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| **Study Plan for the 2018 End-to-End Census Test Operational Assessment**  **Decennial Logistics Management Logistics Management Support**  **Decennial Logistics Management Integrated Project Team (IPT)**  **Draft Pending Final Census Bureau Executive Review and Clearance.** |  |
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# Introduction

The 2020 Census Decennial Logistics Management Operation (DLM) coordinates space acquisition for and lease management of six Regional Census Centers (RCCs), the Puerto Rico Area Office (PRAO), and 248 Area Census Offices (ACOs) in collaboration with the Census Bureau’s Field Division (FLD) and the General Services Administration (GSA) (e.g., secure bids, award contracts/ leases). The other major DLM activity collaborates with FLD and the National Processing Center (NPC) to provide logistics management support services for the decennial census. Examples of DLM activities include but are not limited to:

* Developing a space acquisition plan and program schedule in coordination with GSA for the RCCs, PRAO, and ACOs.
* Monitoring the procurement and build-out of space (i.e., specifications, schemas, designs, etc.).
* Ensuring all office locations meet physical security requirements.
* Closeout of the offices.
* Providing logistics management support services including procuring warehouse space, warehousing, inventory management, kit assembly, deployment of materials, and receiving and excessing materials. Services include but are not limited to:
  + Procuring and setting-up warehouse space to support RCCs and ACOs.
  + Provisioning RCCs and ACOs with office furniture, supplies, operating materials, and non-IT equipment.
  + Provisioning RCC and ACO field staff with supplies.
  + Inventory management.
  + Kit assembly (e.g., recruiting, hiring, and training kits).
  + Deploying materials to RCCs, PRAO, and ACOs.
  + Receiving and excessing remaining materials after the operation concludes.
  + Printing and shipping – NPC or external print vendor (e.g., Government Publishing Office (GPO)).

The 2018 End-to-End Census Test (2018 E2E CT) is an important opportunity for the Census Bureau to ensure an accurate count of the nation’s increasingly diverse and rapidly growing population. It is the first opportunity to apply much of what has been learned from census tests conducted throughout the decade in preparation for the nation’s once-a-decade population census. The Address Canvassing portion of the 2018 E2E CT will be held in three locations: Providence County, Rhode Island; Pierce County, Washington; and Bluefield-Beckley-Oak Hill, West Virginia. The remaining operations, including the self-response phase, will take place in Providence County, Rhode Island.

The 2018 E2E CT will be a dress rehearsal for most of the 2020 Census operations, procedures, systems, and field infrastructure to ensure there is proper integration and conformance with functional and non-functional requirements. The test also will produce prototypes of geographic and data products. Note that the 2018 E2E CT results cannot be generalized to the entire United States.

This study plan documents how the DLM’s logistics management support services effort will be assessed. DLM has generated a separate, companion study plan for Space Acquisition and Lease Management.

# Background

The following sections provide an overview of logistics management support activities that occurred in the 2010 Census and those planned for the 2018 E2E CT.

**The 2010 Census**

For the 2010 Census, the Department of Commerce’s (DOC) Office of Inspector General (OIG) recommended that the Census Bureau develop an Integrated Logistics Management System (ILMS) comprised of software that would support the planning and forecasting of material and kit production for field operations. This system would be managed by staff at the Census Bureau’s Headquarters (HQ) and at NPC by the Warehouse/Inventory Management area. The system would also use barcode technology for receipt of materials at the NPC and tracking inventory movement to the RCCs and the Local Census Offices (LCOs). For the 2020 Census, LCOs are now called ACOs.

Due to limited budget resources, a full-scale ILMS development was downsized to one that used NPC’s current inventory system. HQ planning and forecasting efforts used a series of spreadsheets, but none of them were able to link to the inventory system at NPC.

The following procedures were put into place for the 2010 Census Logistics operation:

* 2010 Master Activity Schedule that tracked start and finish baseline dates for all operations.
* Field Logistics created kit models using Excel Spreadsheets.
* NPC and the Census Bureau established a 951 program and set up a contract with the Government Printing Office (GPO) to provide printing services.
* NPC used manual labor with a powered conveyor assembly belt to assemble kit orders.

**The 2018 End-to-End Census Test**

In consideration of the four innovation areas described in the *2020 Census Operational Plan,* DLM is pursuing the implementation of an online, real-time Enterprise Resource Planning system (the ILMS), expanding its usage by extending access to RCCs and ACOs.

DCMD’s Decennial Logistics Management Branch, in collaboration with FLD and NPC is responsible for ensuring that non-IT equipment (supplies) and census operational kits (Address Canvassing [AdCan], Update Leave [UL], Non-Response Follow-up [NRFU], Group Quarters [GQ], and Recruiting and Hiring) are fulfilled and delivered to the field offices by the requested dates for the 2018 End-to-End Census Test.

The following are in place for the 2018 E2E CT DLM:

* 2018 Integrated Master Schedule (IMS) that tracks start and finish baseline dates for all operations.
* Early and Peak Operations (AdCan, UL, NRFU, and GQ) provide operational kit specifications (Bills of Materials) in a timely fashion.
* FLD HQ Field Infrastructure Branch (FIB) receives kit specifications from operational areas using Excel spreadsheets. FIB then creates bills of materials (BOMs) in the ILMS.
* NPC’s and the Census Bureau’s continued collaboration with GPO to provide printing services, as well as with other print vendors.

# Assumptions

We are making the following assumptions about the 2018 E2E CT DLM operation:

* + - Funding and staffing requirements for HQ and NPC are sufficient to accommodate the workload.
    - Decennial Census Management Division (DCMD) funding is synchronized with the DLM operational schedule.
    - RCC and ACO staff are provided with logistical procedures, tools, and requirements to understand how to successfully accommodate the workload.
    - RCC and ACO staff are provided ILMS training.

# Scope of Assessment Content and Questions To-Be-Answered

The diagram below depicts the high-level process flow for logistics management support.



We will evaluate the effectiveness of the following areas of the DLM logistics management support:

A) Budget

1. What were the costs for assembling the 2018 E2E CT operational kits?
2. What were the costs of forms printing for the 2018 E2E CT operational kits?
3. Did the total cost for kit assembly and forms printing stay within the budgeted amount? If no, what factors caused the budget overruns?
4. Was there enough funding to cover operational requirements?
5. Was funding available in time to cover operational expenditures and printing?
6. Were funds allocated in the correct Fiscal Year to start printing for the 2018 E2E CT operational kits?
7. What was NPC’s estimated labor cost for each 2018 E2E CT operational kit?

B) 2018 E2E CT Logistics Management Support Process

1. Were baseline dates met for delivery of 2018 E2E CT operational kits to field offices?
   1. When did DLM receive a list of products necessary for each operation’s kit development?
   2. What role did DLM play in generating schedules for development of materials necessary for the operational kits?
   3. How did DLM ensure that all stakeholders participated in schedule development?
2. How many 2018 E2E CT operational kits did FLD forecast to be delivered? How many were actually delivered?
3. Were the kit shipping dates (per operation) met? If not, why not?
4. How many 2018 E2E CT operational kits remained at the conclusion of operations (excess) requiring disposition?
5. With ILMS, ACOs will have the opportunity to input orders (and re-order) for their known needs. If an ACO did not re-order supplies in a timely fashion, what were the reasons and impacts?
6. In what ways did the Census Bureau benefit from its collaboration with GPO for print operations for the 2018 E2E CT? What changes are recommended for the 2020 Census?

C) Lessons Learned

1. What were the major successes for DLM during the 2018 E2E CT?
2. What were the major obstacles that DLM encountered during the 2018 E2E CT?

# Methodology

The DCMD Decennial Logistics Management Branch, FLD Field Infrastructure Branch, and NPC are responsible for ensuring that non-IT equipment (supplies) and 2018 E2E CT operational kits are fulfilled and delivered to the field offices by the requested date for the 2018 E2E CT. The assessment methodology includes analysis and output from budget records, the 2018 E2E CT Integrated Master Schedule, and debriefings. A description of each area is below:

**Budget Records**

Budget records will provide the amount spent versus the amount budgeted for the 2018 E2E CT DLM operation. In addition, budget records will be used to determine the timing of the expenditure.

**Integrated Master Schedule**

The 2018 E2E CT Integrated Master Schedule (IMS) will be used to track the beginning and ending baseline dates for all operations. The IMS enables DLM to track logistics support and other related activities. The IMS also provides DCMD with the opportunity to mitigate potential problems before they occur if an activity falls behind schedule.

**Debriefings**

DLM’s debriefings for the 2018 E2E CT will involve best practice methods and future operational recommendations based on discussions with HQ, NPC, and field office staff. Lessons learned from these debriefings will provide feedback on how these operations were implemented. The debriefings will also help answer the questions posed in this study plan.

The following table depicts which assessment methodology areas will be used to answer the study plan questions:

|  |  |
| --- | --- |
| **Methodology Areas and Associated Study Plan Questions** | |
| **Methodology Area** | **Study Plan Questions (A: Budget, B: Logistics Management Support Process, C: Lessons Learned)** |
| Budget Records | A: 1-7 |
| Integrated Master Schedule | B: 1, 3 |
| Debriefings | B: 2, 4-6; C: 1 -2 |

# Risks/Limitations

There are no risks or limitations associated with this operational assessment at this time.

# Measures of Success

Criteria used to define successful completion of logistics management support are a combination of cost, process, and quality measures, and come directly from the DLM Baselined Requirements:

The following table shows which questions are used to evaluate each success measure:

| **Success Measures and Associated Study Plan Questions** | |
| --- | --- |
| **Success Measure** | **Study Plan Questions (A: Budget, B: Logistics Management Support Process, C: Lessons Learned)** |
| 1. The DLM operation receives a list of products necessary for census operational kits material development. HQ receives a list of products for all census operational kits and forwards them to NPC for assembly. | B: 1, 6 |
| 1. The DLM operation generates schedules for development of materials necessary for census operational kits. The developed schedules ensure all stakeholders participate and submit materials on time. | B: 1 |
| 1. The DLM operation assembles kits. NPC creates kits, with the required materials, for all field offices. | A: 1-7; B: 2, 4, 6 |
| 1. The DLM operation ships kits on designated distribution dates. NPC ships all kitted materials on designated distribution dates. | B: 3; C: 1-2 |
| 1. The DLM operation tracks all inventory of non-accountable items in all locations. All locations (field offices, HQ, NPC) track all inventory of non-accountable items, optimizing ordering and order fulfillment. | B: 5; C: 1-2 |

# Data Requirements (Data Sources)

Data on timing, cost, and results of logistics management support will be provided by May 1, 2019.

# Division Responsibilities

Various divisions of the Census Bureau have coordinated to create this operational assessment study plan, and will provide the information to evaluate the DLM logistics management support activities.

| **Name** | **Organization** |
| --- | --- |
| Bryn Johnson | DCMD |
| Latrice Brogsdale-Davis | DCMD |
| George Jones | DCMD |
| Vance Davis | DCMD |
| Linwood Hall, Jr. | DCMD |
| David Buckholtz | DCMD |
| Edmond Jarrell | NPC |
| Leanna Mayo | NPC |
| Sneha Desai | FLD |
| John Donnelly | FLD |
| Lou Konya | FLD |
| Jana Smith Post | FLD |
| Susan Berry | DITD |

The FLD HQ Field Infrastructure Branch and NPC staff will gather the necessary data for the assessment report. In addition, FLD and NPC will work with DCMD in drafting the DLM operational assessment report.

# Milestone Schedule

| Activity ID | Activity Name | Orig. Duration | Start | Finish |
| --- | --- | --- | --- | --- |
| **Decennial Logistics Management Operational Assessment Study Plan**  **(Space Acquisition and Lease Management)** | | | | |
| **First Draft** |  |  |  |  |
|  | Prepare First Draft of DLM Assessment Study Plan | 5 | 7/10/17 | 7//14/17 |
|  | **Distribute First Draft of DLM Assessment Study Plan to the Assessment Sponsoring DCMD DLM Branch Chief** | 4 | 7/14/17 | 7/18/17 |
|  | Incorporate DCMD DLM Branch Chief feedback to DLM Assessment Study Plan | 1 | 7/18/17 | 7/20/17 |
|  | **Submit revised First Draft to DCMD ADC for review** | 1 | 7/20/17 | 7/20/17 |
| **Initial Draft** |  | | | |
|  | Prepare Initial Draft DLM Assessment Study Plan (Incorporate ADC feedback/ input) | 3 | 7/20/17 | 7/25/17 |
|  | Distribute Initial Draft DLM Assessment Study Plan to Evaluations & Experiments Coordination Branch (EXC) | 1 | 7/26/17 | 7/26/17 |
|  | EXC Distributes Initial Draft DLM Assessment Study Plan to the DROM Working Group for Electronic Review | 1 | 7/27/17 | 7/27/17 |
|  | Schedule the DLM Study Plan for the IPT Lead to Meet with the DROM Working Group | **6** | 8/3/17 | 8/11/17 |
|  | Distribute **revised** Initial Draft DLM Assessment Study Plan to Evaluations & Experiments Coordination Branch (EXC) | 1 | 9/14/17 | 9/14/17 |
|  | EXC Distributes **revised** Initial Draft DLM Assessment Study Plan to the DROM Working Group for Electronic Review | 1 | 9/15/17 | 9/15/17 |
|  | Receive Comments from the DROM Working Group on the **revised** Initial Draft DLM Assessment Study Plan | 13 | 9/18/17 | 10/4/17 |
|  | Discuss DROM Comments on **revised** Initial Draft DLM Assessment Study Plan | 1 | 10/5/17 | 10/5/17 |
| **Final Draft** |  | | | |
|  | Prepare Final Draft of DLM Assessment Study Plan | 15 | 10/6/17 | 10/27/17 |
|  | Distribute Final Draft of DLM Assessment Study Plan to the DPMO and the EXC | 1 | 10/30/17 | 10/30/17 |
|  | Schedule and Discuss Final Draft DLM Assessment Study Plan with the 2020 PMGB | 14 | 10/31/17 | 11/20/17 |
|  | Incorporate 2020 PMGB Comments for DLM Assessment Study Plan | 5 | 11/21/17 | 11/28/17 |
|  | Prepare FINAL DLM Assessment Study Plan | 5 | 11/29/17 | 12/5/17 |
|  | Distribute FINAL DLM Assessment Study Plan to the EXC | 1 | 12/6/17 | 12/6/17 |
|  | EXC Staff Distributes the DLM Assessment Study Plan and 2020 Memorandum to the DCCO | 3 | 12/7/17 | 12/11/17 |
|  | DCCO Staff Process the Draft 2020 Memorandum and the DLM Assessment Study Plan to Obtain Clearances (DCMD Chief, Assistant Director, and Associate Director) | 30 | 12/12/17 | 1/25/18 |
|  | DCCO Staff Formally Release the DLM Assessment Study Plan in the 2020 Memorandum Series | 1 | 1/26/18 | 1/26/18 |
| **DLM – Logistics Management Support Assessment Report** | | | | |
| **First Draft of Assessment Report** | | | | |
|  | | | | |
|  | Receive, Verify, and Validate DLM Assessment Data | **20** | 4/3/19 | 5/1/19 |
|  | Examine Results and Conduct Analysis | **20** | 5/2/19 | 5/30/19 |
|  | Prepare First Draft of DLM Assessment Report (Includes Branch Chief review) | 15 | 5/31/19 | 6/20/19 |
|  | **Distribute First Draft of DLM Assessment Report to the Assessment Sponsoring DCMD ADC** | 1 | 6/21/19 | 6/21/19 |
|  | Incorporate DCMD ADC comments into DLM Assessment Report | 7 | 6/24/19 | 7/2/19 |
| **Initial Draft of Assessment Report** | | | | |
|  | Prepare Initial Draft DLM Assessment Report | 8 | 7/3/19 | 7/16/19 |
|  | Distribute Initial Draft DLM Assessment Report to Evaluations & Experiments Coordination Br. (EXC) | 1 | 7/17/19 | 7/17/19 |
|  | EXC Distributes Initial Draft DLM Assessment Report to the DROM Working Group for Electronic Review | 1 | 7/18/19 | 7/18/19 |
|  | Receive Comments from the DROM Working Group on the Initial Draft DLM Assessment Report | 10 | 7/19/19 | 8/1/19 |
|  | Schedule the DLM Assessment Report for the IPT Lead to Meet with the DROM Working Group | **10** | 8/2/19 | 8/15/19 |
|  | Discuss DROM Comments on Initial Draft DLM Assessment Report | 1 | 8/16/19 | 8/16/19 |
| **Final Draft of Assessment Report** | | | | |
|  | Prepare Final Draft of DLM Assessment Report | 25 | 8/17/19 | 9/23/19 |
|  | Distribute Final Draft of DLM Assessment Report to the DPMO and the EXC | 1 | 9/24/19 | 9/24/19 |
|  | Schedule and Discuss Final Draft DLM Assessment Report with the 2020 PMGB | 14 | 9/25/19 | 10/15/19 |
|  | Incorporate 2020 PMGB Comments for DLM Assessment Report | 10 | 10/16/19 | 10/29/19 |
| **Final Assessment Report** | | | | |
|  | Prepare FINAL DLM Assessment Report | 10 | 10/30/19 | 11/14/19 |
|  | **Deliver FINAL DLM Assessment Report to the EXC** | 1 | 11/15/19 | 11/15/19 |
|  | EXC Staff Distribute the FINAL DLM Assessment Report and 2020 Memorandum to the DCCO | 3 | 11/18/19 | 11/20/19 |
|  | DCCO Staff Process the Draft 2020 Memorandum and the FINAL DLM Assessment Report to Obtain Clearances (DCMD Chief, Assistant Director, and Associate Director) | 30 | 11/21/19 | 1/3/20 |
|  | DCCO Staff Formally Release the FINAL DLM Assessment Report in the 2020 Memorandum Series | 1 | 1/6/20 | 1/6/20 |
|  | EXC Staff Capture Recommendations of the FINAL DLM Assessment Report in the Census Knowledge Management SharePoint Application | 1 | **1/7/20** | **1/7/20** |

# Review/Approval Table

| Role | Electronic Signature | Date |
| --- | --- | --- |
| Fact Checker or independent verifier | Latrice Brogsdale-Davis |  |
| DCMD ADC | Bryn Johnson |  |
| DROM DCMD co-executive sponsor (or designee) | Deborah Stempowski |  |
| DROM DSSD co-executive sponsor (or designee) | Patrick Cantwell |  |
| Associate Director for R&M (or designee) | John Abowd |  |
| Associate Director for Decennial Census Programs (or designee) and 2020 PMGB | Albert Fontenot |  |

# Document Revision and Version Control History

|  |  |  |  |
| --- | --- | --- | --- |
| **VERSION** | **DATE** | **REVISION DESCRIPTION** | **AUTHOR/EDITOR** |
| **V 1.0** | **7/14/17** | **First draft** | Amaka Ndubueze |
| **V 1.1** | **7/19/17** | **Post-review updates for DLM Branch Chief review** | David Buckholtz |
| **V 1.2** | **7/20/17** | **Post-DLM Branch Chief Review updates** | David Buckholtz |
| **V 1.3** | **7/25/17** | **Post-ADC Review; formatting and document review schedule table updates** | David Buckholtz |
| **V 1.4** | **9/14/17** | **Updated formatting, Review/ Approval Table, and Study Plan schedule** | David Buckholtz |
| **V 1.5** | **11/8/17** | **Post-DROM Review updates** | David Buckholtz |
| **FINAL DRAFT V 1.0** | **11/20/17** | **Post-2nd DROM Review - approved for PMGB submission** | David Buckholtz |

# Glossary of Acronyms

| Acronym | Definition |
| --- | --- |
| ADC | Assistant Division Chief |
| AdCan | Address Canvassing |
| DCCO | Decennial Census Communications Office |
| DCMD | Decennial Census Management Division |
| DLM | Decennial Logistics Management |
| DOC | Department of Commerce |
| DPMO | Decennial Program Management Office |
| DROM | Decennial Research Objectives and Methods Working Group |
| DSSD | Decennial Statistical Studies Division |
| EXC | Evaluations & Experiments Coordination Branch |
| FIB | Field Infrastructure Branch |
| FLD | Field Division |
| GPO | Government Publishing Office |
| GQ | Group Quarters |
| GSA | General Services Administration |
| HQ | Headquarters |
| IPT | Integrated Project Team |
| NPC | National Processing Center |
| NRFU | Non-Response Follow-up |
| OIG | Office of Inspector General |
| PMGB | Portfolio Management Governing Board |
| PRAO | Puerto Rico Area Office |
| R&M | Research & Methodology Directorate |
| UL | Update Leave |

# References

U.S. Census Bureau (2010), “2010 Census Logistics Study Plan,” May 6, 2010.

U.S. Census Bureau (2011), “2010 Census Logistics Assessment Report,” December 14, 2011.

U.S. Census Bureau (2016), “2020 Census Operational Plan, Version 2,” October 31, 2016.