 17, 2017. (The Providence, Rhode Island, ACO opened May 26, 2017.)
2. Delivered Bulk Office Supply kits and Administrative ACO kits to the Beckley, West Virginia, ACO on July 7, 2017, and to the Seattle, Washington, ACO on July 11, 2017. (These materials were delivered to the Providence, Rhode Island, ACO on May 22, 2017.)
3. Delivered Address Canvassing Training kits for Census Field Supervisors (CFSs) and Listers to the Beckley, West Virginia, and Seattle, Washington, ACOs on July 13, 2017. (These materials were delivered to the Providence, Rhode Island, ACO on June 28, 2017.)
4. Delivered Address Canvassing Quality Control Training kits to the Providence, Rhode Island, ACO on July 7, 2017, and to the Beckley, West Virginia and Seattle, Washington ACOs on July 26, 2017.
5. Began assembling recruiting kits for Peak Operations next year.

#### *Recruiting, Training, and Onboarding*

1. Continued Lister, Census Field Supervisor (CFS), Quality Control (QC) Lister, and QC CFS Selections for Address Canvassing in Providence, Rhode Island; Beckley, West Virginia; and Seattle, Washington, ACOs.
2. The Third-Party Vendor (3PV) Fingerprinting Price Evaluation Team (PET), and the Technical Evaluation Team (TET) reviewed responses to the Fingerprinting Request for Proposal (RFP).

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

### **Summary of Activities (Last 30 Days) Cont'd**

#### *Recruiting, Training, and Onboarding Cont'd*

3. Continued Lister, CFS, QC Lister, and QC CFS Clearance through Census Investigative Services (CIS) for Address Canvassing in Providence, Rhode Island; Beckley, West Virginia; and Seattle, Washington, ACOs.
4. Conducted Address Canvassing Just-In Time (JIT) training for ACO Manager Staff in Providence, Rhode Island, ACO, July 12-13, 2017. Los Angeles, California, and Philadelphia, Pennsylvania, Regional Census Center/ACO Management staff attended JIT training.
5. Completed Address Canvassing Production Classroom training modules and uploaded to the laptops to be used for Census Field Supervisor training on July 31, 2017.

#### *Program Management*

1. Submitted the full Paperwork Reduction Act package for the 2018 End-to-End Census Test to the Office of Management and Budget on July 14, 2017.
2. Held the Operational Readiness Review (ORR) for Training Release 1: Address Canvassing on July 17, 2017.

#### *Internet Self-Response*

1. Continued development for Internet Self-Response (ISR) application, Census Questionnaire Assistance-Internet Self-Response (CQA-ISR) application, Translation Application, and Coverage Improvement Application.
2. Completed an updated draft of the ISR Detailed Operational Plan on July 28, 2017, and submitted it for review by the Decennial Census Management Division leadership.
3. Completed Joint Application Design session with Technical Integrator, Systems Engineering and Implementation, and Census Enterprise Data Collection and Processing (CEDCAP) to finalize 2018 Capability Requirements.

#### *Census Questionnaire Assistance (CQA)*

Continued work to realize efficiencies and focus on high-priority components of the CQA solution.

#### *Content and Forms Design*

Developed Frequently Asked Questions document for use by Census Questionnaire Assistance agents on July 6, 2017.

#### *Language Services*

Began translation of Frequently Asked Question (FAQs) content for Census Questionnaire Assistance (CQA). These FAQs are being translated into all of the 2018 languages that CQA has phone lines to support: Spanish, Chinese, Vietnamese, Korean, Russian, Arabic, and Tagalog.

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

### **Summary of Activities (Last 30 Days) Cont'd**

#### *Forms Printing and Distribution*

The Government Publishing Office (GPO) posted the solicitation (contract terms) to acquire the necessary printing and mailing services for the 2018 End-to-End Census Test, with an option for extending through the 2020 Census. An award is planned on or about September 15, 2017.

#### *Non-ID Processing*

1. Revised detailed performance (operational progress) report requirements on July 13, 2017.
2. Revised 2018 End-to-End Census Test Non-ID Processing specifications on July 14, 2017.

#### *Nonresponse Followup*

Met with the Decennial Research Objectives and Methods (DROM) group on July 28, 2017, to review the 2018 End-to-End Census Test Nonresponse Followup (NRFU) Assessment Study Plan.

#### *Update Leave (UL)*

1. Met with the Product Owner of the Enterprise Censuses and Surveys Enabling (ECaSE) Field-Operational Control System (FOCS) to review the backlog of user stories that need to be developed.
2. Met with the Decennial Research Objectives and Methods (DROM) group on July 20, 2017, to review the Update Leave Assessment Study Plan.

#### *Geographic Programs*

1. Delivered Recruiting Geographic Reference File–Codes (GRF-C), and Applicant Geocoding Service, to the Decennial Applicant, Personnel, and Payroll System (DAPPS) Team on July 27, 2017.
2. Delivered Revised Address Canvassing Geographic Reference File – Codes (GRF-C) with additional workload. The In-Field Address Canvassing (IFAC) workload was revised to include additional Basic Collection Units that had gone through Active Block Resolution and were excluded from the initial IFAC workload. That workload has now been added back in, and was included in the GRF-C that was delivered prior to July 27, 2017. See page 15 for more background.

#### *Systems Engineering and Integration*

Conducted the Production Readiness Review for Release A (Address Canvassing) on July 26, 2017 and Recruiting Release 2 (Nonresponse Followup, Update Leave, Group Quarters recruiting) on July 31, 2017. Both releases were approved with conditions.

#### *IT Infrastructure*

Completed the dry run of provisioning and training with Computer Assisted Personal Interviewing (CAPI) laptops for Address Canvassing operations by July 14, 2017. All equipment was configured and deployed to the Beckley, West Virginia, and Pierce County, Washington, Area Census Offices by July 14, 2017. (All equipment was configured and deployed to the Providence, Rhode Island, ACO by May 26, 2017.)

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

### **Summary of Activities (Last 30 Days) Cont'd**

#### *Redistricting Data Program*

Design of the prototype P.L. 94-171 Redistricting Data File to be produced from the test is under review. The addition of Group Quarters to the file was discussed/reviewed by the Data Stewardship Executive Policy (DSEP) Committee on July 20, 2017 due to potential disclosure risks. A decision was made to allow for a Group Quarters table to be included using a modified design from that proposed. Revisions to the file structure from Population Division, to account for the use of a combined race and ethnicity question on the 2018 End to-End Census Test, are being vetted and brought forward for external stakeholder comment and review.

#### *United States Postal Service Coordination Team*

1. Began development of core program management documentation for the Census Bureau-United States Postal Service (USPS) Partnership organization, including an integrated project plan, common reporting process, risk register, and roles and responsibilities matrix on July 6, 2017, with targeted completion of August 2017.
2. Held inter-agency discussions with working group members to begin planning a meeting of working group co-chairs and executive champions from both agencies to take place in late August 2017 and focus on operationalizing joint working group projects.
3. Continued discussions with stakeholders from the Decennial Census Management Division and the Center for New Media and Promotions, and USPS around requirements for using Informed Delivery as part of one mailing and processes needed to stand-up a beta test site.

#### *Response Processing*

1. Presented initial draft of the 2018 Response Processing Assessment Study Plan to the Decennial Research Objectives and Methods (DROM) Working Group.
2. Received and began Integrated Project Team review of multiple draft specifications:
  - 2018 Microdata Detail File Specification
  - 2018 Tabulation Recodes Specification
  - 2018 Preliminary Census Unedited File Specification
  - 2018 Edit and Characteristic Imputation Specification
  - 2018 Decennial Response File Specification
  - 2018 Primary Selection Algorithm Specification

#### *Address Canvassing*

1. Submitted a program level change request on July 13, 2017, to add approximately 93,000 housing units to the In-Field Address Canvassing workload for Address Canvassing. The original estimate of housing units was based on our original approach to the In-Office Address Canvassing Operation, which included two phases: Interactive Review and Active Block Resolution (ABR). The Census Bureau discontinued this second phase in February 2017 because we were experiencing significant issues with productivity and quality control. Prior to the suspension of ABR, some of the blocks in the three test sites were removed from the In-Field Address Canvassing workload as a result of this phase of the In-Office Address Canvassing operation. Therefore, in order to ensure that the operations implemented in the 2018 End-to-End Census Test are consistent with the operations we

## 2018 End-to-End Census Test

### **Summary of Activities (Last 30 Days) Cont'd**

#### *Address Canvassing Cont'd*

plan to execute in the 2020 Census, the Census Bureau determined it was appropriate to add the blocks originally resolved during ABR back into the in-field workload for this test.

2. The In-Office Address Canvassing Evaluation study plan was reviewed by the Decennial Research Objectives and Methods Group (DROM) on July 27, 2017. The document received approval and will move forward to the 2020 Portfolio Management Governing Board (PMGB).

#### *Paper Data Capture*

Continued to support efforts to design the physical layout for the Paper Data Capture Server room at the National Processing Center.

#### *Census Enterprise Data Collection and Processing (CEDCaP) Product Release 8*

1. Released to production CEDCaP capabilities for Training Release 1 for Address Canvassing. All Training systems were deployed to production by July 10, 2017; all Production systems required for Training were deployed to production by July 28, 2017.
2. Supported the integration testing for Release A (Address Canvassing).
3. Continued iterative development and testing for CEDCaP Capabilities.

### **Look Ahead (Next 60 Days)**

#### *Program Management*

1. Finalize the Test Plan.
2. Hold Operational Readiness Review (ORR) for Release A: Address Canvassing.
3. Hold Operational Readiness Review (ORR) for Recruiting Release 2: Field Enumeration.

#### *Decennial Logistics Management*

Deliver Recruiting kits for Peak Operations (scheduled for next year) to the Providence, Rhode Island Area, Census Office by August 21, 2017.

#### *Nonresponse Followup*

1. Finalize requirements for Enterprise Censuses and Surveys-Operational Control System (ECaSE-OCS) Field and ECaSE-OCS Survey for Nonresponse Followup (NRFU) operations.
2. Develop specifications for Field Enumeration of Fraud Detection Recollect cases.
3. Finalize specifications for Field Verification.
4. Finalize business rules for the Census Operational Control System for Reengineered Field Operations (MOJO) optimizer, which will be used for assignment of Nonresponse Followup addresses to enumerators.

#### *Internet Self-Response*

1. Complete Interface Control Documents (ICD) between Internet Self-Response (ISR) and Census Questionnaire Assistance (CQA) for both the CQA-ISR application, and the Coverage Improvement application.

## 2018 End-to-End Census Test

### Look Ahead (Next 60 Days) Cont'd

#### *Internet Self-Response Cont'd*

2. Complete initial draft of ICD between ISR and Census Data Lake (CDL). The CDL is a repository for all electronic data from the 2018 End-to-End Census Test. The ISR-CDL ICD would include a catalog of the interface as well as the specific data format and elements/variables that are being sent as part of the ISR operation.
3. Begin project level testing of ISR and CQA-ISR applications.

#### *Census Questionnaire Assistance (CQA)*

1. Update the Integrated Master Schedule to include all final interfaces and external dependencies for CQA.
2. Deliver the initial draft of the Study Plan for CQA Assessment to the Decennial Research Objectives and Methods (DROM) Group, and present it for discussion.

#### *Non-ID Processing*

Complete initial draft of the Assessment Study Plan for Non-ID Processing and present it to the Decennial Research Objectives and Methods (DROM) Group for discussion.

#### *Recruiting, Training, and Onboarding*

1. Award Third-Party Vendor (3PV) Fingerprinting Vendor in early-August.
2. Complete Lister, Census Field Supervisor (CFS), Quality Control (QC) Lister, and QC CFS selection, hiring and training in preparation for the Address Canvassing Operation.
3. Complete Address Canvassing Field Staff Recruiting for Seattle, Washington, and Beckley, West Virginia, ACOs. (This activity was completed for the Providence, Rhode Island, ACO, on June 23, 2017.)
4. Technical Integrator (TI) resources were allocated to the badging system for enhanced development and testing in preparation for the 2020 Census. The badging team will look to create a development and testing schedule that will work cohesively with the 3PV Fingerprinting solution schedule.
5. Request for Proposal (RFP) is expected to be released on August 4, 2017.

#### *Language Services*

1. Prepare translations of the Internet Self-Response instrument, Census Questionnaire Assistance (CQA) instrument, and Nonresponse Followup field enumeration instrument.
2. Deliver non-English content of Frequently Asked Questions for CQA.

#### *Update Leave*

1. Finalize the priority of user stories for the Field Operational Control System (OCS) being developed for the test.
2. Deliver the final copy of the printing specification for the Update Leave questionnaires.

## 2018 End-to-End Census Test

### Look Ahead (Next 60 Days) Cont'd

#### *Group Quarters*

1. Deliver Group Quarters Enumeration systems requirements specifications to Enterprise Censuses and Surveys-Operational Control System (ECaSE-OCS) team.
2. Conduct user acceptance testing for Group Quarters Advance Contact-Production Control System.

#### *Systems Engineering and Integration*

Gather Program Increment 22 commitments as part of the Census Enterprise Data Collection and Processing (CEDCaP) release train on August 23, 2017. (CEDCaP work is organized into a series of 40-day program increments; each increment begins with an all-day meeting where systems commit to completing the necessary development for capability requirements that are expected to be tested during upcoming Test Readiness Reviews.) For Program Increment 22, the focus of the CEDCaP project teams is Releases A, C, and D for the 2018 End-to-End Census Test. Release A covers In-Field Address Canvassing, Release C is Self-Response, and Release D is Field Enumeration.

#### *Address Canvassing*

1. Present Address Canvassing Operational Assessment study plan to the 2020 Census Portfolio Management Governing Board (PMGB) on August 2, 2017.
2. Present In-Office Address Canvassing Evaluation to the 2020 Census Portfolio Management Governing Board (PMGB) in mid- to late-August, 2017.
3. Begin In-Field Address Canvassing on August 28, 2017.
4. Begin In-Field Address Canvassing Quality Control on September 5, 2017.

#### *IT Infrastructure*

1. Finalize the Detailed Operational Plan.
2. Conduct cloud Authority to Operate (ATO) activities for services, processes, and tools required for Release C (Self-Response).
3. Support installation and configuration of infrastructure management applications in the Amazon Web Services Cloud.
4. Conduct Internet Self-Response Performance Test.
5. The Decennial Service Center will continue to support the Regional Census Center staff and begin support for the Area Census Office staff. Knowledge Base Articles are being built for the Decennial Service Center and IT staff at the Regional Census Centers and Area Census Offices to provide detailed information about individual applications and anything else the Decennial Service Center is supporting. Both the Knowledge Base Articles and training materials are being built so the IT staff at the Regional Census Centers and Area Census Offices can be prepared to best help the customers who call tier 1 of the Decennial Service Center.

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

### **Look Ahead (Next 60 Days) Cont'd**

#### *United States Postal Service Coordination Team*

1. The team will request approval from the 2020 Portfolio Management Governing Board and Executive Steering Committee for a Study Plan and test site locations for the Pilot of USPS Postal Carriers as Census Enumerators during the 2018 End-to-End Census Test.
2. The team's partnership communication working group will develop a communications strategy (messaging, recruitment, co-branding, leveraging of USPS's retail infrastructure) for both this Pilot and for the 2018 End-to-End Census Test.

#### *Paper Data Capture*

1. Support and begin incorporating the Technical Integrator's (TI) approach to using Intelligent Mail Barcode Postal Tracking System (IPTS). This is a Census Bureau system housed at the National Processing Center (NPC) and used to ingest data from the United States Postal Service (USPS) Intelligent Mail Barcode Tracing Service.
2. Receive and review the Intelligent Mail Barcode Postal Tracking System (IPTS) 2018 Implementation Plan.
3. Receive preliminary physical layout drawings for the Paper Data Capture Server Room at the National Processing Center to support the test.

#### *Census Enterprise Data Collection and Processing (CEDCaP) Product Release 8*

Continue iterative development and testing for CEDCaP Capabilities.

## **Address Canvassing Test**

### **Description**

The Address Canvassing Test conducted in 2016 focused on the following: (1) measuring the effectiveness of In-Office Address Canvassing through In-Field Address Canvassing; (2) measuring the effectiveness of In-Field Address Canvassing; and (3) understanding the implications of moving from Assignment Area (a grouping of blocks) to Basic Collection Unit (BCU), which encompasses the characteristics of both collection blocks and assignment areas. See Appendix C for more details.

### **Summary of Activities (Last 30 Days)**

Delivered the Address Canvassing Test Analysis Report to the Decennial Research Objectives and Methods Group (DROM) on July 17, 2017 for an electronic review process. Once approved, it will move forward for the 2020 Census Portfolio Management Governing Board (PMGB).

### **Look Ahead (Next 60 Days)**

The Address Canvassing Test Analysis Report is scheduled to be reviewed by the 2020 Census Portfolio Management Governing Board (PMGB) in mid- to late-August, 2017.

## 2016 Census Test

### Description

The 2016 Census Test was an operational study of both self-response and nonresponse follow-up procedures. See Appendix C for more details.

### Status of Current Activities

Analysis reports are under development or review. Once complete, the reports will be issued, on a flow basis, through the 2020 Census Memorandum Series.

#### *Reports under Development/Review*

- 2016 Census Test Optimizing Self-Response, Language Services, Race and Ethnicity, and Relationship Report (Expected completion on August 30, 2017.) In development.
- 2016 Census Test Analysis – Non-ID Processing Report (Expected completion on August 31, 2017) (Under review by the 2020 Census Portfolio Management Governing Board.)
- 2016 Census Test Administrative Record Usage Report (Expected completion on August 31, 2017.)
- 2016 Census Test–Evaluating the Decennial Census Call-in Option: Results from an Interviewer Debriefing on the 2016 Census Test Report (Expected completion on August 31, 2017.)
- 2016 Service-Based Enumeration Census Test Analysis Report (Expected completion on August 31, 2017.)
- 2016 Census Test Coverage Reinterview Analysis Report (Expected completion was April 30, 2017; delayed until September 8, 2017 due to resource limitations.) (Approved by the Decennial Research Objectives and Methods (DROM) Group.)
- 2016 Census Test Report – Overview (Expected completion on December 29, 2017.)
- 2016 Census Test Nonresponse Followup Operational Assessment Report (Expected completion TBD.) In development.
- 2016 Group Quarters Electronic Response Independent Test Analysis Report (Detailed report will not be produced due to resource issues. A high-level summary document will be issued in the Decennial Statistical Studies Division’s Memorandum Series.)
- 2016 Census Test: In-Office Address Canvassing Report (This report will not be produced due to resource issues. Release of any relevant results will be issued in the Decennial Statistical Studies Division's Memorandum Series.)

#### *Reports Issued*

- 2016 Census Test: Non-ID Response Validation Recollect Analysis Report was issued in the 2020 Census Memorandum Series on July 27, 2017.

## 2015 National Content Test

### Description

The 2015 National Content Test (NCT) used a nationally representative sample of approximately 1.2 million households to evaluate and compare different census content and to test different contact strategies for optimizing self-response. See Appendix C for more details.

### Status of Current Activities

All reports are now complete. We will not report on this test after this month.

### *Reports Issued*

- Evaluating the Decennial Census Call-In Option: Results from an interviewer debriefing of the 2015 National Content Test (formerly known as, 2015 National Content Test Telephone Questionnaire Assistance Centurion Instrument Interviewer Debriefing) (Completed October 5, 2016.)
- The study plan for the race and ethnicity analysis was issued in the 2020 Census Memorandum Series on November 4, 2016.
- The 2015 National Content Test Optimizing Self-Response was issued in the 2020 Census Memorandum Series on November 22, 2016.
- Relationship Question Experiment Analysis Report completed February 10, 2017.
- Race and Ethnicity Analysis Report was issued in the 2020 Census Memorandum Series on February 28, 2017. An extended Tip Sheet was provided to the media publicizing this release.
- Analysis of Non-ID Processing Results (Completed on March 17, 2017.)
- Within-Household Coverage was issued in the 2020 Census Internal Memorandum Series on July 20, 2017.

# Status of Major 2020 Census Operations

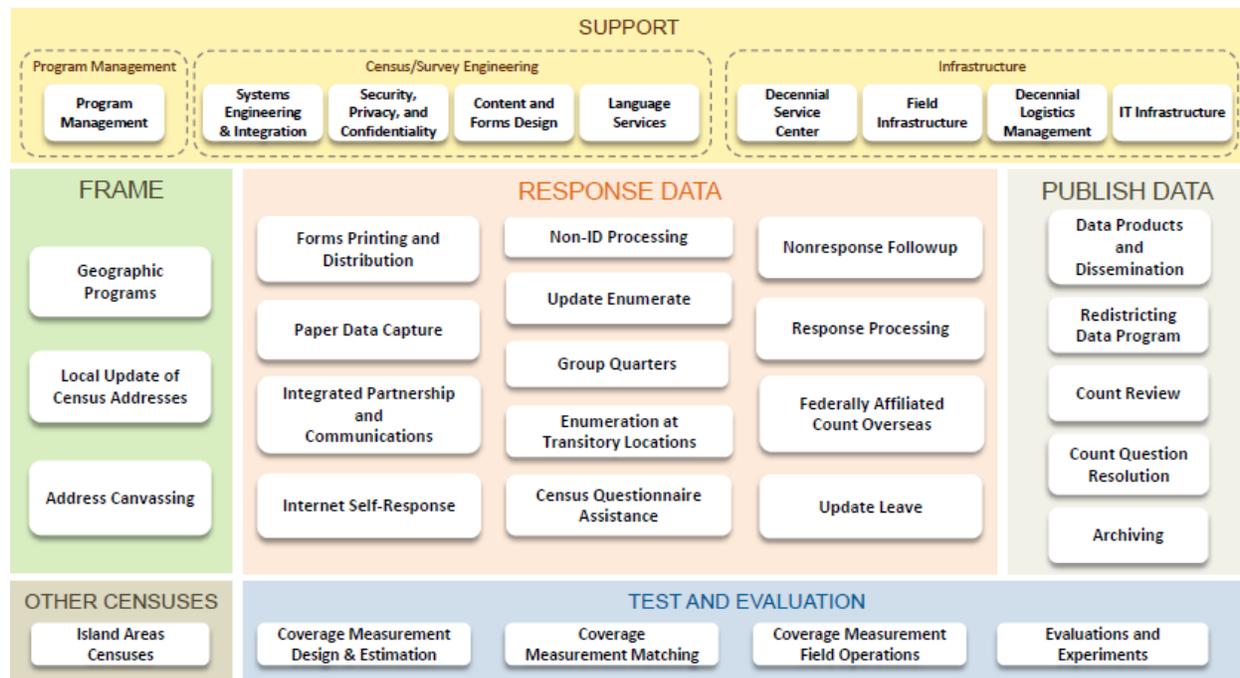
The 2020 Census includes 35 operations that are organized into eight major areas that correspond with the Census Bureau standard Work Breakdown Structure (WBS). The term operation refers to both support and business functions.

The status of these operations is reported on the following pages, which are organized by major area. Please note, only operations that are underway are discussed on the following pages.

Appendix A describes the 35 operations of the 2020 Census.

Completed or planned activities specifically supporting past or current Tests are reported on the relevant Test pages (pages 8 – 21). Otherwise, they are reported on the relevant 2020 Census Operations pages (pages 23 – 36).

**Figure 1: Operational Overview by WBS**



## Census/Survey Engineering

### Description

Four operations support the Census/Survey Engineering area of the 2020 Census: Systems Engineering and Integration (SE&I); Security, Privacy, and Confidentiality; Content and Forms Design; and Language Services. For the description of these operations, please see Appendix A.

**Table 1: SE&I Review Descriptions**

Review	Description
<b>Critical Business Proposal Review (CBR)</b>	Review of initial high-level architecture to ensure inclusion of appropriate systems to implement the desired subset of the 34 operations.
<b>Project Baseline Review (PBR)</b>	Review of program baselines. Schedule, organizational structure, Risk, etc.
<b>Systems Requirements Review (SRR)</b>	Joint review of PLBR/CAP requirements by engineering and operations.
<b>Critical Design Review (CDR)</b>	Review of high-level architecture and detailed business processes that define the subset of operations, interfaces, etc. Includes allocation of requirements to systems and the defined releases.
<b>Test Readiness Review (TRR)</b>	Ensures appropriate test objectives, methods procedures, scope and environments. Assesses readiness of systems to begin independent Program-Level testing. Marks the beginning of testing by the Program Test Team.
<b>Production Readiness Review (PRR)</b>	Assessment of test results to ensure systems are ready for operations testing.
<b>Operational Readiness Review (ORR)</b>	Assessment of operational testing to ensure full operation is ready to go-live.

**Table 2: SE&I Release Functionality Key**

Release	Functionality
<b>Release A</b>	In-Field Address Canvassing
<b>Release B</b>	Coverage Measurement – Independent Listing
<b>Release C</b>	Self-Response
<b>Release D</b>	Field Enumeration
<b>Release E</b>	Tabulation/Dissemination
<b>Release F</b>	RESERVED
<b>Release G</b>	Geographic Programs / Local Update of Census Addresses (LUCA)
<b>Release H</b>	RESERVED
<b>Release I</b>	In-Office Address Canvassing
<b>Release J</b>	RESERVED
<b>Release K</b>	Coverage Measurement – Initial Housing Unit Followup, Person Interview
<b>Release L</b>	Coverage Measurement – Person Interview Matching
<b>Release M</b>	Coverage Measurement – Person Followup
<b>Release N</b>	Coverage Measurement – Final Housing Unit Followup
<b>Release O</b>	Coverage Measurement – Reports & Release Findings
<b>Release P</b>	Partnership Activities
<b>Recruiting Release 1</b>	Address Canvassing, Coverage Measurement – Independent Listing, and Initial Housing Unit Followup Recruiting
<b>Recruiting Release 2</b>	Field Enumeration, Coverage Measurement – Person Interview, Person Followup, and Final Housing Unit Followup Recruiting
<b>Training Release 1</b>	Address Canvassing Training
<b>Training Release 2</b>	Field Enumeration Training
<b>Coverage Measurement Sample Release</b>	Initial Sample for Coverage Measurement

## **Census/Survey Engineering**

### **Summary of Activities (Last 30 Days)**

#### *Systems Engineering and Integration (SE&I)*

Completed the 2020 Software Requirements Review #2 (SRR2) on July 31, 2017. Recent Systems Engineering and Integration (SE&I) and Program-Level Change Requests proposed four 2020 System Requirement Reviews, Critical Design Reviews, Test Readiness Reviews, and Production Readiness Reviews (the original plan was for one of each).

#### *Content and Forms Design*

Continued gathering requirements for 2020 Census questionnaires and materials from other operations.

#### *Security, Privacy, and Confidentiality*

Worked with Office of Information Security to obtain an updated standardized System List. Ensured that systems currently in the Risk Profile Management System (RPMS) match up with the name of the systems being tracked by the Decennial Architecture Team.

### **Look Ahead (Next 60 Days)**

#### *Systems Engineering and Integration (SE&I)*

1. Hold Critical Design Review #2 (CDR2) on August 28, 2017.
2. Hold Software Requirements Review #3 (SRR3) on September 28, 2017.

#### *Content and Forms Design*

Develop 2020 Census household questionnaires and mailing materials.

#### *Security, Privacy, and Confidentiality*

Work with the Policy Coordination Office to develop a checklist that helps program areas depict what should be updated in the Privacy Threshold Analysis when a major change occurs to a system.

## Frame

### Description

Three operations support the frame area of the 2020 Census: Geographic Programs; Local Update of Census Addresses (LUCA); and Address Canvassing. For the description of these operations, please see Appendix A.

### Summary of Activities (Last 30 Days)

#### *Geographic Programs*

1. Continued Participant Statistical Area Program (PSAP) internal review processing at the National Processing Center.
2. Completed Geographic Partnership Support Desk (GPSD) training to support the LUCA invitation mailing at the National Processing Center (NPC) on July 13, 2017.
3. Submitted the pre-submission Federal Register Notice for the 2020 Census Participant Statistical Area Program for legal review on July 20, 2017 (completed review on July 21, 2017), to the Policy Office for review on July 24, 2017 (completed review on July 26, 2017), then to the Department of Commerce for review on July 27, 2017.

#### *Local Update of Census Addresses (LUCA)*

The LUCA Integrated Project Team's (IPT) LUCA Promotional Outreach events continued to occur in July 2017. A total of 500 promotional presentations have been completed to date by staff and another 106 promotional events are scheduled (these are not scheduled to occur until the October/November 2017 timeframe). Completed training of National Processing Center (NPC) Census Address and Maps Process Staff (CAMPS) on the LUCA Invitational/Registration phase of LUCA. Completed National Processing Center (NPC) Geographic Program Support Desk staff training on LUCA Invitation/Registration phase. Completed working with NPC Document Services Branch staff to finalize the programming needed to print the LUCA invitation packages. Started printing and shipping of LUCA Invitation packages on July 17, 2017.

#### *Address Canvassing*

The 2020 Census In-Office Address Canvassing Interactive Review production continues, and is meeting the expected production goals. The clerks have reviewed 11,155,309 blocks during Interactive Review from the beginning of production in September 2015 through July 31, 2017. They have completed 100 percent of the 11,155,486 total blocks nationally through the **first pass** in Interactive Review. Going forward, blocks will continued to be triggered back in for review as needed. Forty-two staff are working Interactive Review (IR) in production, and 18 are performing Quality Control (QC). This process classifies the blocks into three categories:

- Passive = blocks that do not show signs of change and need no further review at this time.
- Active = blocks that show signs of change and need to move to the next phase of In-Office Address Canvassing for further review.
- On Hold = blocks that need new imagery to do the Interactive Review.

As of July 31, 2017, 74.7 percent of the blocks were classified as Passive, 18.2 percent were classified as Active, and 4.6 percent were classified as On-Hold. As of July 31, 2017, 282,741 blocks have been triggered for IR re-review. (These numbers are in line with our assumptions.) Triggered blocks which are still being worked through IR will be included in the "Total Blocks

## Frame

### **Summary of Activities (Last 30 Days) Cont'd**

#### *Address Canvassing Cont'd*

Reviewed" number above, but not be included in any of the Totals (Active, Passive, Hold) until they are re-reviewed. The triggered blocks accounted for 2.5 percent of the total completed. Blocks may remain in "On Hold" status for review at a later date due to "future growth" (for instance, there are signs that construction will be taking place but the houses are not built) or "imagery issues" (for instance, cloud cover obscures views of the structures).

The 2020 Census In-Office Address Canvassing Ungeocoded Resolution production began in April 2017 and continues. Ungeocoded Resolution is a component of In-Office Address Canvassing that investigates the records that were not resolved from the automated Delivery Sequence File update and matching process, and attempts to assign block codes by reviewing local source data available in-house as well as online.

Ungeocoded Resolution has three stages:

- Production - Production staff work the ungecoded records.
- Quality Control (QC) - QC staff review the production work.
- Monitoring - Monitoring staff review the QC staff's work, which is a final review to determine what records have been geocoded (resolved) and which have been referred (on hold). Referred records will remain on hold until a later date.

Currently there are 18 staff members working on Production, 14 working on Quality Control, and 4 working on Monitoring. As of July 31, 2017, staff have geocoded 229,851 address records out of the universe of 2,800,896 ungecoded address records.

1. Participated in System Readiness Review (SRR) for the 2020 Census on July 31, 2017. The result of the SRR was for all operations to submit their Business Process Models and requirements for 2020 to be baselined.
2. Submitted all Address Canvassing capability requirements and Business Process Models for the 2020 Census on July 31, 2017. Official baselining to be completed in August.

#### *United States Postal Service (USPS) Coordination Team*

Released first draft of an enterprise Memorandum of Understanding (MOU) that documents the major components of the Census Bureau-United States Postal Service Partnership for the 2020 Census, and requested comments from both Census Bureau and USPS stakeholders by July 21, 2017. USPS stakeholders requested that the MOU be replaced with a Letter of Intent, which was circulated during the week of July 18, 2017 and sent to Legal for review during the week of July 24, 2017.

### **Look Ahead (Next 60 Days)**

#### *Address Canvassing*

1. Present final draft of the Master Address File Coverage Study 2016 Analysis Report to the 2020 Census Portfolio Management Governing Board (PMGB) on August 16, 2017.
2. Participate in the Critical Design Review for the 2020 Census.

## Frame

### **Look Ahead (Next 60 Days) Cont'd**

#### *Local Update of Census Addresses (LUCA)*

1. Continue to conduct LUCA Promotional Workshops. These workshops are being given by Census Bureau staff to potential LUCA participants, including representatives from tribal, state, and local governments. There are 65 workshops scheduled for August and September. (Ending in October/November 2017 timeframe)
2. Complete shipping LUCA Invitation/Registration materials to governmental entities by August 2017.
3. Complete the requirements needed to develop the software that will generate the census address lists for participants. The address lists will be delivered to participants starting in February 2018.
4. Complete and finalize address count list software requirement specifications (SRS) for LUCA. This entails completing the requirements to develop the software that will generate the address count lists for LUCA blocks. The list will show the number of addresses per block for participants to use during their LUCA review.
5. Complete and finalize Geographic Support System matching and Master Address File/Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) System matching SRS for LUCA. This entails completing the requirements needed to develop the address matching rules for when a participant submits their LUCA review return of addresses. The LUCA addresses returned by the participant will be matched to addresses for address validation purposes.

#### *United States Postal Service (USPS) Coordination Team*

1. Coordinate an August 2017 meeting with all executive champions (both Census Bureau and USPS senior managers), working group members and chairs.
2. Finalize an Interface Control Document that defines requirements for an automated process to track the status of census questionnaires mailed with Intelligent Mail Barcode technology.

## Response Data

### Description

Thirteen operations support the response data area of the 2020 Census: Forms Printing and Distribution; Paper Data Capture; Integrated Partnership and Communications; Internet Self-Response; Non-ID Processing; Update Enumerate; Update Leave; Group Quarters; Enumeration at Transitory Locations; Census Questionnaire Assistance; Nonresponse Followup; Response Processing; and Federally Affiliated Count Overseas. For the description of these operations, please see Appendix A.

### Summary of Activities (Last 30 Days)

#### *Paper Data Capture*

1. Reviewed the first deliverable for TD013, the Technical Integrator's (TI) Paper Data Capture (PDC) Business Process Model (BPM) during the July 20 –27, 2017, period and "accepted (it) with comments." Government comments will be shared with the TI team so the TI team may update the BPM, as necessary.
2. Continued working on the draft of TD113. This TD defines the work in TD013 that needs to be continued into Option Year 1. (In other words, TD113 is the FY2018 version of FY2017's TD013.)
3. Validated the updated dates in TD013 and incorporated them into the Integrated Master Schedule.
4. Observed additional tests at the National Processing Center regarding the use of extractor technology. The extractor is a PDC processing, automated mail processing system that the National Processing Center is evaluating for 2020. In addition, the TI contractor has the extractor under an Analysis of Alternatives (AoA) evaluation process.
5. Released the Paper Data Capture Detailed Operational Plan on July 14, 2017.

#### *Integrated Partnership and Communications (IPC) Program*

1. The Research and Analytics Team met with the Integrated Communication Contractor (Team Y&R) to discuss potential scenarios for qualitative research activities on July 10, 2017.
2. The team also met with Team Y&R to discuss open questions on next steps for research activities, including the status of Center for Survey Measurement (CSM) pre-testing for the Census Barriers, Attitudes, and Motivators (CBAMS) questionnaire on July 14, 2017.

#### *Nonresponse Followup*

Finalized timeframes and expected deliverables with key internal stakeholders for the 2020 Census NRFU (Nonresponse Followup) Supplemental Sample<sup>1</sup>, which will include New Construction, Count Review, LUCA (Local Update of Census Addresses) appeals, and the Spring Delivery Sequence File.

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<sup>1</sup> The NRFU Supplemental Sample includes the New Construction program (where local governments identify housing units that were recently completed), the Count Review program (where State Data Centers identify housing units that are missing from the census address frame), the LUCA appeals process (where local governments identify housing units that were omitted from the census universe); and the Spring Delivery Sequence File (a file received biannually from the U.S. Postal Service listing new addresses added and changes to existing addresses).

## Response Data

### Summary of Activities (Last 30 Days) Cont'd

#### *Census Questionnaire Assistance (CQA)*

1. Developed a schedule to ensure completing the planned December 2017 revision of the current baselines CQA Detailed Operational Plan.
2. Completed a revision of the 2020 Census CQA Business Process Models in support of the revised CQA Detailed Operational Plan.

#### *Update Leave (UL)*

1. Submitted a change request to baseline the 2020 UL Capability Requirements on July 11, 2017.
2. Delivered the initial draft of the Unified Tracking System (UTS) report requirements and the Enterprise Censuses and Surveys Enabling Field Operations Control System (ECaSE-FOCS) report requirements to the Performance Measurement Branch for review on July 14, 2017.
3. Delivered the first draft of the 2020 UL Detailed Operational Plan (DOP) to the Integrated Project Team (IPT) on July 20, 2017.
4. Met with Content and Forms Design to discuss field material requirements for 2020 on July 28, 2017.

#### *Update Enumerate (UE)*

1. Delivered the initial draft of the Unified Tracking System (UTS) 2020 report requirements and the ECaSE Field Operations Control System (ECaSE-FOCS) 2020 report requirements to the Performance Measurement Branch for review on July 10, 2017.
2. Began development of the address register design for the listing portion of the operation on July 10, 2017.
3. Submitted a change request to update the baselined set of 2020 UE Capability Requirements on July 19, 2017.

#### *Group Quarters*

1. Began work with Decennial Translation Branch on translation schedule and requirements for group quarters materials
2. Conducted a kickoff meeting with Federal Bureau of Prisons to discuss transmitting 2020 Census group quarters respondent data via electronic format.

#### *Enumeration at Transitory Locations (ETL)*

1. Began work with Content and Forms Design to draft a questionnaire for ETL.
2. Met with Geography Division and Listing and Mapping Application (LiMA) to evaluate solutions for maps and geocoding for ETL enumerations.

#### *Federally Affiliated Count Overseas (FACO)*

Tested the functionality of an electronic data collection instrument for usability.

#### *Response Processing*

Publically released the 2020 Census Detailed Operational Plan on July 11, 2017.

## Response Data

### Look Ahead (Next 60 Days)

#### *Integrated Partnership and Communications (IPC)*

1. Receive decennial executive-level approval of the 2020 Census Partnership Engagement Plan.
2. Receive decennial executive-level approval of the 2020 Census Integrated Communications Plan.
3. Continue planning activities for the Census Barriers, Attitudes, and Motivators Survey (CBAMS).
4. Conduct meetings to discuss updating the Low Response Score (LRS) and developing other response behavior-related predictors. The LRS is a variable the Census Bureau provides on the Planning Database (PDB). It is a model-based prediction of mail return rates by block group and tract that may be used separately or in conjunction with other PDB variables; it is essentially a tool to identify and understand hard-to-count areas. The “other response behavior-related predictors” refers to the planned result of our modeling efforts that have been discussed for the past several months. Currently, we are calling those Self-Response Propensities (SRPs). SRPs will model both internet and mail response while the LRS is currently mail only. SRPs will also use publically available commercial data (Civis File) that is not used in other Census Bureau predictions. SRPs will be used to inform many aspects of the 2020 IPC, most importantly to develop our audience segments.

#### *Paper Data Capture*

1. Receive and review a draft solution and physical architecture for the Intelligent Mail Barcode Postal Tracking System (IPTS).
2. Receive and review a draft Concept of Operations (ConOps) for the IPTS.
3. Continue to facilitate the Technical Integrator (TI) Team's conduct of two Analyses of Alternatives (AoAs) for Paper Data Capture, one for an automated conveyor system and another regarding the paper handling process.

#### *Update Leave*

1. Develop the 2020 Census Integrated Master Schedule for the operation.
2. Begin internal review of a final draft of the 2020 Update Leave Detailed Operational Plan.

#### *Update Enumerate*

1. Develop the 2020 Census Integrated Master Schedule for the operation.
2. Begin writing the 2020 Update Enumerate Detailed Operational Plan.

#### *Group Quarters*

1. Complete development of Group Quarters Advance Contact and Group Quarters Enumerations 2020 Census Integrated Master Schedule.
2. Deliver 2020 Group Quarters Detailed Operational Plan.

#### *Federally Affiliated Count Overseas (FACO)*

Update requirements and specifications to submit for changes to the data collection instrument.

## Response Data

### **Look Ahead (Next 60 Days) Cont'd**

#### *Nonresponse Followup*

1. Baseline the 2020 Census Nonresponse Followup (NRFU) Detailed Operational Plan.
2. Develop plans and procedures for User Acceptance Tests of the Enterprise Censuses and Surveys Enabling (ECaSE) systems.

## **Publish Data**

### **Description**

Five operations support the publish data area of the 2020 Census: Data Products and Dissemination; Redistricting Data Program; Count Review; Count Question Resolution; and Archiving. For a description of these operations, please see Appendix A. These operations are active as we prepare for the 2018 End-to-End Census Test.

### **Summary of Activities (Last 30 Days)**

The Redistricting Data Program (RDP)'s Federal Register Notice announcing Phase 2 – the Voting District Project, 30-day comment period closed.

The RDP continued processing the 964 counties with changes submitted as of June 7, 2017. This refers to counties received in Block Boundary Suggestion Project verification where the states have indicated they would like modifications performed to the Master Address File/Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) system. The RDP passed 879 counties to Geography Division for insertion into the MAF/TIGER system. In addition, the RDP has confirmed 2,256 counties as having no changes needed. These combined account for 100 percent of the counties in the program universe.

### *Data Products and Dissemination*

1. Awarded contract to support an enhanced version of the current American Community Survey (ACS) tabulation system to be used for the 2020 Census.
2. Executed modification to existing ACS Data Products Redesign Group (DPRG) contract to cover feedback on the 2020 Census products. As outlined in the contract, this group will manage the feedback collection from stakeholders and data users on 2020 Census data products and dissemination channels. Activities may include conducting user surveys, focus groups, and/or other methods to elicit input from a range of stakeholders and data users representing the spectrum of skill levels and interest areas in the use of data products, including topics such as content geographic usage, supporting documentation, and accessibility/dissemination channels for the products. These activities will begin late Summer 2017 and run through Spring 2018.

### **Look Ahead (Next 60 Days)**

#### *Redistricting Data Program*

1. Complete the verification phase of the Block Boundary Suggestion Project.
2. Submit for publication in the Federal Register, as part of Phase 3- Data Delivery of the RDP, the proposed design for the 2020 P.L. 94-171 Redistricting Data File to be produced as a prototype product from the 2018 End-to-End Census Test.

## Test and Evaluation

### Description

Four operations support the Test and Evaluation area of the 2020 Census: Coverage Measurement Design and Estimation; Coverage Measurement Matching; Coverage Measurement Field Operations; and Evaluations and Experiments. For the description of these operations, please see Appendix A.

### Summary of Activities (Last 30 Days)

*The Coverage Measurement Design and Estimation Integrated Project Team:*

1. Continued updating the Post Enumeration Survey (PES) Design and Estimation Business Process Model.
2. Continued working on simulating the sample design for the 2020 PES by the sampling subteam.
3. Presented the Noninterview Adjustment Study Plan to the Decennial Research Objectives and Methods (DROM) working group.
4. Revised initial drafts of the Enumeration Sample (E-sample) Imputation Study Plan. The E-sample (Enumeration sample) will consist of 2020 Census enumerated housing units and people in the same Basic Collection Unit as the PES P-sample, which includes all people enumerated during PES for the sample blocks.
5. Continued developing specifications for selecting the initial sample of Small Basic Collection Units (BCUs) and sub sampling the small BCUs.
6. Reviewed and added risks to the 2020 Census Risk Register.
7. Updated the 2020 overall decision inventory.
8. Revised the 2020 PES milestone schedule to reflect changes to the operational plan.

*The Coverage Measurement Field Operations and Matching Integrated Project Team:*

1. Continued updating PES Field and Matching Business Process Models.
2. Continued updating the 2020 Census Integrated Master Schedule.
3. Completed contingency plans for 2020 Census risks.
4. Continued developing some of the 2020 PES Field Operations and Matching specifications and user stories.

*The Evaluations and Experiments team:*

The Decennial Research Objectives and Methods (DROM) working group reviewed the following:

1. A Comparison of Training Modules for Administrative Records Use in Nonresponse Followup Operations: The 2010 Census and American Community Survey
2. Study Plan for the 2018 End-to-End Census Test Nonresponse Followup Operational Assessment Study Plan for the 2018 End-to-End Census Test Response Processing Operational Assessment
3. Study Plan for the 2018 End-to-End Census Test Service-Based Enumeration Operational Assessment
4. Study Plan for the 2018 End-to-End Census Test Update Leave Operational Assessment
5. In-Office Address Canvassing Triggers Methodology
6. Study Plan for the 2018 End-to-End Census Test Address Canvassing Evaluation

## Test and Evaluation

### **Look Ahead (Next 60 Days)**

*The Coverage Measurement Design and Estimation Integrated Project Team* will work on the following activities:

1. Continue updating the Post Enumeration Survey (PES) Design and Estimation Business Process Model.
2. Continue to work on simulating the sample design for the 2020 PES by the sampling subteam.
3. Revise initial drafts of the E-Sample Imputation Study Plan.
4. Review and add risks to the 2020 Census Risk Register.
5. Update the decision inventory.
6. Revise the 2020 PES milestone schedule and integrate with other operational 2020 schedules.
7. Continue developing sampling specifications.

### *Coverage Measurement Field Operations and Matching Integrated Project Team*

The team will work on the following activities:

1. Build an Integrated Master Schedule for the 2020 PES Field and Matching operations, including additional activities for paper-based data collection for field follow-up activities, and determine any effects of the redesign on the 2020 PES milestones.
2. Update 2020 PES Field Ops and Matching Business Process Models and capability requirements.
3. Work with the Coverage Measurement Design and Estimation Integrated Project Team to document high-level design requirements.
4. Begin drafting detailed operational assessment study plan.
5. Begin drafting 2020 PES Field Operations and Matching specifications and user stories.

*Evaluations and Experiments* team will:

1. Baseline the 2020 Census Demographic Analysis project charter.
2. Support the Decennial Research Objectives and Methods (DROM) working group in the review, vetting, and selection of 2020 Census experiments and evaluations.

## Infrastructure

### **Description**

Four operations support the infrastructure area of the 2020 Census: Decennial Service Center; Recruiting, Training and Onboarding; Decennial Logistics Management; and Information Technology (IT) Infrastructure. For the description of these operations, please see Appendix A.

### **Summary of Activities (Last 30 Days)**

#### *IT Infrastructure*

1. Modified the 2020 Decennial Services Contract Request for Proposal (RFP) based on Request for Information (RFI) vendor responses.
2. Completed Oracle Exadata and Exalogic Hardware Installation/Deployment.
3. Coordinated with Acquisitions Division to modify the Field IT Deployment RFP and Acquisition Plan.
4. The Cloud team delivered a secure solution for the Disclosure Avoidance System (DAS) compliant with Title 13 requirements.

#### *Recruiting, Training, and Onboarding*

The Technical Evaluation Team (TET) and Price Evaluation Team (PET) evaluated Third Party Vendor (3PV) Fingerprinting Proposals.

#### *Decennial Logistics Management*

Received approval on July 12, 2017 to proceed with acquisition activities with the General Services Administration for Wave 1 Area Census Offices (ACOs).

### **Look Ahead (Next 60 Days)**

#### *IT Infrastructure*

1. The Data Center/Data Capture Center will build a development environment at the Technical Integrator (TI) facility.
2. Systems Integration and Migration will complete the 2020 Census Program Migration Plan and Decennial IT Roadmap updates.
3. The Decennial Service Team will release a draft 2020 Decennial Service Contract to the Decennial Contract and Execution Office.
4. Release the final Request for Proposal (RFP) for the Field IT Deployment contract.
5. Complete installation of 2020 Census On-Premise network infrastructure at the Bowie, Maryland, Computer Center.
6. Complete physical connectivity between Census and 2020 Census On-Premise at the Bowie, Maryland, Computer Center.

#### *Recruiting, Training and Onboarding*

1. Award Third-Party Vendor (3PV) Fingerprinting Contract in early August 2017.
2. Technical Integrator (TI) resources were allocated to the Lenel badging system for enhanced development and testing in preparation for the 2020 Census. The badging team will look to create a development and testing schedule that will work cohesively with the 3PV Fingerprinting solution schedule.

## Infrastructure

### **Look Ahead (Next 60 Days) Cont'd**

#### *Decennial Logistics Management*

Provide draft 2020 Census Continuity of Operations (COOP)/Disaster Recovery Plans to Decennial Census Management Division management.

# **Additional Updates**

## **Census Enterprise Data Collection and Processing (CEDCaP )**

### **Description**

The Census Enterprise Data Collection and Processing (CEDCaP) major transformation initiatives continue. Efforts to streamline how the Census Bureau will collect and process data across all our censuses and surveys. In the past, the Census Bureau created and used a new, unique system for every survey and census we conducted. By creating an enterprise-wide approach to data collection and processing that is adaptable based on each customer's needs, CEDCaP will lead to more streamlined workflows and less duplication. This initiative focuses on building data collection capabilities for the 2020 Census while taking into consideration the challenges of the data collection and cost of development.

### **Summary of Activities (Last 30 Days)**

#### *2020 Census (Decennial) (CEDCaP Product Release 9)*

1. Supported joint Decennial and CEDCaP Reviews.
2. Continued work on the vision/scope for the 2020 Census Release specific to CEDCaP systems.

#### *CEDCaP Program*

1. Continued work on CEDCaP Program Increment 21 commitments. The CEDCaP release management uses a 40-day development cycle called program increment. For Program Increment 21, the focus of the CEDCaP project teams is Releases A, C, and D for the 2018 End-to-End Census Test. Release A covers In-Field Address Canvassing, Release C is Self-Response, and Release D is Field Enumeration.
2. Complete close-out of the Enterprise Development, Integration and Test Environments (EDITE) and Service Oriented Architecture (SOA) projects and move them into Operations and Maintenance.

### **Look Ahead (Next 60 Days)**

#### *2020 Census (Decennial) (CEDCaP Product Release 9)*

1. Support joint Decennial and CEDCaP schedule development.
2. Support joint Decennial and CEDCaP Reviews.
3. Baseline the CEDCaP 2020 Census vision/scope.

#### *CEDCaP Program*

Complete CEDCaP Program Increment 21 system development commitments and begin Program Increment 22. The CEDCaP release management uses a 40-day development cycle called program increment. For both Program Increments 21 and 22, the focus of the CEDCaP project teams is Releases A, C, and D for the 2018 End-to-End Census Test. Release A covers In-Field Address Canvassing, Release C is Self-Response, and Release D is Field Enumeration.

## Oversight & Stakeholder Engagement

### Description

This section describes major activities related to Government Accountability Office (GAO) and Office of the Inspector General (OIG) audits (e.g., new audits, exit meetings for completed audits, issuance of draft and final reports, preparation of agency action plans); congressional hearings related to the 2020 Census; and presentations and working meetings with our advisory committees, the 2020 Census National Academy of Sciences Standing Committee on Reengineering Census Operations, and other external stakeholders.

### Summary of Activities (Last 30 Days)

1. Participated in the NOBEL Women Conference on July 1, 2017.
2. Conducted the quarterly 2020 Census Program Management Review on July 11, 2017.
3. Participated in the 2017 ISI World Statistics Congress July 16 – 21, 2017.
4. Continued working actively to close open recommendations from GAO and OIG.
5. Held meeting with GAO on July 20, 2017 to coordinate our open recommendation list. This was the first of planned quarterly meetings to discuss open recommendations.
6. Submitted comments on draft report *2020 Census: Bureau Needs to Better Leverage Information to Achieve Goals of Reengineered Address Canvassing* (GAO-17-622) to GAO on July 14, 2017.
7. Submitted comments on the draft report *2020 Census: Bureau Is Taking Steps to Address Limitations of Administrative Records* (GAO-17-664) to GAO on July 20, 2017. GAO found that the Census Bureau has taken steps to ensure that its use of administrative records will lower the cost and improve the accuracy of the 2020 Census. In this draft report, GAO describes the steps the Census Bureau has taken to address limitations for the use of administrative records in the 2020 Census, and the planned uses of administrative records that have not been tested. GAO has no recommendations. The Census Bureau agrees with the draft report findings.
8. GAO issued the final report *GAO-17-622: 2020 Census: Bureau Needs to Better Leverage Information to Achieve Goals of Reengineered Address Canvassing* on July 20, 2017. GAO recommends that the Census Bureau use evaluations before 2020 to determine the implications of in-office address canvassing on the cost and quality of address canvassing, and use this information to justify decisions related to its re-engineered address canvassing approach; to plan and execute more flexible, and perhaps smaller, addressing canvassing test and evaluation activity needed to support key design decisions having significant effect on the cost and quality of the census; and to use productivity measures that track the progress in completing in-office address canvassing workload and the effectiveness of in-office address canvassing in reducing fieldwork in order to make informed decisions on allocating resources to current and future address canvassing workload so that the operation is completed in a timely and cost-effective manner. The Census Bureau has no disagreements with the findings and is now developing an action plan in response to the final report to address the recommendations.
9. As of July 31, 2017, GAO currently has one major audit in progress related to the 2020 Census, and OIG has three:

## Oversight & Stakeholder Engagement

### Summary of Activities (Last 30 Days) Cont'd

#### GAO

- Continues to audit the Census Bureau's readiness for the 2018 End-to-End Census Test, evaluate the extent to which the Census Bureau has backup plans to ensure the successful implementation of key IT capabilities needed for the 2020 Census, and determine the extent to which the Census Bureau has effectively planned and implemented information securing protections in preparation for the 2018 End-to-End Census Test and ultimately the 2020 Census.

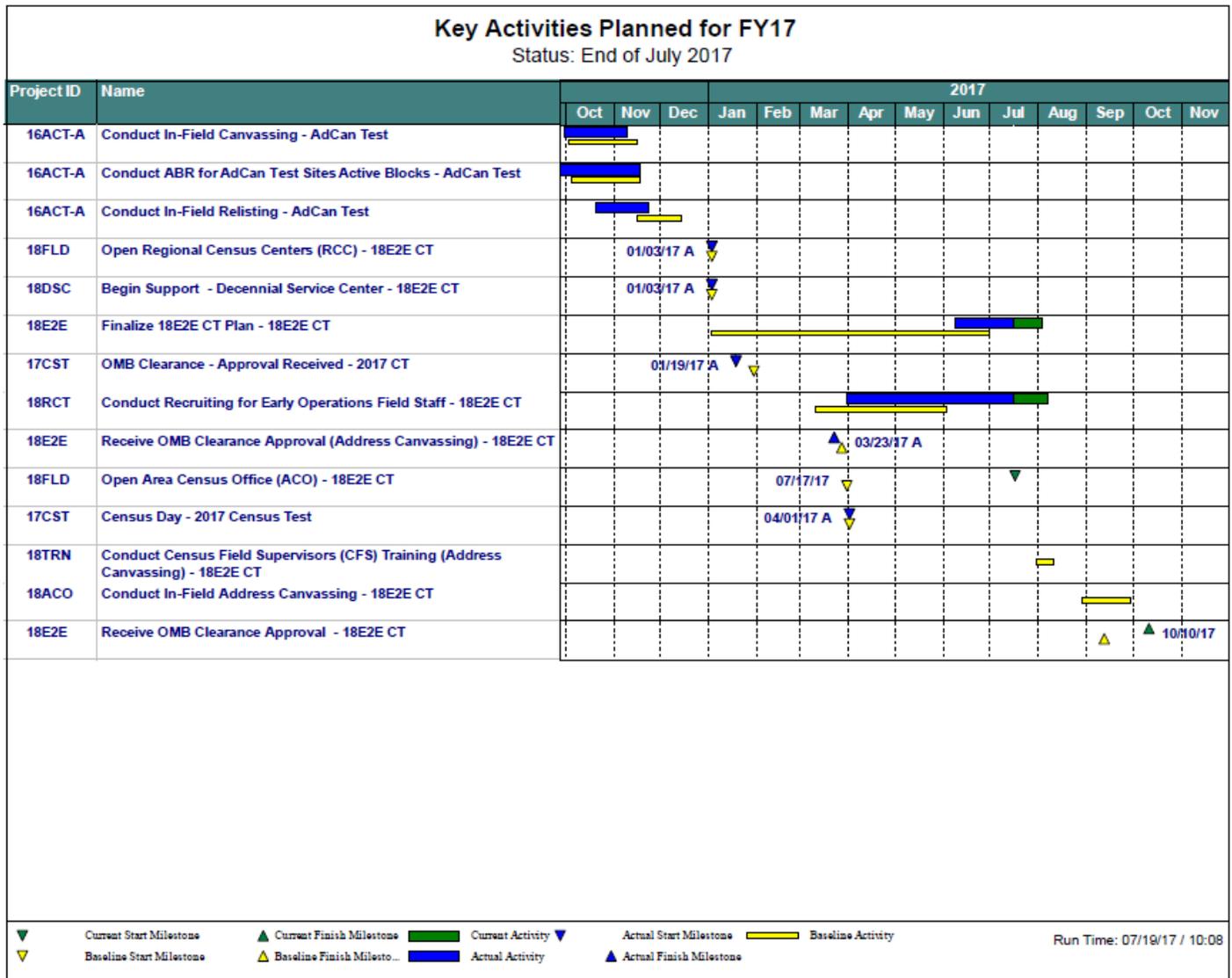
#### OIG

- Continues to audit the accuracy of the cost estimate used in the Census Bureau's May 2016 CEDCaP COTS Capability Assessment and Analysis report.
  - Continues to audit the Census Bureau's internal policies and procedures for conducting background checks on temporary employees, and to determine whether the Census Bureau has an effective plan in place to conduct background checks for temporary employees who will be hired during the 2020 Census tests and decennial field operations.
  - Continues to audit Area Census Office (ACO) locations, the decision process for determining the number and location of ACOs for the 2020 Census, and the involvement of the General Services Administration.
10. Completed quarterly teleconference calls with local government representatives of the Island Areas regarding planning for the 2020 Island Areas Censuses on July 6, 2017.
  11. Participated in the International Census Forum Content Community of Practice teleconference on July 19, 2017.

### Look Ahead (Next 60 Days)

1. Hold entrance meeting for OIG new engagement on the Address Canvassing component of the 2018 End-to-End Census Test on August 9, 2017.
2. Hold entrance meeting for GAO new engagement on the Address Canvassing component of the 2018 End-to-End Census Test on August 15, 2017.
3. Census Bureau comments on the OIG draft report titled *2020 Census: Evaluation of Interactive Address Canvassing Operation Revealed Issues with Quality Assurance Controls* will be provided to OIG by August 28, 2017.
4. Action plan in response to the final report GAO-17-622: *2020 Census: Bureau Needs to Better Leverage Information to Achieve Goals of Reengineered Address Canvassing* is due to Congress and GAO by September 18, 2017.

## Program Schedule Metrics Research & Testing



### Explanations for Project Start/Finish Delays

Activity 18ETE-10180: "Finalize 18E2E CT Plan - 18E2E CT"

Reason for Delay: Need to update Test Plan to reflect recent changes. Project updates will complete by 8/9. Then needs to be sent through approval process; may go through 8/18/17. DCMD Chief sign-off and "Red folder" review will hopefully be incorporated into the approval process.

Activity 18RCT-10830: "Conduct Recruiting for Early Operations Field Staff - 18E2E CT"

Reason for Delay: Providence is complete on 6/19/17, Seattle and Beckley expected to complete on 8/7/17.

Activity 18FLD-10160: "Open Area Census Office (ACO) – 18E2E CT"

Reason for Delay: Providence ACO has opened on 5/26/17. Beckley to open 7/17/17. Seattle to open 7/24/17.

Activity 18TRN-32680: "Conduct Census Field Supervisors (CFS) Training (Address Canvassing) – 18E2E CT"

Reason for Delay: CFS Training for AdCan is expected to be on time. Delay in development of QC CFS procedural manual and Guide for Training QC CFS is driving the delay.

Activity 18ACO-11000: "Conduct In-Field Address Canvassing –18E2E CT"

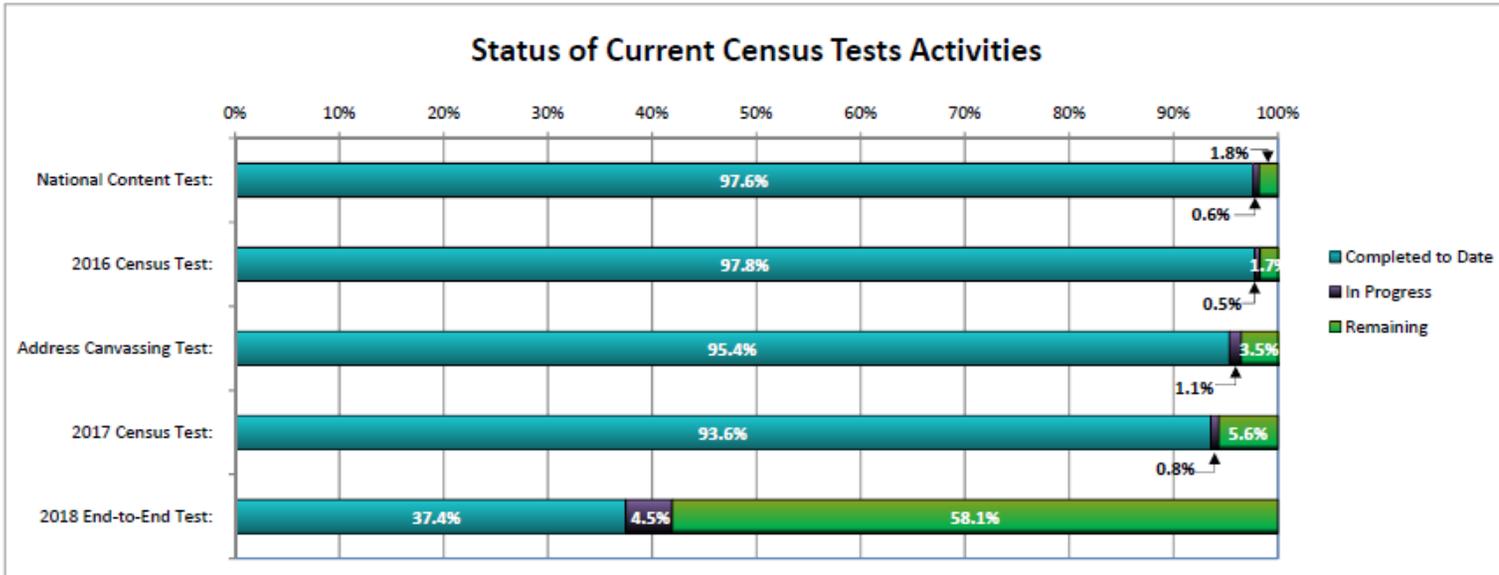
Reason for Delay: Conduct In-Field Address Canvassing is expected to be on time. Delay in development of QC CFS procedural manual and Guide for Training QC CFS is driving the delay.

Activity 18ETE-10870: "Receive OMB Clearance Approval – 18E2E CT"

Reason for Delay: Replan calls for a 6/21/17 start & 7/14/17 finish. No impact to OMB Clearance date expected.

## Program Schedule Metrics Research & Testing

### Status of Census Tests through July 31, 2017

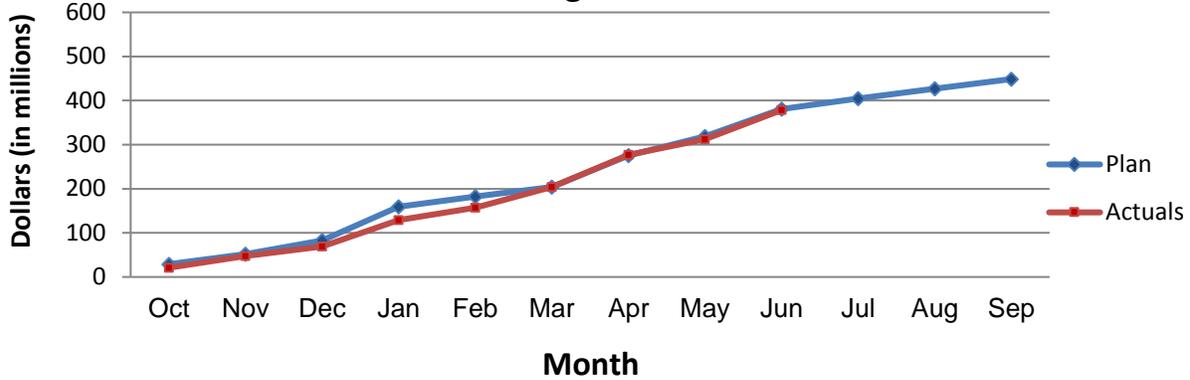


	Total Activities	Completed to Date	In Progress	Remaining
<b>2015 National Content Test:</b>	1181	1153	7	21
<b>2016 Census Test:</b>	1888	1846	10	32
<b>Address Canvassing Test:</b>	628	599	7	22
<b>2017 Census Test:</b>	1648	1542	13	93
<b>2018 End-to-End Test:</b>	6448	2415	288	3745

Processed on: 7-19-2017

**Program Budget/Costs as of June 30, 2017**

**FY 2017 Cumulative Budget Actuals vs. Plan to Date**



Note: We received the Enacted Budget but the plans were not integrated until June.

	June Cum Plan	June Cum Actuals	June Cum Variance	% Variance
<b>GRAND TOTAL</b>	<b>\$381,023,449</b>	<b>\$378,346,266</b>	<b>\$2,677,183</b>	<b>0.7%</b>

At the end of June, the \$2.7M variance in the 2020 Census program consists of \$12.3M lower than expected costs in salaries and \$9.6M higher than expected costs in other objects. The salary variance is due to the following: 1) unfilled vacancies due to the hiring freeze and the Continuing Resolution (CR), 2) Master Address File (MAF) Coverage Study has ended, and 3) Post Enumeration Survey was descope from the 2018 End to End Census Test. The Decennial Leadership Team continues to review, prioritize, and approve critical vacancies to be filled. Any available surplus identified through unfilled vacancies is being redirected to fund critical unfunded priorities. The other objects variance is due to the approval of critical unfunded needs, including the Technical Integration (TI) contract and Decennial Device as a Service (dDAAS) contract.

<b>R1 Program Management</b>	\$46,450,744	\$44,575,534	\$1,875,210	4.0%
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The variance in this area consists of \$0.8M lower than expected costs in salaries and \$1.1M lower than expected costs in other objects. The salary variance is due to delays in filling vacancies due to the hiring freeze and CR. The other objects variance is due to a Program Management contractor being out on extended leave and the contractor has not been able to add as many individuals as previously projected because it has taken time for the contractor to find the high-level of experience needed to work on the large Decennial contracts.

**Program Budget/Costs as of June 30, 2017**

<b>R2 Census/Survey Engineering</b>	\$71,503,468	\$81,840,592	(\$10,337,124)	-14.5%
<p>The variance in this area consists of \$0.06M higher than expected costs in salaries and \$10.3M higher than expected costs in other objects. The salary variance is due to the Content and Forms Design and Language work requiring more time than initially planned. The other objects variance is due to the approval of the critical unfunded need to support the Technical Integration (TI) contract which supports the 2020 Census Program in ensuring the architectural integrity and interoperability of the 2020 Census System of Systems (SOS). There is no impact to the program as there is sufficient funding in later months in this investment area to cover this shortfall.</p>				
<b>R3 Frame</b>	\$41,433,887	\$38,187,995	\$3,245,892	7.8%
<p>The variance in this area consists of \$1.8M lower than expected costs in salaries and \$1.4M lower than expected costs in other objects. The salary variance is due to the following: 1) MAF Coverage Study has ended, 2) work began later than expected for the Local Update of Census Addresses (LUCA) workshops, and 3) unfilled vacancies due to the hiring freeze and CR. The majority of the other objects variance is due to the delay in obligating the Exadata Hardware maintenance contract and changes in the scope of work delayed printing and postage for the LUCA operations.</p>				
<b>R4 Response Data</b>	\$82,423,261	\$88,265,000	(\$5,841,739)	-7.1%
<p>The variance in this area consists of \$2.5M higher than expected costs in salaries and \$3.3M higher than expected costs in other objects. The IPC Operations and the CQA program funding does not cover the staffing levels. Variance will continue to grow on a monthly basis. The other objects variance is due to the approval of a critical unfunded need to support the dDAAS contract which consist of the mobile device acquisition, logistics, provisioning, management, cellular network coverage, and decommissioning services needed to support the 2020 Decennial Census. There is no impact to the program as there is sufficient funding in the later months to cover this shortfall.</p>				
<b>R5 Published Data</b>	\$13,660,713	\$13,577,345	\$83,368	0.6%
<p>The variance is within threshold.</p>				

**Program Budget/Costs as of June 30, 2017**

<b>R6 Test and Evaluation</b>	\$31,379,830	\$24,449,422	\$6,930,408	22.1%
<p>The variance in this area consists of \$5.9M lower than expected costs in salaries and \$1.1M lower than expected costs in other objects. The salary variance is due to the following: 1) delays in filling vacancies due to the hiring freeze and CR, 2) Post Enumeration Survey was descoped from the 2018 End to End Census Test, and 3) due to the change in the scope of work in the Test Planning, Project Management and Support project, NPC and the Telephone Center funds were spread incorrectly. The other objects variance is due to the re-scoping of the 2018 End-to-End test. There were delays in procuring the office space, rent, equipment, postage and supplies for the End-to-End sites. There is no impact to the program as these obligations will occur in the fourth quarter.</p>				
<b>R7 Infrastructure</b>	\$94,171,546	\$87,450,378	\$6,721,168	7.1%
<p>The variance in this area consists of \$6.4M lower than expected costs in salaries and \$0.3M lower than expected costs in other objects. The salary variance is due to delays in filling vacancies due to the hiring freeze and CR. The other objects variance is due to minimal spending in travel, training, and supplies due to the CR. There is no impact to the program as we expect these obligations to occur in the fourth quarter.</p>				

**Notes:**

1) Explanations are required for frameworks with variances that are equal to or greater than +/- 10% OR greater than +/- \$500k.

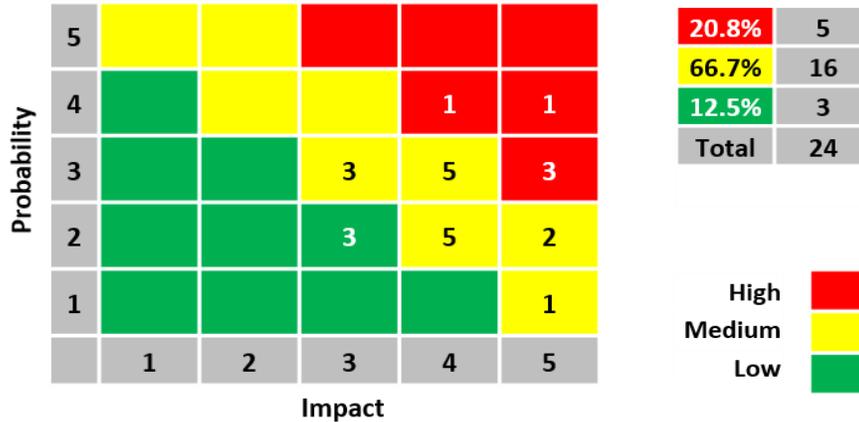
2) We report budget variance data as currently as possible. When the Monthly Status Report is prepared, we have not yet received budget variance data from the current month, so data from the previous month is what we include.

## Program-Level Life Cycle Risks

	Risk ID	Name	Level	Prior Level	Trend	Prob	Imp
1	LC-040	Funding Requests Not Realized	H	H	↔	4	5
2	LC-012	External Support	H	H	↔	4	4
3	LC-033	Administrative Records And Third-Party Data - External Factors	H	H	↔	3	5
4	LC-039	Public Perception Of Ability To Safeguard Response Data	H	H	↔	3	5
5	LC-041	Cybersecurity Incidents	H	H	↔	3	5
6	LC-010	Enterprise IT Solutions	M	M	↔	3	4
7	LC-036	Operations And Systems Integration	M	M	↔	3	4
8	LC-038	Testing Of Field Operations Quality Control Procedures	M	M	↔	3	4
9	LC-042	Late Operational Design Changes	M	M	↔	3	4
10	LC-046	Insufficient Levels Of Staff With Subject Matter Skillsets	M	M	↔	3	4
11	LC-043	Cloud Implementation	M	M	↔	3	3
12	LC-044	Systems Scalability	M	M	↔	3	3
13	LC-045	Major Disasters	M	M	↔	3	3
14	LC-028	Internet Data Collection	M	M	↔	2	5
15	LC-034	Administrative Records And Third-Party Data - Access And Constraints	M	M	↔	2	5
16	LC-001	Cost Model Projections	M	M	↔	2	4
17	LC-021	Schedule Impacts	M	M	↔	2	4
18	LC-022	Technological Innovations Surfacing After Design Is Finalized	M	M	↔	2	4
19	LC-027	IT Security Controls	M	M	↔	2	4
20	LC-029	Contract Management	M	M	↔	2	4
21	LC-004	ACS Funding And Integration	M	M	↔	1	5
22	LC-011	Acquisition Lead Time	L	L	↑	2	3
23	LC-016	Policy Impacts	L	L	↔	2	3
24	LC-023	Inconclusive Data	L	L	↔	2	3

Risk Trend
↑
Improving
↔
No Change
↓
Worsening

### Program-Level Life Cycle Risks



The following changes were made since the June Monthly Status Report:

1. LC-011\_Acquisition Lead Time: Probability rating lowered from 3 to 2 because all mitigation strategies for the Build or Buy decision were completed and all major 2020 Census contracts are awarded or to be awarded in FY17.
2. LC-018\_Trade Agreement Act Compliance: The risk pertained to the Trade Agreement Act (TAA) within the context of the Bring Your Own Device strategy. The challenge was how to comply with TAA while pursuing the strategy. The risk was closed because Bring Your Own Device is no longer a strategy being considered. Additionally, it has been replaced by procuring devices as a service where TAA does not apply.
3. The program issue titled Additional Workload for the Address Canvassing Operation (created from LC-032\_Reengineering Address Canvassing Operation) remained open. Description: For the 2010 Census, a near-100 percent Address Canvassing operation in the field was used to update and validate a complete and accurate inventory of addresses, which forms the basis for the census enumeration. For the 2020 Census, a variety of “in-office” techniques are used to update and validate the completeness of the address inventory. These “in-office” techniques were expected to reduce the areas requiring field work while achieving an equal or greater quality result, thereby reducing costs and improving quality for the overall 2020 Census Program. The established threshold of addresses for update and validation through “in-office” techniques is 75 percent, with a plan to send about 25 percent of addresses for field canvassing, as cited in the 2020 Census Operational Plan and the Detailed Operational Plan for Address Canvassing. Due to significant issues with productivity and quality control, two major components of the reengineered Address Canvassing operation, known as Active Block Resolution (ABR) and the Master Address File Coverage Study (MAFCS) have been suspended for the remainder of FY2017. Active Block Resolution (ABR) uses a variety of sources to perform MAF updates in areas of change identified by the Interactive Review (IR) process and provides high-quality frame information to the Address Canvassing Operation. The MAF Coverage Study (MAFCS) was designed to 1) update the MAF on a continuous basis by field listing 20,000 blocks each year; 2) provide estimates of MAF coverage on a national and subnational basis; and 3) validate the In-Office Address Canvassing methodology.

Impact: The suspension of the ABR and MAFCS projects will result in an increased universe for field canvassing for 2020 Address Canvassing. The exact increase is unknown, but the

suspension will almost certainly result in a field workload above the 25 percent threshold. This change will result in cost increases and increased potential for schedule adjustments associated with the additional field listing. In-Field Address Canvassing will need to scale up its listing operations by January 1, 2019 when field offices are scheduled to open. This change also has the potential to affect quality control (QC) work, as the scale and nature of sampling are likely to be affected. The pause in these two projects will make it difficult to meet the objectives of the reengineered Address Canvassing operation and is likely to impact customer expectations and public trust of the Census Bureau.

4. The program issue titled Modification To The 2020 Census Baselined Design (created from LC-003\_Meeting Cost Goal) remained open.

Description: The design for the 2020 Census was baselined in October 2015 and documented in the 2020 Census Operational Plan. In 2017, operational changes were decided on that have altered the baselined design. For example, the Address Canvassing operation suspended two of its projects, which will result in an increase in the field workload. In addition, the Update Enumerate operation will be paper-based and the Update Leave operation was added to the 2020 Census Program to cover most of the areas originally covered by Update Enumerate. The Group Quarters operation is mostly paper-based now as well. Additional operational changes are pending and the 2020 Census design may be modified further before the design of the 2018 End-to-End Census Test is finalized.

Impact: Many of the changes to the 2020 Census baselined design involve operations switching from automated processing to paper and manual processing. The increase in paper and manual processing, and the decrease in automated processing, will lead to increased costs for the 2020 Census Program.

# Appendix

## Appendix A: 2020 Census Operations and Purpose

Operations	Purpose
<b>Census/Survey Engineering</b>	
<b>Systems Engineering and Integration</b>	The Systems Engineering and Integration operation (SEI) manages the delivery of a system of systems that meets 2020 Census Program business and capability requirements.
<b>Security, Privacy, and Confidentiality</b>	The Security, Privacy, and Confidentiality (SPC) operation ensures that all operations and systems used in the 2020 Census adhere to the following policies and regulations: <ul style="list-style-type: none"> <li>• Appropriate systems and data security.</li> <li>• Respondent and employee privacy and confidentiality.</li> </ul>
<b>Content and Forms Design</b>	The Content and Forms Design (CFD) operation performs the following activities: <ul style="list-style-type: none"> <li>• Identify and finalize content and design of questionnaires and associated nonquestionnaire materials such as letters, postcards, brochures, envelopes, flashcards, and field materials.</li> <li>• Ensure consistency across data collection modes and operations, including (but not limited to) questionnaire content, help text, mailing materials, and field materials.</li> <li>• Provide the optimal design and content of the questionnaires to encourage high response rates.</li> </ul>
<b>Language Services</b>	The Language Services (LNG) operation performs the following activities: <ul style="list-style-type: none"> <li>• Assess and support language needs of non-English speaking populations.</li> <li>• Determine the number of non-English languages and level of support for the 2020 Census.</li> <li>• Optimize the non-English content of questionnaires and associated nonquestionnaire materials across data collection modes and operations.</li> <li>• Ensure cultural relevancy and meaningful translation of 2020 Census questionnaires and associated nonquestionnaire materials.</li> </ul>
<b>Frame</b>	
<b>Geographic Programs</b>	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/Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) System. The MAF/TIGER System (software applications and databases) serves as the national repository for all of the spatial, geographic, and residential address data needed for census and survey data collection, data tabulation, data dissemination, geocoding services, and map production. Components of this operation include: <ul style="list-style-type: none"> <li>• Geographic Delineations.</li> <li>• Geographic Partnership Programs.</li> <li>• Geographic Data Processing.</li> </ul>
<b>Local Update of Census Addresses</b>	The Local Update of Census Addresses (LUCA) operation provides an opportunity for tribal, federal, state, and local governments to review and improve the address lists and maps used to conduct the 2020 Census. This operation is required by the Census Address List Improvement Act of 1994 (Public Law (P.L.) 103-430).
<b>Address Canvassing</b>	The Address Canvassing (ADC) operation serves two purposes: <ul style="list-style-type: none"> <li>• Deliver a complete and accurate address list and spatial database for enumeration.</li> <li>• Determine the type and address characteristics for each living quarter.</li> </ul>

Operations	Purpose
<b>Response Data</b>	
<b>Forms Printing and Distribution</b>	<p>The Forms Printing and Distribution (FPD) operation prints and distributes the following paper forms to support the 2020 Census mailing strategy and enumeration of the population:</p> <ul style="list-style-type: none"> <li>• Internet invitation letters.</li> <li>• Reminder cards or letters or both.</li> <li>• Questionnaire mailing packages.</li> <li>• Materials for other special operations, as required.</li> </ul> <p><i>Other materials required to support field operations are handled in the Decennial Logistics Management or Field Infrastructure operations.</i></p>
<b>Paper Data Capture</b>	<p>The Paper Data Capture (PDC) operation captures and converts data from 2020 Census paper questionnaires. This operation includes:</p> <ul style="list-style-type: none"> <li>• Mail receipt.</li> <li>• Document preparation.</li> <li>• Scanning.</li> <li>• Optical Character Recognition.</li> <li>• Optical Mark Recognition.</li> <li>• Key From Image.</li> <li>• Editing and checkout.</li> </ul>
<b>Integrated Partnership and Communications</b>	<p>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:</p> <ul style="list-style-type: none"> <li>• Support Field recruitment efforts for a diverse, qualified Census workforce.</li> <li>• Engage and motivate people to self-respond, preferably via the Internet.</li> <li>• Raise and keep awareness high throughout the entire 2020 Census to encourage response.</li> <li>• Effectively support dissemination of Census data to stakeholders and the public.</li> </ul>
<b>Internet Self-Response</b>	<p>The Internet Self-Response (ISR) operation performs the following functions:</p> <ul style="list-style-type: none"> <li>• Maximize online response to the 2020 Census via contact strategies and improved access for respondents.</li> <li>• Collect response data via the Internet to reduce paper and NRFU.</li> <li>▪ Provide Paper Questionnaires to respondents who request paper materials only.</li> </ul>
<b>Non-ID Processing</b>	<p>The Non-ID Processing (NID) operation is focused on making it easy for people to respond anytime, anywhere to increase self-response rates. The operation accomplishes this by:</p> <ul style="list-style-type: none"> <li>• Providing response options that do not require a unique Census ID.</li> <li>• Maximizing real-time matching of non-ID respondent addresses to the Census living quarters address inventory.</li> <li>• Accurately assigning nonmatching addresses to census blocks.</li> <li>• Conducting validation of all non-ID responses.</li> </ul>
<b>Update Enumerate</b>	<p>The Update Enumerate (UE) operation is designated to occur in geographic areas where the Census Bureau has identified unique challenges. UE combines listing methodologies with enumeration methodologies. The primary functions of UE include:</p> <ul style="list-style-type: none"> <li>• Verifying and updating the address list and feature data.</li> <li>• Determining the type and address characteristics for each living quarter.</li> <li>• Enumerating respondents at housing units within the UE geographic areas.</li> </ul>

Operations	Purpose
<b>Update Leave</b>	<p>The Update Leave (UL) operation serves two purposes:</p> <ul style="list-style-type: none"> <li>• Verify and update the address list and feature data.</li> <li>• Link and deliver a choice questionnaire package to each housing unit in the designated area for the household to self respond.</li> </ul>
<b>Group Quarters</b>	<p>The 2020 Census Group Quarters (GQ) Operation will:</p> <ul style="list-style-type: none"> <li>• Enumerate people living or staying in group quarters.</li> <li>• Provide an opportunity for people experiencing homelessness and receiving service at a service-based location, such as a soup kitchen, to be counted in the Census.</li> </ul>
<b>Enumeration at Transitory Locations</b>	<p>The Enumeration at Transitory Locations (ETL) operation enumerates individuals in occupied units at transitory locations who do not have a Usual Home Elsewhere. Transitory locations include recreational vehicle parks, campgrounds, racetracks, circuses, carnivals, marinas, hotels, and motels.</p>
<b>Census Questionnaire Assistance</b>	<p>The Census Questionnaire Assistance (CQA) operation has two primary functions:</p> <ul style="list-style-type: none"> <li>• Provide questionnaire assistance for respondents by answering questions about specific items on the Census form or other frequently asked questions about the Census;</li> <li>• Tier 1: Provide telephone assistance via an Interactive Voice Response (IVR).</li> <li>• Tier 2: Provide real-time assistance over the telephone or web chat. via CQA agents.</li> <li>• Provide an option for respondents to complete a Census interview over the telephone.</li> </ul>
<b>Nonresponse Followup</b>	<p>The Nonresponse Followup (NRFU) Operation serves two purposes:</p> <ul style="list-style-type: none"> <li>• Determines housing unit status for nonresponding addresses that do not self-respond to the 2020 Census.</li> <li>• Enumerates households that are determined to have a housing unit status of occupied.</li> </ul>
<b>Response Processing</b>	<p>The Response Processing Operation (RPO) supports the three major components of the 2020 Census: predata collection activities, data collection activities, and post data collection activities.</p> <p>Specifically, the operation supports the following:</p> <ul style="list-style-type: none"> <li>• Create and distribute the initial 2020 Census enumeration universe of living quarters.</li> <li>• Assign the specific enumeration strategy for each living quarter based on case status and associated paradata.</li> <li>• Create and distribute workload files required for enumeration operations.</li> <li>• Track case enumeration status.</li> <li>• Run post data collection processing actions in preparation for producing the final 2020 Census results.</li> <li>• Check for invalid or potential fraudulent returns.</li> </ul>
<b>Federally Affiliated Count Overseas</b>	<p>The Federally Affiliated Count Overseas (FACO) operation obtains counts by home state of U.S. military and federal civilian employees stationed or deployed overseas and their dependents living with them.</p>
<b>Publish Data</b>	
<b>Data Products and Dissemination</b>	<p>The Data Products and Dissemination (DPD) operation performs three primary functions:</p> <ul style="list-style-type: none"> <li>• Prepare and deliver the 2020 Census apportionment data for the President of the United States to provide to Congress by December 31, 2020.</li> <li>• Tabulate 2020 Census data products for use by the states for redistricting.</li> <li>• Tabulate and disseminate 2020 Census data for use by the public.</li> </ul>

Operations	Purpose
<b>Redistricting Data Program</b>	The purpose of the Redistricting Data Program (RDP) is to provide to each state the legally required P.L. 94-171 redistricting data tabulations by the mandated deadline of 1 year from Census. Day: April 1, 2021.
<b>Count Review</b>	The Count Review (CRO) operation enhances the accuracy of the 2020 Census through remediating potential gaps in coverage by: <ul style="list-style-type: none"> <li>• Implementing an efficient and equitable process to identify missing housing units.</li> <li>• Identifying and correcting missing or geographically misallocated large group quarters and their population.</li> <li>• Positioning remaining count issues for a smooth transition to the CQR operation.</li> </ul>
<b>Count Question Resolution</b>	The Count Question Resolution (CQR) operation provides a mechanism for governmental units to challenge their official 2020 Census results.
<b>Archiving</b>	The Archiving (ARC) operation performs the following functions: <ul style="list-style-type: none"> <li>• Coordinates storage of the materials and data and provides records deemed permanent, including files containing the individual responses to the 2020 Census, to National Archives and Records Administration (NARA).</li> <li>• Provides similar files to the NPC to use as source materials to conduct the Age Search Service.</li> </ul>
<b>Other Censuses</b>	
<b>Island Areas Censuses</b>	The purpose of the Island Areas Censuses 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.
<b>Test and Evaluation</b>	
<b>Coverage Measurement Design and Estimation</b>	The Coverage Measurement Design and Estimation (CMDE) operation develops the survey design and sample for the postenumeration survey for the 2020 Census. It also produces estimates of census coverage based on a postenumeration survey.
<b>Coverage Measurement Matching</b>	The Coverage Measurement Matching (CMM) operation identifies matches and nonmatches between the 2020 Census and the Coverage Measurement Survey, for both housing units and people, including computer and clerical components.
<b>Coverage Measurement Field Operations</b>	The Coverage Measurement Field Operations (CMFO) collects person and housing unit information (independent from 2020 Census operations) for the sample of Coverage Measurement Survey housing units. Coverage Measurement (CM) collects the same data as the 2020 Census for both housing units and persons. Additional information is collected by CM to help us understand census coverage and to detect erroneous enumerations.
<b>Evaluations and Experiments</b>	Evaluations and Experiments (EAE) document how well the 2020 Census was conducted; evaluations analyze, interpret, and synthesize the effectiveness of census components and their impact on data quality or coverage or both. Experiments identify potential designs of early 2030 Census life-cycle research and testing; experiments are quantitative or qualitative studies that must occur during a decennial census in order to have meaningful results to inform planning of future decennial censuses. In general, experiments involve response comparisons between tests, new or modified methods, or procedures against 2020 Census production methods or procedures.  The EAE operation performs the following functions: <ul style="list-style-type: none"> <li>• Measures success of critical 2020 Census operations and processes.</li> </ul>

Operations	Purpose
	<ul style="list-style-type: none"> <li>• Formulates a 2020 Census experimental program that will further refine 2030 Census operational design options.</li> <li>• Contributes to the formulation of the 2030 Census Research and Testing phase objectives.</li> <li>• Develops a transition plan and appropriate organizational structures to establish 2030 Census life cycle planning.</li> <li>• Initiates other early planning activities for the 2030 Census, including the monitoring of policy concerns and technological, societal, and public cooperation trends.</li> <li>• Produces an independent assessment of coverage via Demographic Analysis.</li> </ul>
<b>Infrastructure</b>	
<b>Decennial Service Center</b>	The Decennial Service Center (DSC) will support 2020 Census field operations and handle all service requests initiated by field staff.
<b>Recruiting, Training, and Onboarding</b>	<p>The Field Infrastructure (FLDI) operation performs the following functions:</p> <ul style="list-style-type: none"> <li>• Coordinates space acquisition for, and lease management of, the RCC and Area Census Offices.</li> <li>• Provides the administrative infrastructure for data collection covering the 50 states, the District of Columbia, and Puerto Rico including: <ul style="list-style-type: none"> <li>◦ Recruiting.</li> <li>◦ Hiring and onboarding.</li> <li>◦ Personnel and payroll administration.</li> <li>◦ Training.</li> <li>◦ Partnership support.</li> <li>◦ Management and supervision.</li> <li>◦ Clerical support.</li> <li>◦ Materials supply.</li> <li>◦ Printing and plotting.</li> </ul> </li> </ul>
<b>Decennial Logistics Management</b>	The Decennial Logistics Management (DLM) will provide logistics management services including procuring warehouse space, warehousing, inventory management, kit assembly, deployment of materials, and receiving and excessing materials.
<b>IT Infrastructure</b>	<p>The purpose of the IT Infrastructure (ITIN) operation is to provide the IT-related infrastructure support to the 2020 Census, including:</p> <ul style="list-style-type: none"> <li>• Enterprise systems and applications.</li> <li>• Decennial-specific systems, applications, and interfaces.</li> <li>• Field IT infrastructure (RCC, field office, and paper data capture center).</li> <li>• Mobile computing.</li> <li>• Cloud computing.</li> </ul>
<b>Program Management</b>	
<b>Program Management</b>	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.

## Appendix B: Detailed Operational Plan Release Schedule

	Detailed Operational Plan	DOP Release Dates via Operational Plan v1.0	Revised release date v2.0	Revised schedule as of June 2017	
1	(8) Address Canvassing - (ADC)	Sept 2015		Dec 2017	
2	(7) Local Update of Census Addresses (LUCA)	Sept 2016	Sept 2016		
3	(4) Content and Forms Design (CFD)				
4	(5) Language Services (LNG)				
5	(12) Internet Self-Response (ISR)			Dec 2016	June 2017
6	(13) Non-ID Processing (NID)			Sept 2016	March 2018
7	(10) Paper Data Capture (PDC)			Dec 2016	March 2017, Dec 2018 rev
8	(22) Redistricting Data Program (RDP)				March 2018
9	(11) Integrated Partnership and Communications (IPC)			Sept 2016	Dec 2018
10	(17) Census Questionnaire Assistance (CQA)				Dec 2017
11	(19) Response Processing (RPD)			Mar 2017	June 2018
12	(6) Geographic Programs Operation (GEOP) -- Geographic Delineations Component (GEOP/GD)			No date released in 2020 Ops Plan	Sept 2016
13	(6) Geographic Programs Operation (GEOP) -- Geographic Partnerships Component (GEOP/GP)				
14	(6) Geographic Programs Operation (GEOP) -- Geographic Data Processing Component (GEOP/GDP)				
15	(34) IT Infrastructure (ITIN)		Mar 2017	April 2017	
16	(3) Security, Privacy and Confidentiality (SPC)				
17	(18) Nonresponse Followup (NRFU)		Dec 2016	June 2017	
18	(9) Forms Printing and Distribution (FPD)		Mar 2017		
19	(35) Update Leave (UL)	Operation added in FY17		Sept 2017	
20	(14) Update Enumerate (UE)	Sept 2017	Mar 2017	Sept 2017	
21	(15) Group Quarters (GQ)	Sept 2017	Jun 2017	Sept 2017	
22	(32) Field Infrastructure (FID)	Sept 2016		Dec 2017	
23	(33) Decennial Logistics Management (DLM)				
24	(31) Decennial Service Center (DSC)	Jan 2017			
25	(21) Data Products and Dissemination (DPD)			Oct 2017	
26	(30) Evaluations and Experiments (EAE)		Sept 2018		
27	(27) Coverage Measurement Design & Estimation (CMDE)	Sept 2017	Sept 2017	Sept 2018	
28	(28) Coverage Measurement Matching (CMM)				
29	(29) Coverage Measurement Field Operations (CMFO)				
30	(20) Federally Affiliated Americans Count Overseas (FAA)				
31	(16) Enumeration at Transitory Locations (ETL)				
32	(25) Archiving (ARC)	Sept 2018	Sept 2017	Sept 2018	
33	(23) Count Review (CRO)	Sept 2017	Sept 2018		
34	(26) Island Areas Censuses (IA)				
35	(24) Count Question Resolution (CQR)		Sept 2018		
36	(1) Program Management (PM)				
37	(2) Systems Engineering & Integration (SEI)				

- FY 16 release
- FY 17 release
- FY 18 release
- FY 18 re-release
- FY 19 re-release

**Note:** All reports are released via the 2020 Census Memorandum Series. This schedule was released September 28, 2016. Work on many Detailed Operational Plans was delayed so existing staff could focus on higher priority 2017 Census Test preparations and rework artifacts to account for scope changes.

## **Appendix C: Descriptions of Tests That Have Already Taken Place**

### **Address Canvassing Test**

The Address Canvassing Test conducted in 2016 focused on the following: (1) measuring the effectiveness of In-Office Address Canvassing through In-Field Address Canvassing; (2) measuring the effectiveness of In-Field Address Canvassing; and (3) understanding the implications of moving from Assignment Area (a grouping of blocks) to Basic Collection Unit (BCU), which encompasses the characteristics of both collection blocks and assignment areas.

The Address Canvassing Test included In-Office Address Canvassing and In-Field Address Canvassing. The In-Office Address Canvassing included the Interactive Review and Active Block Resolution activities. The In-Field Address Canvassing activity is full block listing of all living quarters. Both In-Office Address Canvassing and In-Field Address Canvassing are based on the same input data (i.e., Master Address File (MAF) and Topologically Integrated Geographic Encoding and Referencing (TIGER)) and will be completed in time to compare the results from both activities with each other.

This Test occurred in two sites, Buncombe County, North Carolina, and St. Louis, Missouri. The sites include a variety of living quarters and address types (i.e., city-style addresses, non-city-style addresses, and location descriptions). Census field representatives were hired to conduct In-Field Address Canvassing. All management and oversight activities occurred out of the regional offices.

### **2016 Census Test**

The 2016 Census Test was an operational study of both self-response and nonresponse follow-up procedures. The self-response objectives included testing the provision of language support to limited English proficient populations, testing the ability to reach demographically diverse populations, and refining Real-Time Non-ID Processing (RTNP) methods.

The nonresponse follow-up objectives included the following strategies: the use of administrative records and third-party data to reduce cost while maintaining quality; reengineering field operations using models to reduce travel time and determine the best time for the enumerator to contact the respondent; and streamlining the staffing and supervisory structure.

Systems testing included the use of a Census Bureau server-based infrastructure<sup>1</sup> to support Self-Response and Non-ID Processing (for those responses where the Census ID is not used), and to measure the systems' abilities to manage a significant number of concurrent users. Also, this Test utilized Census Enterprise Data Collection and Processing (CEDCaP) systems (Control and Response Data System and the Multimode Operational Control System) for the first time in support of response processing operations. Data collection for the 2016 Census Test began in March 2016 and continued through June 2016 in Los Angeles County, California, and Harris County, Texas.

## **Appendix C: Descriptions of Tests That Have Already Taken Place cont'd**

### **2015 National Content Test**

The 2015 National Content Test (NCT) used a nationally representative sample of approximately 1.2 million households to evaluate and compare different census content and to test different contact strategies for optimizing self-response. The scope of the Test included: content testing for questions on race and Hispanic origin (e.g., combining race and Hispanic origin into a single question vs. using separate questions, introduction of a Middle Eastern/North African category), relationship (introduction of same-sex relationship categories), and within-household coverage (streamlined approach for ensuring accurate within-household coverage); continued testing of self-response modes and contact strategies (timing of invitations/notifications), targeted mail strategies to address the differences in Internet access based on demographics and regions, and optimization of the Internet data collection application for mobile devices. The Test also included a reinterview (of a subsample of respondents) to further assess the accuracy and reliability of the question alternatives for race, Hispanic origin, and within-household coverage. The 2015 NCT used a nationally representative sample to test various versions of questions that may appear on the 2020 Census and future American Community Survey questionnaires. Data collection for the 2015 NCT took place from August through December 2015.

## Appendix D: Acronyms

ABR.....	Active Block Resolution
ACO .....	Area Census Offices
ACS .....	American Community Survey
ADSD .....	Applications Development and Services Division
AMO .....	Area Manager of Operations
AMSD .....	Administrative and Management Systems Division
ARM.....	Administrative Records Modeling
ATAC.....	Automated Tracking and Control
ATP .....	Architecture Transition Plan
ATT .....	Authority To Test
AVI.....	[Telephone: robocall]
AVT .....	Address Validation Test
AWS.....	Amazon Web Services
BAS .....	Boundary and Annexation Survey
BBSP .....	Block Boundary Suggestion Project
BCU.....	Basic Collection Unit
BYOD .....	Bring Your Own Device [The use of employee-owned equipment/services.]
C-SHaRPS .....	Census Schedule A Human Resources Payroll System
CASS.....	Coding Accuracy Support System
CAT .....	Customer Acceptance Testing
CATI .....	<i>Computer Assisted Telephone Interviewing</i>
CBAMS.....	Census Barriers, Attitudes, and Motivators Survey
CCs.....	Contact Centers
CDR.....	Critical Design Review
CEDCaP .....	Census Enterprise Data Collection and Processing
CES.....	Center for Economic Studies
CFD .....	Content and Forms Design
CHEC .....	Census Hiring and Employment Check
CM .....	Coverage Measurement
CMS .....	Center for Medicare and Medicaid Studies
COMPASS .....	Census Operations Mobile Platform for Adaptive Services and Solutions
CQA .....	Census Questionnaire Assistance
CRM.....	<i>Customer Relationship Management</i>
CSAC .....	Census Scientific Advisory Committee
CSM .....	Center for Survey Measurement
DAPPS .....	Decennial Applicant, Personnel, and Payroll System
DCBO .....	Decennial Communications and Budget Office
DCMD .....	Decennial Census Management Division
dDaaS .....	decennial Device as a Service
DDSSO .....	Decennial Directorate Support Services Office
DID.....	Design Intent Drawings
DITD.....	Decennial Information Technology Division
DOP .....	Detailed Operational Plan
DPMO .....	Decennial Program Management Office
DROM.....	Decennial Research Objectives and Methods Group
DSSD .....	Decennial Statistical Studies Division
DTO .....	Decennial Translation Office
EAE .....	Evaluations and Experiments
ECaSE.....	Enterprise Censuses and Surveys Enabling
ECaSE-Enum.....	Enterprise Censuses and Surveys Enabling-Enumeration
ECaSE-ISR.....	Enterprise Censuses and Surveys Enabling-Internet Self-Response
ECaSE-OCS.....	Enterprise Censuses and Surveys Enabling-Operational Control System
EFU .....	Evaluation Followup
ENUM .....	Enumerators in the Field
ENUMPREP .....	Enumeration Preparation

eResponse IT.....Electronic Response Data Independent Test  
ES..... English/Spanish, otherwise known as Bilingual  
ESB ..... Enterprise Service Bus  
FAQ..... *Frequently Asked Questions*  
FMO..... Field Manager of Operations  
FY..... *Fiscal Year*  
FSCPE..... Federal-State Cooperative for Population Estimates  
GAADS ..... Geographic Area Analysis and Delineation System  
GAO ..... Government Accountability Office  
GEO ..... Geography Division  
GPO ..... *Government Publishing Office*  
GPMO.....Government Program Management Office  
GPSD..... Geographic Partnership Support Desk  
GQ ..... Group Quarters  
GRF-C..... Geographic Reference File-Codes  
GRF-N ..... Geographic Reference File-Names  
GUPS..... Geographic Update Partnership Software  
HU ..... Housing Unit  
ICADE..... Integrated Computer Assisted Data Entry System  
ICC ..... Integrated Communications Contract  
IIP ..... Integration and Implementation Plan  
IMS ..... Integrated Master Schedule  
IPC ..... Integrated Partnership and Communications  
IPT ..... Integrated Project Team  
IR ..... Interactive Review  
IRS ..... *Internal Revenue Service*  
ISR ..... Internet Self-Response  
IT ..... *Information Technology*  
JASON ..... [An independent scientific advisory group that provides consulting services to the federal government on matters of science and technology.]  
LCO ..... Local Census Office  
LiMA ..... Listing and Mapping Application  
LMS ..... Learning Management System  
LSO ..... Local Supervisor of Operations  
LUCA ..... Local Update of Census Addresses  
MAF ..... Master Address File  
MAF/TIGER..... Master Address File/Topologically Integrated Geographic Encoding and Referencing  
MAFUF ..... Master Address File Update File  
MCM..... Mobile Case Management  
MDM ..... Mobile Device Management  
MES ..... Mission Enabling Services  
MMVT..... MAF Model Validation Test  
MOCS..... Multimode Operational Control System  
MOJO ..... [Term for Census Operational Control System for Reengineered Field Operations]  
MTDB..... Master Address File/Topologically Integrated Geographic Encoding and Referencing system database  
NAC ..... National Advisory Committee  
NAS ..... *National Academy of Sciences*  
NCT ..... National Content Test  
“Notify Me” ..... [Census Bureau’s Preregistration Tool]  
NPC..... National Processing Center  
NRFU ..... Nonresponse Followup  
NTC..... Note for Correspondents  
OCS..... Operational Control System  
OIG ..... *Office of the Inspector General*  
OIS..... *Office of Information Security*

**OMB** ..... *Office of Management and Budget*  
**OOS** ..... *Office Operations Supervisor*  
**OCR**.....*Optical Character Recognition*  
**ORR** ..... *Operational Readiness Review*  
**ORT**.....*Operational Readiness Testing*  
**OSR** ..... *Optimizing Self-Response*  
**PCS** ..... *Production Control System*  
**PDC**..... *Paper Data Capture*  
**PES**..... *Post Enumeration Survey*  
**PM** ..... *Program Management*  
**PMGB** ..... *Portfolio Management Governing Board*  
**PMR**..... *Program Management Review*  
**Primus** ..... [*Census Bureau’s Internet Data Collection System*]  
**PRR** ..... *Production Readiness Review\**  
**PSAP** ..... *Participant Statistical Areas Program*  
**PVSed** ..... [*To make data private and secured*]  
**PWS**.....*Performance Work Statement*  
**PXP** ..... *Partnership Experience Portal*  
**QC**..... *Quality Control*  
**R&T** ..... *Research and Testing*  
**RA**..... *Recruiting Assistant*  
**RCC** ..... *Regional Census Center*  
**RDP**..... *Redistricting Data Program*  
**RFI** ..... *Request for Information*  
**RFP** ..... *Request for Proposal*  
**RO**..... *Regional Office*  
**ROckIT** ..... *Reorganized Census with Integrated Technology [Reengineered Field Operations]*  
**RRB** ..... *Risk Review Board*  
**RTNP**..... *Real-Time Non-ID Processing*  
**RTOCS** ..... *Research and Testing Operational Control System*  
**SBE** ..... *Service Based Enumeration*  
**SDLC** ..... *Systems Development Life Cycle*  
**SE**..... *System Engineering*  
**SE&I** ..... *Systems Engineering and Integration*  
**SIMEX** ..... *Human in the Loop Simulation*  
**SLC**..... *Survey Life Cycle*  
**SPC** ..... *Security, Privacy, and Confidentiality*  
**SRR** ..... *Systems Requirement Review*  
**TEA** ..... *Type of Enumeration Area*  
**TEMP** ..... *Test and Evaluation Management Plan*  
**TI** ..... *Technical Integrator*  
**TIGER** ..... *Topologically Integrated Geographic Encoding and Referencing*  
**TQA** ..... *Telephone Questionnaire Assistance*  
**TRR** ..... *Test Readiness Review*  
**UAA** ..... *Undeliverable As Addressed*  
**UAT**..... *User Acceptance Test*  
**UE**..... *Update Enumerate*  
**UHE**..... *Usual Home Elsewhere*  
**USPS** ..... *United States Postal Service*

\*This is a review to assess program-level test results to ensure systems are ready for operational testing. A PRR is held for each release and typically occurs 2-3 weeks prior to the release’s Operational Readiness Review. If key stakeholders agree that any outstanding defects will not negatively impact the goals/objectives of the field test and the Operational Readiness Testing environment is operational, then systems are ready for production and to support Operational Readiness Testing.

UT..... Users Test  
*UTS..... Unified Tracking System*  
*VTD..... Voting Districts*  
*WG..... Working Group*  
WLM..... Workload Management  
*Y&R..... Young & Rubicam*

**Note: Nonitalicized acronyms are those that are used mainly at U.S. Census Bureau whereas italicized acronyms are widely employed elsewhere.**