[Page intentionally left blank.]
Approvals

This ETL Detailed Operational Plan has been reviewed and approved for use.

Electronically Approved
Brian Zamperini
IPT Lead

Electronically Approved
Dora Durante
Branch Chief

Electronically Approved
Judy Belton
IPT Program Manager

Electronically Approved
Deborah M. Stempowski
Chief, Decennial Census Management Division
# Document Change History

<table>
<thead>
<tr>
<th>Revision #</th>
<th>Version</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>v0.01</td>
<td>July 5, 2018</td>
<td>Initial Working DRAFT Version from 2020 Census DOP template. Uses Annotated version of ETL BPM Version 0.8.</td>
</tr>
<tr>
<td>2</td>
<td>v0.02</td>
<td>July 11, 2018</td>
<td>Draft version for IPT Lead</td>
</tr>
<tr>
<td>3</td>
<td>v0.03</td>
<td>August 6, 2018</td>
<td>Draft version for IPT Program Manager</td>
</tr>
<tr>
<td>4</td>
<td>v0.04</td>
<td>August 8, 2018</td>
<td>Chief, DCMD</td>
</tr>
<tr>
<td>5</td>
<td>v1.0</td>
<td>September 10, 2018</td>
<td>Final version for publication</td>
</tr>
</tbody>
</table>

Note: Edit the fields below to update the Document Version, Date and Status in the Page Footers throughout the document.

## Document Footer Information Control Table

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Version, Date and Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>DocVersion:</td>
<td>Version 1.0</td>
</tr>
<tr>
<td>DocDate:</td>
<td>September 10, 2018</td>
</tr>
<tr>
<td>DocStatus:</td>
<td>Final</td>
</tr>
</tbody>
</table>
Table of Contents

1. Document Purpose ............................................................................................................. 1

2. Operational Overview ....................................................................................................... 2
   2.1 Operation Purpose .......................................................................................................... 2
   2.2 Background ................................................................................................................... 2
   2.3 Design Overview ............................................................................................................ 5
      2.3.1 High-Level Operational Design .................................................................................. 5
      2.3.2 ETL Operational Context .......................................................................................... 6
   2.4 ETL Data Flow and Operational Influences .................................................................. 16

3. Enumeration at Transitory Locations (ETL) Detailed Process Description ................ 25
   3.1 ETL Planning and Preparation [ETL 16-1] ..................................................................... 26
      3.1.1 Determine ETL Processing Requirements [ETL 16-1.1] ............................................ 27
      3.1.2 Develop Requirements and Approve Systems Supporting ETL [ETL 16-1.2] .......... 27
      3.1.3 Determine Staff Needs and Performance Metrics [ETL 16-1.3] ............................... 27
      3.1.4 Prepare for and Conduct ETL-Specific Training [ETL 16-1.4] .............................. 30
      3.1.5 Conduct Carnival/Circus Research [ETL 16-1.5] ..................................................... 31
   3.2 Progress Monitoring and Issue Resolution [ETL 16-2] ................................................... 31
      3.2.1 Monitor Progress and Resolve Issues [ETL 16-2.1] ................................................. 32
   3.3 ETL Advance Contact [ETL 16-3] .................................................................................. 32
      3.3.1 Receive Initial ETL Universe from RPO [ETL 16-3.1] .............................................. 33
      3.3.2 Conduct ETL Advance Contact [ETL 16-3.2] .......................................................... 34
   3.4 ETL Enumeration Universe and Updates from RPO [ETL 16-4] .................................... 37
      3.4.1 Receive ETL Enumeration Universe and Updates from RPO [16-4.1] ..................... 38
   3.5 ETL Enumeration [ETL 16-5] .......................................................................................... 38
      3.5.1 Create Field Work Assignments and Prepare Packets [ETL 16-5.1] ....................... 39
      3.5.2 Conduct ETL Field [ETL 16-5.2] .............................................................................. 41
      3.5.3 Process Paper Enumeration Records (ER) and Other Materials From Field [ETL 16-5.3] ....................................................................................................................... 45
      3.5.4 Conduct ETL QC Data Collection [ETL 16-5.4] ..................................................... 47
   3.6 ETL Operation Closeout [ETL 16-6] ............................................................................... 50
3.6.1 Closeout ETL Operation [16-6.1]...........................................................................51

4. Cost Factors..................................................................................................................52

5. Measures of Success......................................................................................................53

Appendix A – Acronyms and Terminology......................................................................54

Appendix B – References..................................................................................................61

Appendix C – Activity Tree for Enumeration at Transitory Locations (ETL)......................62

List of Figures

Figure 1: Enumeration at Transitory Locations Operation (ETL) Context Diagram .............. 7
Figure 2: 2020 Census Data Collection Integrated Operations Diagram (IOD).................... 17
Figure 3: ETL Operation Context Model............................................................................... 25
Figure 4: ETL Planning and Preparation [ETL 16-1] Constituent Activities............................ 26
Figure 5: Progress Monitoring and Issue Resolution [ETL 16-2] Constituent Activities ........ 32
Figure 6: ETL Advance Contact [ETL 16-3] Constituent Activities......................................... 33
Figure 7: Conduct ETL Advance Contact ........................................................................... 34
Figure 8: Attempt ETL Advance Contact ........................................................................... 35
Figure 9: Collect ETL Advance Contact Information ............................................................ 36
Figure 10: Update ETL Advance Contact Status ................................................................. 37
Figure 11: ETL Enumeration Universe and Updates from RPO [ETL 16-4]............................ 38
Figure 12: ETL Enumeration [ETL 16-5] Constituent Activities............................................. 39
Figure 13: Create Field Work Assignments and Prepare Packets .......................................... 40
Figure 14: Conduct ETL Field ............................................................................................. 41
Figure 15: Receive Work Assignments for TLs ................................................................. 42
Figure 16: Enumerate TLs ................................................................................................. 43
Figure 17: Sample Notice of Visit Form .............................................................................. 44
Figure 18: Review and Send Completed Packets ............................................................... 45
Figure 19: Process Paper Enumeration Records (ER) and Other Materials From Field ........ 46
Figure 20: Conduct ETL QC Data Collection ........................................................................ 47
Figure 21: Conduct ETL Reinterview ................................................................................ 48
Figure 22: Adjudicate Reinterview Results ....................................................................... 49
Figure 23: ETL Operation Closeout [ETL 16-6] Constituent Activities .............................. 50
Figure 24: Closeout ETL Operation .................................................................................. 51

List of Tables

Table 1: ETL Operational Inputs ......................................................................................... 8
Table 2: ETL Operational Controls .................................................................................... 10
Table 3: ETL Operational Outputs .................................................................................... 11
Table 4: Staff Resources Used Within ETL Operational Activities .................................... 14
Table 5: Infrastructure Sites for ETL Operational Activities .............................................. 15
Table 6: Systems Used Within ETL Operational Activities .............................................. 15
Table 7: Sample ETL Performance Measures ................................................................... 28
Table 8: Acronyms and Abbreviations List ........................................................................ 54
Table 9: TL Types and Definitions ..................................................................................... 58
1. Document Purpose

The 2020 Census Detailed Operational Plan for the Enumeration at Transitory Locations operation (ETL) is intended for use by U.S. Census Bureau managers, staff, contractors, and other internal and external stakeholders working on the 2020 Census. The document presents the detailed operational design for the 2020 Census ETL operation and includes a summary of the operational processes involved, their inputs, outputs, controls, and the basic mechanisms employed to conduct the operational work.

Anticipated uses of this document include the following:

- Communication—Documents operational design details for internal and external stakeholders.
- Planning—Documents planning assumptions and key milestones.
- Staffing—Documents staffing needs and strategies.
- Design—Describes operations and flows, which inform design of IT systems, manual processes, and training.
- Development—Identifies business rules and required capabilities to be developed.
- Testing—Provides a basis for developing integrated test plans for IT systems and processes.

This document complements the 2020 Census Operational Plan, which presents the 2020 Census operational design and covers all operations required to execute the 2020 Census, starting with precensus address and geographic feature updates and ending once census data products are disseminated and coverage and quality are measured.
2. Operational Overview

2.1 Operation Purpose

The 2020 Census Enumeration at Transitory Locations operation (ETL) enumerates individuals in occupied units at Transitory Locations (TLs) who do not have a Usual Home Elsewhere (UHE). TLs include recreational vehicle (RV) parks, campgrounds, racetracks, circuses, carnivals, marinas, hotels, and motels.

2.2 Background

2010 Census ETL

The 2010 Census was the first time the Enumeration at Transitory Locations operation (ETL) was conducted separately from the Group Quarters Enumeration (GQE) operation. For the 2010 Census, fundamental differences supported the need for separation of the TL and Group Quarters (GQs) operations. GQE enumerators were instructed to interview all people at GQ locations; however, at transitory locations, enumerators were instructed to interview people who had no UHE. Additionally, the ETL and GQ operations used separate questionnaires. The GQE operation interviewed individuals using Individual Census Reports, Military Census Reports, and Shipboard Census Reports. The Enumeration at Transitory Locations operation interviewed households using ETL Enumerator Questionnaires to collect respondent data during enumeration.

Universe Creation

During the 2010 Census, the Address Canvassing (AdCan), Address Listing Update (ALU), and Group Quarters Validation (GQV) operations supported the initial ETL universe creation. AdCan added or deleted addresses as a result of in-field address canvassing, and classified living quarters as Housing Units or Other Living Quarters (OLQs). The GQV further classified OLQs as TLs, GQs, or Nonresidential. The carnivals and circuses workload was identified as part of the ALU program. The National Processing Center (NPC) staff contacted operators of carnivals, circuses, and fairs to obtain information to support ETL.

TLs identified during GQV were geocoded and transmitted to the Census Bureau headquarters (HQ) Geography Division (GEO). GEO made TL updates to the Master Address File/Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) database. GQV operational outcomes also included original site maps, if obtained during GQV, as well as copies of GQV field maps with specific TL updates. These maps were provided to the Local Census Offices (LCOs) performing ETL, and the capability existed to print additional maps on an as needed basis for ETL.
**Preliminary Contact**
ETL fieldwork was conducted nationwide managed from 12 regional census centers (RCCs), 494 local census offices (LCOs) and the Puerto Rico Area Office. Census Bureau crew leaders (CLs) performed preliminary contact visits to identified TLs. CLs gathered information such as the total number of units at the location and the expected number of units to be occupied at the time of enumeration. CLs returned transitory location workload information to LCOs. LCO staff keyed the preliminary contact information into the Paper-Based Operations Control System. LCO staff also assembled CL assignments that consisted of a Master TL Binder containing TL addresses, blank Transitory Location Questionnaires (TLQs), identification labels, and public information forms in preparation for TL enumeration.

**Transitory Locations Enumeration**
Enumerators conducted transitory location enumeration based upon the locations assigned to them by their CLs. A team approach was used to complete enumeration in one visit whenever possible. Team sizes varied according to the estimated number of occupied spaces or units at the TL. Once enumerators arrived at the transitory location, they visited each occupied site, slip, space, or unit within the TL. Enumerators asked screening questions using a Unit Verification Page to identify occupancy of the units and updated the listing sheet to list occupied and unoccupied units at the TL.

Enumerators interviewed a household member for each unit or space. If the respondent stated that he, she, or any other occupants had no other residence where they lived or slept most of the time they were interviewed using the TLQ. If all the occupants did have a UHE, enumerators did not conduct an interview or complete a questionnaire. Those individuals were instead assumed to be enumerated at their primary residence. Respondents were asked their age as of April 1, 2010. This date was used as a reference when asking the date-of-birth question, since the ETL operation started prior to April 1, 2010.

**Reinterview**
Reinterview (RI) was the process used to ensure ETL operational quality. This was a telephone interview conducted from LCOs to check that correct enumeration procedures were followed, as well as to eliminate errors and identify potential data falsification. RI clerks used an Office Review Checklist to confirm the quality and consistency of the enumeration questionnaire entries, map spots, and updates made during TL enumeration. RI clerks made three telephone contact attempts to the TL being reinterviewed. If telephone contacts were unsuccessful, the location was visited in person to conduct the reinterview.

**2010 Census Timelines**
Operations were conducted on the following dates:

- March 30 – July 10, 2009 Address Canvassing
- July 20 – September 10, 2009 Address Listing Update, NPC Carnival/Circus
2020 Census ETL

The 2020 Census includes a comprehensive ETL universe creation process with inputs planned from Address Canvassing, Local Updates of Census Addresses (LUCA), phone canvassing of carnivals and circuses, and updates from census field managers and enumerators. The 2020 Census ETL operation will continue to be primarily paper-based, with automation used where possible.

Lessons Learned

Based on lessons learned from the 2010 Census, the following recommendations were made:

- Automate the questionnaire and all related sources of paradata used to record contact details during an interview.
- Learn more about the living situations of people counted in the ETL operation.
- Clearly define and identify TLs, as well as procedures on how to list transitory units (TUs) appropriately in operations that feed the ETL universe.
- Conduct intercensal testing of the TL population.

Operational Innovations

Operational innovations include the following:

- Use of reengineered field management structure, staff positions, and approach to managing fieldwork.
- Use of automation and technology for data collection.

Research Completed

The 2020 Census ETL operation will implement a similar design and methodologies as those used in the 2010 Census. While enhancements will be pursued, the planning and design of the 2020 Census ETL operation is about the operational implementation rather than research into new or different methodologies. Automated solutions were pursued this decade, but this operation will remain a paper-based operation for the 2020 Census.

Decisions Made

The following decisions have been made for this operation:

- The goals and objectives of the ETL field operation is to enumerate individuals at occupied units at TLs who do not have a UHE. The ETL operation is designed to
enumerate eligible populations that inhabit TLs, such as RV parks, campgrounds, hotels, motels, marinas, racetracks, circuses, and carnivals.

- The Census Bureau will follow an approach similar to the approaches used in other operations, which will involve a comprehensive approach to quality. All cases will be subject to edits and checks within the Operational Control System and, as needed, the chance at being selected for a “reinterview” involving telephone contact in the area census offices (ACOs).
- The success of the 2020 Census ETL program will be the ability to identify the TL location and enumerate the units at the transitory location the day of the enumerator's visit.
- The Census Bureau plans to conduct ETL Advance Contact from February 24, 2020 to March 21, 2020. The ETL data collection operation will be conducted from April 9, 2020 to May 4, 2020. Because of the transitory/temporary/impermanent nature of transitory locations, respondents who do not have a usual home elsewhere are counted where they are at the time of enumeration, not where they are on April 1, 2020. ETL Reinterview will be conducted from April 13, 2020 to May 6, 2020. These dates could change slightly as we get closer to 2020.
- The Census Bureau enumerator will leave a notice of visit form at housing units where nobody is available to interview at the time of field enumeration.
- The Census Bureau is not using administrative records or third-party data sources for the ETL frame development; however, the ETL frame development is a multiple phase approach of updating and verifying TL addresses. The Census Bureau plans to use several methods to update the frame: (1) ETL carnival research; (2) Census field manager/enumerator updates; and (3) through the LUCA and New Construction programs.

2.3 Design Overview

The sections below present the high-level design for the Enumeration at Transitory Locations (ETL) operation. Please refer to the 2020 Census Operational Plan for a complete inventory of design decisions for all 2020 Census operations.

2.3.1 High-Level Operational Design

The design of the ETL operation for the 2020 Census includes six major operational activity areas:

1. ETL Planning and Preparation

The ETL Integrated Project Team (IPT) and stakeholders are actively performing all aspects of planning and preparation for the conduct of 2020 Census ETL operations.

2. Progress Monitoring and Issue Resolution
Census Bureau field-based and office-based supervisors and managers monitor the progress of ETL operations using robust reporting and issue resolution procedures.

3. **ETL Advance Contact**

The ETL Advance Contact is an office based operation to make initial contacts with transitory location points of contact. TL’s unable to be contacted by phone will receive an in-field contact attempt. Clerks in the ACOs call TL points of contact to verify the address, transitory location type, number of spaces or units at the TL, and other advance information to support ETL enumeration in the field.

4. **ETL Enumeration Universe and Updates from RPO**

The ETL Enumeration operation receives an initial universe, which represents the workload to be enumerated, from the Response Processing Operation (RPO). Updates to the initial workload are sent from RPO to the field during the designated ETL enumeration time frames.

5. **ETL Enumeration**

A field-based operation that leverages the results of ETL Advance Contact. Enumerators count the people staying at RV parks, campgrounds, hotel/motels, marinas, racetracks, carnivals, or circuses who do not have a usual home elsewhere.

6. **ETL Operation Closeout**

The closeout phase concludes ETL data collection for the 2020 Census. Operational managers and IPT stakeholders perform lessons learned and assessment activities to inform future operations.

The full hierarchy of activities for the ETL operation is provided in Appendix C in the form of an Activity Tree. In the Activity Tree, each major operational activity area listed above is numbered and then decomposed into a numbered set of subactivities, some of which are further decomposed into more detailed numbered subactivities or steps.

For a full description of the operational subactivities that comprise the ETL operation, see the Detailed Process Description discussions in Section 3 below.

2.3.2 **ETL Operational Context**

The ETL operational activities described above are conducted within the context of other 2020 Census operations and other programs or data sources that are external to the 2020 Census Program. One way to depict an operational context is by using a “Context Diagram,” which shows the boundary of the operational process, the operational activities it contains, and the information exchanged with its neighbor operations (or other entities) as well as the resources (mechanisms) needed to conduct the operational work.
Figure 1 is a top-level context diagram for the ETL operation represented as an Integrated Definition, Level 0 (IDEF0) model. An IDEF0 model of a process (or operation) shows the Inputs, Controls, Outputs, and Mechanisms of the process. These IDEF0 model elements are summarized below and described further in the sections that follow.

The yellow box in the center of the IDEF0 model lists the major operational activity areas for the operation, numbered as given in the ETL operation Activity Tree in Appendix C. Specific Information Exchanges (IE) are shown in different colored boxes to represent the Inputs (green boxes on left side), Outputs (orange boxes on right side), Controls (purple boxes on top), and Mechanisms (blue boxes on the bottom). Boxes to the left of the Inputs indicate the Provider of the inputs to the operation (typically another 2020 Census operation or an external source). The Provider of the Controls is noted in the box itself. Boxes to the right of the Outputs indicate the Receiver of the outputs (typically another 2020 Census operation or external entity). Each Information Exchange has a name and a unique number for identification purposes.

For detailed descriptions of the Inputs, Controls, Outputs, and Mechanisms used by the ETL operation, see the sections that follow.
2.3.2.1 ETL Operational Inputs

Inputs are the data that are consumed by the operation. The inputs define the amount of operational work that needs to be performed.

Table 1 lists the inputs to the ETL operation.

**Table 1: ETL Operational Inputs**

<table>
<thead>
<tr>
<th>Provider</th>
<th>Information Exchange</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>32. Field Infrastructure operation (FLDI)</td>
<td>IE241: Draft and Final Operation-Specific Training Materials</td>
<td>All materials needed to conduct the training for ETL-specific operational activities. This includes course content, instructor materials, and handouts.</td>
</tr>
<tr>
<td>19. Response Processing Operation (RPO)</td>
<td>IE122: Advance Contact Workload and Supporting Info</td>
<td>The initial set of TL cases requiring field enumeration with supporting information needed to conduct ETL Advance Contact.</td>
</tr>
<tr>
<td>19. Response Processing Operation (RPO)</td>
<td>IE111: Case Universe and Updates (incl. Mode Info)</td>
<td>The set of cases to be enumerated. This includes any cases requiring rework because of a failure during the quality control process.</td>
</tr>
<tr>
<td>9. Forms Printing and Distribution operation (FPD) (w/ 33. Decennial Logistics Management operation [DLM])</td>
<td>IE503: Printed Questionnaires and Questionnaire Packages</td>
<td>Printed materials needed in support of other field data collection operational activities.</td>
</tr>
<tr>
<td>33. Decennial Logistics Management operation (DLM)</td>
<td>IE607: Field Ops Supplies and Materials Shipments</td>
<td>Shipment of additional supplies and materials required to support the field operation. Provided in response to requests made by the field operations to DLM.</td>
</tr>
<tr>
<td>Provider</td>
<td>Information Exchange</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Transitory Location (TL)</td>
<td>IE281: Advance Contact Information</td>
<td>Information collected during the ETL Advance Contact. This includes TL types, maximum number of units, estimated population and scheduled date and time for enumeration.</td>
</tr>
<tr>
<td>Transitory Location (TL)</td>
<td>IE551: TU Information for Units at the TL</td>
<td>Information about TUs at the TL, including occupied and nonoccupied statuses of the TL and TUs. May be obtained from a combination of sources: from the transitory location operator, observation by the enumerator, or from the occupant during the interview.</td>
</tr>
<tr>
<td>Carnival/Circus Operators</td>
<td>IE552: List of Carnival/Circus Locations and Dates</td>
<td>Information obtained prior to or during advance contact regarding each of the carnivals and circuses and their expected location during the time frame it is expected they will be enumerated.</td>
</tr>
<tr>
<td>6. Geographic Programs operation (GEOP)</td>
<td>IE066: Spatial Data</td>
<td>Spatial data from MAF/TIGER.</td>
</tr>
<tr>
<td>Respondent or Proxy</td>
<td>IE183: Response Data</td>
<td>Data provided by the respondent directly to a Census Bureau enumerator in response to census questions to complete the TLQ.</td>
</tr>
<tr>
<td>Respondent or Proxy</td>
<td>IE184: Contact Information</td>
<td>Contact information (e.g., telephone numbers) provided by respondents for follow-up when answering questions.</td>
</tr>
<tr>
<td>31. Decennial Service Center operation (DSC)</td>
<td>IE360: IT Service Outcome Notification</td>
<td>Notifications and status updates of IT service results provided to the users (requesters).</td>
</tr>
</tbody>
</table>
Table 2 lists the controls for the ETL operation.

**Table 2: ETL Operational Controls**

<table>
<thead>
<tr>
<th>Provider</th>
<th>Information Exchange</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1. Program Management operation (PM) | Program Controls | Program Control information including:  
  - Budget  
  - Operational Plans and Schedule |
| 3. Security, Privacy, and Confidentiality operation (SPC) | Security, Privacy, and Confidentiality Controls | Laws, policies, regulations, and guidelines related to physical security, IT security, data security and privacy and confidentiality impacts, analyses, and processes. These include but are not limited to Title 13, Title 26, and other laws and policies related to protection of personally identifiable information. |
| 32. Field Infrastructure operation (FLDI) | IE367: Online and Classroom Training Schedules | Schedules for ETL-specific training classes.  
For ETL, all training is conducted in the classroom. |
 Provider | Information Exchange | Description
---|---|---
5. Language Services operation (LNG) | IE206: 2020 Census Language Support Plan | Document that specifies the number of languages and level of support for each language to be included in the 2020 Census.

### 2.3.2.3 ETL Operational Outputs

Outputs are the data produced by the operation. The outputs constitute the results of operational work that has been performed. Outputs produced may be used as inputs or controls to other operations.

Table 3 lists the outputs from the ETL operation.

**Table 3: ETL Operational Outputs**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>19. Response Processing Operation (RPO)</td>
<td>IE131: Address Data Updates from Field Ops</td>
<td>Address data updates provided by the field operations. This could include newly identified addresses for TUs or respondents with a Usual Home Elsewhere, deletes when an address listed in the MAF is determined to no longer exist, and changes in living quarter type (e.g., housing unit to group quarter).</td>
</tr>
<tr>
<td>19. Response Processing Operation (RPO)</td>
<td>IE266: ETL Advance Contact Results</td>
<td>Information gathered during advance contact that is required by RPO to characterize ETL cases and provide information for subsequent ETL operation’s work.</td>
</tr>
<tr>
<td>Consumer</td>
<td>Information Exchange</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>32. Field Infrastructure operation (FLDI)</td>
<td>IE250: Estimated Operational Workload (from ETL)</td>
<td>Estimate of the number of TL and unit counts that will be enumerated within the field for each geographic area. This information is used by FLDI to create a model for estimating the staffing needs by location.</td>
</tr>
<tr>
<td>32. Field Infrastructure operation (FLDI)</td>
<td>IE251: Operation-Specific Training Content and Requirements (from ETL)</td>
<td>Course content and other training requirements for the ETL-specific classroom training materials developed by FLDI.</td>
</tr>
<tr>
<td>32. Field Infrastructure operation (FLDI)</td>
<td>IE252: Approved Operation-Specific Training Materials (from ETL)</td>
<td>Approval for training content and materials used to conduct classroom training for ETL-specific operational activities.</td>
</tr>
<tr>
<td>32. Field Infrastructure operation (FLDI)</td>
<td>IE615: Time and Expense Records</td>
<td>Information regarding staff time and reimbursable expenses. Used by FLDI to pay employees.</td>
</tr>
<tr>
<td>32. Field Infrastructure operation (FLDI)</td>
<td>IE616: Administrative Actions</td>
<td>Decisions regarding administrative changes for field and office staff made by field operation management. For example, field operations may decide to transfer an employee to another location. FLDI is responsible for documenting these actions in the appropriate systems.</td>
</tr>
<tr>
<td>33. Decennial Logistics Management operation (DLM)</td>
<td>IE391: Operational Training Kit Requirements</td>
<td>A list of the contents that should be included in the kits provided to the field staff in support of ETL.</td>
</tr>
<tr>
<td>33. Decennial Logistics Management operation (DLM)</td>
<td>IE606: Field Ops Supplies and Materials Requests</td>
<td>Requests for additional supplies and materials required to support the field operation once the initial supplies provided in the operational training kit have been depleted.</td>
</tr>
<tr>
<td>Consumer</td>
<td>Information Exchange</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>19. Response Processing Operation (RPO)</td>
<td>IE131: Address Data Updates from Field Ops</td>
<td>Address data updates provided by the field operations. This could include newly identified addresses for TUs or respondents with a Usual Home Elsewhere, deletes when an address listed in the MAF is determined to no longer exist, and changes in living quarter type (e.g., housing unit to group quarter).</td>
</tr>
<tr>
<td>19. Response Processing Operation (RPO)</td>
<td>IE266: ETL Advance Contact Results</td>
<td>Information gathered during advance contact that is required by RPO to characterize ETL cases and provide information for subsequent ETL operation’s work.</td>
</tr>
<tr>
<td>TL Operator</td>
<td>IE561: Request for Advance Contact Info</td>
<td>A phone call request to obtain Advance Contact information from the transitory location operator.</td>
</tr>
<tr>
<td>Respondent</td>
<td>IE562: Notice of Visit</td>
<td>Paper notice of visit left at the TUs directing the occupied units to the internet or Census Questionnaire Assistance to self-respond.</td>
</tr>
<tr>
<td>10. Paper Data Capture operation (PDC)</td>
<td>IE563: Processed TLQs</td>
<td>The Transitory Location Questionnaires reviewed and logged for format and completeness (processed in the field) prior to being sent to Paper Data Capture for scanning and data capture.</td>
</tr>
<tr>
<td>31. Decennial Service Center operation (DSC)</td>
<td>IE380: IT Service Requests</td>
<td>Requests for information or advice, or for a standard change (a preapproved change that is low risk, relatively common and follows a procedure) or for access to an IT service.</td>
</tr>
</tbody>
</table>
2020 Census Detailed Operational Plan for:
16. Enumeration at Transitory Locations Operation (ETL)

### Consumer Information Exchange Description

| 1. Program Management operation (PM) | IE564: ETL Paradata | Status and progress data related to the data collection process. This includes administrative and procedural data describing the data collection and management process in all automated systems. |

#### 2.3.2.4 ETL Operational Mechanisms

Mechanisms are the resources (people, places, and things) that are used to perform the operational processes. They include Staff Resources, Infrastructure Sites, Systems, and other Technology Infrastructure.

**Staff Resources**

Table 4 identifies the Staff Resources employed for the ETL operation.

<table>
<thead>
<tr>
<th>Table 4: Staff Resources Used Within ETL Operational Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Staff Resources</strong></td>
</tr>
<tr>
<td>Headquarters (HQ) Staff</td>
</tr>
<tr>
<td>Regional Census Center (RCC) Staff</td>
</tr>
<tr>
<td>ACO Staff</td>
</tr>
<tr>
<td>Field Staff</td>
</tr>
<tr>
<td>NPC Staff</td>
</tr>
</tbody>
</table>
**Infrastructure Sites**

Table 5 identifies the Infrastructure Sites employed for the ETL operation.

**Table 5: Infrastructure Sites for ETL Operational Activities**

<table>
<thead>
<tr>
<th>Infrastructure Site</th>
<th>Description/Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>HQ</td>
<td>HQ site for office work conducted in support of the ETL operation. This permanent site in Suitland, Maryland, manages the operation throughout the country.</td>
</tr>
<tr>
<td>RCC</td>
<td>The RCCs oversee the activities of the ACOs. Each RCC will manage a number of ACOs.</td>
</tr>
<tr>
<td>ACO</td>
<td>ACOs that are responsible for managing all of the field operations and support activities within their designated area.</td>
</tr>
<tr>
<td>Field Area</td>
<td>The geographic area within which field staff perform data collection activities.</td>
</tr>
<tr>
<td>NPC</td>
<td>NPC in Jeffersonville, Indiana, used for 2020 Census production operational work.</td>
</tr>
<tr>
<td>Training Venues</td>
<td>Sites where field staff receive classroom training on both general administrative topics and ETL-specific topics. These sites are coordinated through the ACO staff in FLDI.</td>
</tr>
</tbody>
</table>

**Systems and other Technology Infrastructure**

Table 6 identifies the Systems employed for the ETL operation.

**Table 6: Systems Used Within ETL Operational Activities**

<table>
<thead>
<tr>
<th>System</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Control System (PCS)</td>
<td>Application system supporting the ETL Advance Contact (ETLAC) stage.</td>
</tr>
<tr>
<td>Enterprise Censuses and Surveys Enabling-Operational Control System (ECaSE-OCS)</td>
<td>Enterprise solution supporting the entire decennial work, including workload assignment and schedule management.</td>
</tr>
<tr>
<td>System</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Enterprise Censuses and Surveys Enabling- Field Operational Control System (ECaSE-Field OCS)</td>
<td>Enterprise solution supporting the entire decennial work, including workload assignment, schedule management, and workload management including check out, check in, linking, and shipping of cases, and selection of reinterview cases.</td>
</tr>
<tr>
<td>Decennial Applicant Personnel and Payroll System (DAPPS)</td>
<td>System that supports payroll for field staff including clerks, enumerators, and Census Field Supervisors (CFSs).</td>
</tr>
<tr>
<td>UTS</td>
<td>The Unified Tracking System (UTS) provides reports made available to management.</td>
</tr>
<tr>
<td>Address Register/Maps</td>
<td>The Census Bureau is currently researching technological options for address and mapping functionality.</td>
</tr>
</tbody>
</table>

Other Technology Infrastructure employed for the ETL operation includes:

- Census networks.
- Mobile networks.
- Mobile devices.
- IT infrastructure.
- Office IT infrastructure.
- Kits/field supplies.

### 2.4 ETL Data Flow and Operational Influences

Figure 2 is an Integrated Operations Diagram (IOD), which describes the design concepts for the response data collection operations for the 2020 Census (stateside and Puerto Rico). This diagram assumes that the frame has been developed and address canvassing operations are complete. The diagram shows the Response Processing Operation (RPO) as the hub of data collection and RPO’s interactions with all the other 2020 Census operations that have a role in data collection. The discussion below walks the reader through the diagram, using the circled numbers to help the reader follow the flow.
Figure 2: 2020 Census Data Collection Integrated Operations Diagram (IOD)
Pre-Data Collection

1 Before the start of data collection, the Geographic Data Processing (GDP) component of the Geographic Programs operation (GEOP) sends initial Address and Spatial Data, including the Type of Enumeration Area (TEA) designations, to RPO so it can create the Initial Enumeration Case Universe. RPO also receives the mailing contact strategy (i.e., strategy for self-response stratification) so it can identify which housing units receive which kinds of mailings, language stratification information so it knows which language to use, and experimentation stratification data so it knows which housing units are to be included in what types of experiments. The creation of the initial Enumeration Case Universe and application of the stratification data are done as part of the RPO Universe Creation function.

Based on the stratifications, the RPO Universe Management function creates the initial mailing workload and sends it to the Forms Printing and Distribution operation (FPD), which prints and then mails the appropriate materials to mailable housing units for the Self-Response (SR) TEA. The first two of the five potential mailings for the SR TEA are sent unconditionally to all housing units in this TEA. These mailings are sent in English or English and Spanish based on the language stratification data and may include letters or—based on the self-response stratification—questionnaires.

During Data Collection

2 Once the RPO Universe Creation work is complete, the Initial Enumeration Case Universe is managed by the RPO Universe Management function, which tracks changes to the enumeration universe for future mailings and for the data collection operations.

People living in housing units are encouraged to self-respond through a partnership and communications campaign (not shown on this diagram), through mailings sent by FPD, and through paper questionnaires left at housing units as part of the Update Leave operation (UL).

To make it easy for people to respond and to reduce the paper workload, the Census Bureau is using an Internet First strategy for most housing units. Respondents can go to the internet and enter their response using the internet instrument as part of the Internet Self-Response operation (ISR). The internet option offers additional flexibility and allows people to respond in multiple languages. If a respondent calls the Census Questionnaire Assistance operation (CQA), a customer service representative may offer to collect the respondent’s information by telephone. The information collected from these telephone interviews is entered by a customer service representative using an ISR instrument similar to the public-facing instrument used by respondents.
Respondents can also mail paper questionnaire forms. These forms are received by the Paper Data Capture operation (PDC), which uses scanning and imaging technology to capture the information from these forms.

ISR receives the Initial Enumeration Case Universe from the RPO Universe Management function and uses the Enumeration Case Universe to link responses provided through the internet instrument to the appropriate case. If respondents do not have their unique Census ID available, they are still able to complete the census questionnaire as a Non-ID response using the ISR instrument. The Non-ID Processing operation (NID) first attempts to match the address entered by the respondent or customer service representative to a known census address in real-time. For addresses that do not match, the response is still collected and is subject to later Non-ID Processing.

Response and status data collected through the various self-response data collection operations are sent (in digital format) to RPO’s Response Data Integration function. Any responses collected through PDC or ISR that are submitted in languages other than English or Spanish are translated by staff at the Tucson call center on behalf of these operations before being sent to RPO. RPO’s Universe Management function uses the response status data to determine the appropriate actions for the case.

During the self-response data collection time-period, reminder mailings are sent to housing units in the SR TEA. The first reminder is sent to all housing units in the SR TEA using the initial mailing workload as discussed above. Subsequent reminders are conditional and are only sent to those housing units that have not yet responded. The RPO Universe Management function sends a Conditional Mailing Workload to the FPD operation for these nonresponding units. FPD also receives from the RPO Universe Management function a list of mailable housing units in the UL TEA and mails two reminders to these housing units.

Any remaining Non-ID cases are sent by RPO to NID for post real-time Non-ID processing, which attempts to match addresses provided by respondents to known addresses in the Master Address File (MAF) using automated and clerical procedures. As needed, administrative records (AdRecs) are used to supplement the matching process. Most of these Non-ID cases will be from internet responses that could not be matched during real-time Non-ID processing. In addition, post data capture Non-ID processing will be required for paper forms for which the Census ID could not be read during data capture. The results of post real-time Non-ID matching are sent back to RPO. Based on pre-defined business rules, some of the responses that are not able to be matched through NID are sent to the field for verification as part of the Nonresponse Followup operation (NRFU).
The discussion above covers self-responses for people living in housing units. Special operations also exist to collect data from people living in other types of living quarters or for whom self-response is not a viable option:

- The Group Quarters operation (GQ) enumerates people living or staying in group quarters (e.g., college/university student housing, correctional facilities, and nursing/skilled-nursing facilities) as well as people experiencing homelessness and receiving services at service-based locations such as soup kitchens. GQ also enumerates people living on maritime vessels and receives administrative records for people living in the Military TEA.

- The Enumeration at Transitory Locations operation (ETL) enumerates people who are living in special locations—such as recreational vehicle parks, campgrounds, racetracks, circuses, carnivals, marinas, hotels, and motels—and who do not have a Usual Home Elsewhere.

- The Update Enumerate operation (UE) lists and enumerates housing units in areas that pose unique challenges to the standard self-response data collection operations. These housing units are in the UE and Remote Alaska TEAs, which cover remote areas of the country and other small selected areas.

NRFU is another special operation with primary purposes of determining the housing unit status of addresses in the SR and UL TEAs for which a self-response was not received and enumerating at those that are believed to be occupied. As mentioned in number 3 above, NRFU also performs a field verification activity to verify selected addresses for Non-ID self-responses that could not be matched to known addresses through NID.

Based on the universe case type (derived from TEA and living quarter type), RPO sends the Initial Enumeration Case Universe/Workload to the GQ, ETL, and UE operations. GQ uses this universe to perform an advance contact activity to collect general information and determine the preferred method of enumeration. ETL also performs an advance contact activity to schedule appointments for enumerating its universe of cases.

NRFU does not require advance contact activities. For NRFU, the RPO Universe Management function creates an Initial Case Universe/Workload based on an AdRec modeling activity. Four possible status outcomes result from this modeling for a given address:

- AdRec Vacant: No one lives there.
- AdRec Delete: There is no housing unit at that address.
- AdRec Occupied: There is a high probability that someone lives there and the Census Bureau has high-quality data about that housing unit.
- AdRec No Determination: Administrative data are not sufficient to help determine the housing unit status.
Only those addresses that are determined to be AdRec Occupied or AdRec No Determination are included in the initial NRFU workload. AdRec Vacant and AdRec Delete housing units receive an additional mailing from FPD. The RPO Universe Management function provides this additional mailing workload to FPD (as another type of Conditional Mailing).

For AdRec Occupied and AdRec No Determination cases, NRFU sends to RPO information regarding the success of an enumeration attempt as part of the response status data. Housing units that have been determined through administrative records modeling to be occupied are visited only once during NRFU. If these cases have not been successfully enumerated from this one visit (attempt), then RPO triggers one final mailing to these homes (from FPD) to encourage these households to self-respond. These housing units are removed from the followup workload.

Self-responses can continue to arrive at any time during NRFU. Accordingly, RPO flags housing units in the followup workload for which RPO has received a self-response or tracing information from the United States Postal Service (USPS) that indicates that a return is on its way to one of the paper data capture facilities. NRFU is notified about these flagged households as soon as the information is available so that it can remove the housing units from the daily workload, if possible. Any self-responses that are flagged but later found by RPO to have insufficient enumeration data are added back to the NRFU workload for continued enumeration attempts. The RPO Universe Management function tracks this information and uses it to determine what to include in the next day’s followup workload. Housing units that have been successfully enumerated are not included in subsequent followup workloads.

For NRFU, field data are collected by electronic devices. The electronic data are sent to the RPO Response Data Integration function, which subsequently provides this information to the Decennial Response Processing function for further processing. Paper questionnaires are used to enumerate at living quarters during UE and at housing units during ETL. These paper questionnaires are checked-in at area census offices (ACOs) and then sent to the paper data capture facilities, where they are scanned and imaged by PDC. PDC sends the captured data and case status information to RPO in digital format.

GQ is primarily a paper operation. Group quarter responses collected on paper questionnaires are checked-in at the ACOs and sent to PDC for scanning and imaging before being transmitted to RPO. Case status updates are sent to RPO as part of the check-in process. GQ data provided in electronic files (eResponses) require additional processing to prepare the data before they are electronically transmitted to RPO. GQ data collected on paper listings are entered by ACO clerks into the same file format that is used for eResponses. These response data are then sent electronically to RPO.

As part of the Evaluations and Experiments operation (EAE), the Census Bureau may test different questionnaire content and data collection methodologies during the 2020 Census to help evaluate content and modes for the 2020 Census and inform design changes for the 2030 Census. Addresses that are selected to be part of these experiments are identified in the initial universe.
(see number 1 above). For those addresses, the EAE operation collects the data and provides responses and status of responses to the RPO Response Data Integration function, which subsequently provides this information to the Decennial Response Processing function. Any responses collected by EAE on paper returns are processed by PDC and sent by that operation to RPO.

5 RPO’s Decennial Response Processing function performs coding and other preparation steps on incoming response data. In addition, special activities are performed to identify possible fraudulent returns.

The RPO Universe Management function also supports a Coverage Improvement (CI) activity, the goal of which is to ensure a high-quality census by conducting telephone followup for households where there could be coverage issues on submitted responses. CI is a followup activity and is therefore considered a component of NRFU; however, the CI telephone interviews are performed by CQA. CQA receives from the RPO Universe Management function a set of cases with potential coverage issues and provides the results of these cases back to RPO’s Response Data Integration function.

6 As noted above, universe and address updates occur during field operations. Census Bureau field staff may uncover changes to addresses as they perform their daily assignments in any field operation. For example, a UL or UE lister may add an address or find an error in the address or geographic data based on the listing activities, or a NRFU enumerator or a UL lister may go to an address and find an additional unit such as a garage apartment located on the premises. All listing results and other address changes are sent to the RPO Geographic Data Integration function, which passes the information on to the GDP function in GEOP.

Changes to the address list may also come from other sources such as appeals from the Local Update of Census Addresses operation (LUCA), the review of addresses performed by the Count Review Operation (CRO), and updated files from the postal service. The GDP function within GEOP updates the address data and sends these RPO’s Universe Management Function, which provides these cases to the appropriate operation. Depending on the timing, living quarter type, and TEA designation, RPO may initiate one or more mailings to these new addresses through FPD to encourage self-response.

7 All field operations (GQ, UL, ETL, UE and NRFU) include quality control (QC) functions. For GQ, the RPO Quality Control Management function creates and sends a sample of the field enumeration cases to ACO staff, who conduct telephone reinterviews for this sample set of cases to confirm that a GQ enumerator visited the site and that the total population count is correct.
For UL, the RPO Quality Control Management function selects a sample set of basic collection units (BCUs) for relisting. The QC Listing Results are sent back to the RPO Quality Control Management function for further processing. RPO does not send any changes resulting from UL listing to GEOP until the lister has passed the QC check. Further, if the QC activities result in a fail, BCUs already worked may require relisting. RPO includes this rework in subsequent UL production workloads.

QC methods for ETL and UE will be performed primarily in the field, tailored to meet the circumstances of these unique paper-based operations.

NRFU includes multiple methods for ensuring high-quality data collection. Several of these are integrated into the staff management activities. In addition, samples of field followup cases are selected for reinterview (RI), a process whereby the response data are collected again and compared to the original collected data. The RPO Quality Control Management function creates the RI workload and sends it to the NRFU operation. The RI cases are handled by NRFU field staff. The RI results are sent to the RPO Quality Control Management function, which performs an automated comparison of the RI data against the original data. Anomalies are sent back to NRFU, where additional research is conducted to determine how these cases should be handled. The results of this review (adjudication outcomes) are sent back to the RPO Quality Control Management function. In some cases, the adjudication requires that prior cases performed by the enumerator at fault be reworked. RPO puts these cases back into the NRFU workload as appropriate.

NRFU, UE, UL, ETL, and parts of the GQ operation are performed in the field. Several operations provide the support for these field data collection activities. The Field Infrastructure operation (FLDI) recruits, hires, onboards, and trains the staff needed to conduct these operations and also operates the field offices during production. The Decennial Logistics Management operation (DLM) provides the space and logistics support (e.g., supplies, kits, etc.) for the offices and the field staff. The Decennial Service Center operation (DSC) provides technical support for field and field office staff. Finally, the IT Infrastructure operation (ITIN) provides the hardware and software used by the field staff and field offices.

**Post-Data Collection**

Once data collection is complete, additional processing occurs to prepare the counts for use in apportionment and the data used by the Data Products and Dissemination operation (DPD) to create data products for redistricting and other purposes. The RPO Decennial Response Processing function handles this post-data collection processing, which includes multiple activities:
• Supplementing response data with administrative records for those cases that had been identified as AdRec Occupied but for which a nonresponse followup attempt was unsuccessful and no subsequent self-response was received.

• Determining the final enumeration universe by reconciling or applying final address and block data from the GDP component of GEOP.

• Determining the returns of record for situations where multiple responses have been received for the same housing unit.

• Performing count and status imputations.

• Performing consistency editing and characteristic allocation supplemented with administrative records data.

• Applying tabulation geography.

• Performing disclosure avoidance (Note: This is done by RPO for Island Areas Censuses data only. Disclosure avoidance for stateside/Puerto Rico data is handled by DPD).

Similar processing occurs for responses from group quarters. Responses collected through the EAE operation may require slightly different activities.

Through these processing activities, the RPO Decennial Response Processing function creates multiple files for stateside/Puerto Rico response data, including the Decennial Response File (DRF), the Census Unedited File (CUF), and the Census Edited File (CEF). RPO also creates an Island Areas CUF (IA-CUF), Island Areas CEF (IA-CEF), and Island Areas Microdata Detail Files (IA-MDF) for the Island Areas Censuses (IAC) response data. Each of these files is reviewed within the Census Bureau before the data are sent to the next stage of processing: Some of these reviews are done as part of the CRO. The CUF, the CEF, the IA-CUF, and the IA-MDF are sent to DPD via the Census Data Lake (CDL). DPD uses these files as inputs for data products creation and also creates the Stateside/PR MDFs using the CEF as input. RPO also sends data collected as part of EAE back to the EAE operation for further analysis.
3. Enumeration at Transitory Locations (ETL) Detailed Process Description

Figure 3 is a top-level Business Process Model (BPM) showing the Level 1 activity areas within the ETL operation. BPMs for the 2020 Census follow industry-standard Business Process Model and Notation (BPMN). An explanation of how to read the BPMN notations and a full sized copy of all of the BPMN diagrams for this operation are provided under separate cover.

This top-level BPM serves as the Context Model for the ETL operation. A BPMN Context Model displays the high-level activities within the operation and relationships between them, whereas the IDEF0 Context Diagram shown earlier depicts the boundaries of the operation or activity and the interfaces between the operation or activity and other operations and activities with which it is associated.

Figure 3: ETL Operation Context Model

The ETL operation is subdivided into the following Activity Areas:

- ETL Planning and Preparation [ETL 16-1].
- Progress Monitoring and Issue Resolution [ETL 16-2].
- ETL Advance Contact [ETL 16-3].
- ETL Enumeration Universe and Updates from RPO [ETL 16-4].
- ETL Enumeration [ETL 16-5].
- ETL Operation Closeout [ETL 16-6].

The business processes for each of these Level 1 activity areas are discussed along with their inputs and outputs in the following subsections.

### 3.1 ETL Planning and Preparation [ETL 16-1]

Figure 4 shows the BPM for the ETL Planning and Preparation [ETL 16-1] activity area (area within the gray rounded rectangle) and its constituent activities within the overall context of the ETL operation.

#### Figure 4: ETL Planning and Preparation [ETL 16-1] Constituent Activities

The ETL Planning and Preparation activity area is subdivided into the following operational subactivities:

- ETL Planning and Preparation [ETL 16-1].
  - Determine ETL Processing Requirements [ETL 16-1.1].
  - Develop Requirements and Approve Systems Supporting ETL [ETL 16-1.2].
  - Determine Staff Needs and Performance Metrics [ETL 16-1.3].
  - Prepare for and Conduct ETL-Specific Training [ETL 16-1.4].
  - Conduct Carnival/Circus Research [ETL 16-1.5].
Subsequent sections describe the ETL Planning and Preparation operational subactivities in detail.

### 3.1.1 Determine ETL Processing Requirements [ETL 16-1.1]

The “Determine ETL Processing Requirements” operational subactivity is subdivided into the following constituent activities:

- **Determine ETL Processing Requirements [ETL 16-1.1].**
  - Determine ETL Business Rules [ETL 16-1.1.1].
  - Determine ETL Quality Control Plans [ETL 16-1.1.2].

Subsequent sections describe the Determine ETL Processing Requirements operational subactivities in detail.

#### 3.1.1.1 Determine ETL Business Rules [ETL 16-1.1.1]

The ETL operation Integrated Project Team (IPT) in coordination with the Special Enumerations Branch has developed business rules for the 2020 ETL operation.

#### 3.1.1.2 Determine ETL Quality Control Plans [ETL 16-1.1.2]

The Decennial Statistical Studies Division (DSSD) develops Quality Control (QC) plans for the ETL operation with inputs from the ETL operation IPT. Selected cases for quality control will undergo the reinterview process using telephone contact from the ACO and an Office Review Checklist to confirm quality. The reinterview process is described in further detail in the 3.5.4 Conduct ETL QC Data Collection section of this document.

### 3.1.2 Develop Requirements and Approve Systems Supporting ETL [ETL 16-1.2]

The ETL operation IPT, subject matter experts (SMEs), and other stakeholders have worked in close coordination to develop a detailed set of 2020 Census ETL operational and systems requirements. These requirements have been provided to the Decennial Information Technology Division (DITD). DITD develops the systems and interfaces supporting ETL operations and oversees the systems approval and deployment processes.

### 3.1.3 Determine Staff Needs and Performance Metrics [ETL 16-1.3]

The “Determine staff needs and Performance Metrics” operational subactivity is subdivided into the following constituent activities:

- Determine Estimated ETL Operational Workload by Geographic Area [ETL 16-1.3.1].
- Define ETL Operational Performance Metrics and Targets [ETL 16-1.3.2].
- Provide Requirements for ETL Staff Supplies and Materials [ETL 16-1.3.3].

Subsequent sections describe the Determine Staff Needs and Performance Metrics operational subactivities in detail.
3.1.3.1 Determine Estimated ETL Operational Workload by Geographic Area [ETL 16-1.3.1]

The ETL operation IPT develops operational workload estimates based upon overall estimates of the number of TLs identified from various sources such as the results of Address Canvassing, the Address Listing Update, and the Local Update of Census Addresses (LUCA) operations.

3.1.3.2 Define ETL Operational Performance Metrics and Targets [ETL 16-1.3.2]

The ETL operation IPT defines the performance thresholds and targets for the ETL operation. The performance measures are designed for the ETL operation to be efficient, as well as to enable managers to make adjustments as needed, depending upon actual operational conditions in the field. ETL managers plan daily and weekly work hours, which will be compared with actual daily and weekly hours worked during the ETL operation. Enumerators’ cases assigned, case completion statuses, and number of TLs submitted are additional metrics that are captured and compared to expected performance thresholds. In addition, the Field Operational Control System (FOCS) performance metrics are supported by outcome codes. These codes, such as S for Started, NS for Not Started and C for Completed allow HQ ETL staff to manage ETL productivity and performance throughout the operation. Table 7 shows sample measures.

Table 7: Sample ETL Performance Measures

<table>
<thead>
<tr>
<th>2020 Census</th>
<th>Enumeration at Transitory Locations</th>
<th>Total TL Workload</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020 Census</td>
<td>Enumeration at Transitory Locations</td>
<td># TLs Assigned</td>
</tr>
<tr>
<td>2020 Census</td>
<td>Enumeration at Transitory Locations</td>
<td>% TLs Assigned</td>
</tr>
<tr>
<td>2020 Census</td>
<td>Enumeration at Transitory Locations</td>
<td># TLs Completed</td>
</tr>
<tr>
<td>2020 Census</td>
<td>Enumeration at Transitory Locations</td>
<td>% TLs Completed</td>
</tr>
</tbody>
</table>

3.1.3.3 Provide Requirements for ETL Staff Supplies and Materials [ETL 16-1.3.3]

The “Provide Requirements for ETL Staff Supplies and Materials” operational subactivity is subdivided into the following constituent activities:

- Provide Requirements for ETL Staff Supplies and Materials [ETL 16-1.3.3].
  - Provide Field Enumeration Materials Content [ETL 16-1.3.3.1].
Provide Kit Requirements [ETL 16-1.3.3.2].

Provide Field Enumeration Materials Content [ETL 16-1.3.3.1]

The ETL operation IPT including Field Division (FLD) SMEs coordinate to develop the requirements and the content for expected types and quantities of materials and forms to be used during the ETL operation. Materials include binders containing print materials, which are used by ETL enumerators in the field. Printed materials that are printed by a print vendor include blank English and Spanish language enumeration questionnaires and continuation questionnaires. The ACO will use OCS to print some paper materials including enumeration records and blank processing ID labels. Other printed materials used by field enumerators include the: Confidentiality Notice, Language ID card, Information Sheet, Notice of Visit, Language Assistance Sheet, and Listing Sheets. The ETL operation IPT sends both the materials specifications and the forms requirements to the Forms Printing and Distribution and Decennial Logistics Management operations prior to the start of the ETL operation. NPC serves as the kitting and shipping resource and uses the requirements to prepare, assemble, and send ETL forms, materials, and kits to the ACOs.

Provide Kit Requirements [ETL 16-1.3.3.2]

FLD coordinates with NPC in developing and verifying kit requirements based upon the 2020 Census ETL estimated workloads. The kits that are prepared are specific to either the ETL Advance Contact or ETL enumeration operations summarized as follows.

All of the materials needed for ETL CFS training are contained in training kits:

- Kit # 782(I), *ETL Crew Leader Instructor Kit*. This kit contains all of the materials the instructor needs to conduct the ETL CFS training.
- Kit # 782(T), *ETL Crew Leader Trainee Kit* (one for each trainee). The trainee kit contains all of the materials that the trainee needs to participate in the CFS training session.
- Kit #, *ETL Crew Leader Supply Kit*, for each trainee. This kit has materials and supplies the CFS needs following the completion of the training.

All of the materials needed for an ETL enumerator’s training are contained in training kits:

- Kit # 761(I), *ETL Enumerator Trainee Instructor Kit*. This kit contains all of the materials needed for the instructor to conduct enumerator training.
- Kit # 761(T), *ETL Enumerator Trainee Kit* (one for each trainee). The trainee kit contains all of the materials the trainee needs to participate in the enumerator training session.
- Kit # 761(S), *ETL Enumerator Supply Kit* (one for each trainee). It includes extra TLQs, Continuation Questionnaires, Confidentiality Notices, Information Sheets, Notice of Visit etc. the enumerator will need to enumerate TLs.
3.1.4 Prepare for and Conduct ETL-Specific Training [ETL 16-1.4]

The “Prepare for and Conduct ETL-Specific Training” operational subactivity is subdivided into the following constituent activities:

- Prepare for and Conduct ETL-Specific Training [ETL 16-1.4].
  - Prepare for ETL-Specific Training [ETL 16-1.4.1].
  - Conduct ETL-Specific Training [ETL 16-1.4.2].

Subsequent sections describe the Prepare for and Conduct ETL-Specific Training operational subactivities in detail.

3.1.4.1 Prepare for ETL-Specific Training [16-1.4.1]

The “Prepare for ETL-Specific Training” operational subactivity is subdivided into the following constituent activities:

- Prepare for ETL-Specific Training [ETL 16-1.4.1].
  - Provide ETL-Specific Training Content and Requirements [ETL 16-1.4.1.1].
  - Review and Approve ETL-Specific Training [ETL 16-1.4.1.2].

Provide ETL-Specific Training Content and Requirements [ETL 16-1.4.1.1]

FLD provides ETL-specific training content based upon requirements developed by the ETL operation IPT. FLD provides training materials for both office and field employees for the ETLAC and ETL Enumeration stages. FLD Decennial Management Training Branch provides training materials for RCC management staff and the Census Field Manager in the ACO. Training for the clerical staff on ETLAC will be through classroom training. The enumerator and CFS training will be three days of classroom training with some administrative online modules.

Review and Approve ETL-Specific Training [ETL 16-1.4.1.2]

FLD reviews and approves the ETL-specific training. The goals of the review and approval process are to ensure the completeness of the training content. The types of training are confirmed through this review process. As examples, enumerators will receive training that is geared towards the details of successfully completing transitory location and unit enumerations. Training for office staff anticipated to participate in the ETL Advance Contact operation covers the details of the contact process, using the telephone script, and documenting contact results. CFMs receive management specific training for their roles, and CFSs receive Census Bureau-specific supervisory training.

3.1.4.2 Conduct ETL-Specific Training [ETL 16-1.4.2]

FLD conducts ETL-specific training for both ACO office-based personnel and enumerators supporting ETLAC and ETL enumeration operations. Following are examples of the types of
training planned for ETL. FLD plans a dry run for enumerators and CFSs with HQ ETL SMEs planning to participate in the entire process.

Tentative dry run activities for ETL enumeration are as follows:

- ETL Enumerator Dry Run.
- CFS Dry Run.

Training activities for ETLAC and ETL enumeration operations are as follows:

- ETLAC CFM Training.
- ETLAC Clerk Training.
- ETL CFM Training.
- ETL CFS Training.
- ETL CFS Assistant Training.
- ETL Enumerator Training.

### 3.1.5 Conduct Carnival/Circus Research [ETL 16-1.5]

Preparation for the ETL operation includes conducting carnival and circus research. This research, planned for January 2020, is a telephone solicitation of carnival and circus operators. As background, during 2009 a number of carnival operators that were contacted indicated that their annual schedules would not be developed until the following year, 2010. Accordingly, contacting carnival, circus, and fair operators at the beginning of the 2020 Census year is a strategy that leverages lessons learned, and is designed to enhance the completeness of the information obtained. Clerks contact carnival and circus operators by phone to obtain their scheduled dates and corresponding addresses for shows that will occur during ETL enumeration. Clerks add the addresses to the PCS system, and valid address records are sent to ECaSE-SOCS to receive a Survey Sponsor Case Identification number to be added to the 2020 ETL enumeration frame.

### 3.2 Progress Monitoring and Issue Resolution [ETL 16-2]

Figure 5 shows the BPM for the Progress Monitoring and Issue Resolution [ETL 16-2] activity area (area within the gray rounded rectangle) and its constituent activities within the overall context of the ETL operation.
Figure 5: Progress Monitoring and Issue Resolution [ETL 16-2] Constituent Activities

3.2.1 Monitor Progress and Resolve Issues [ETL 16-2.1]

ETL operation progress monitoring includes both cost and operational monitoring activities. HQ and RCC managers monitor the overall status of ETL cases on a regional and assignment area basis. ACO managers will use OCS to monitor and control the progress and performance of Census field workers. FOCS-generated reports enable management to quickly spot trends or potential problem areas for attention. Issue resolution is managed by well-defined processes and escalation procedures. CFSs perform important front line functions to resolve issues by phone, by reassignment of staff to meet spikes in workload or to correct potential quality problems, and by in-person visits with ETL administrators when necessary to resolve issues.

3.3 ETL Advance Contact [ETL 16-3]

Figure 6 shows the BPM for the ETL Advance Contact [ETL 16-3] activity area (area within the gray rounded rectangle) and its constituent activities within the overall context of the ETL operation.
Figure 6: ETL Advance Contact [ETL 16-3] Constituent Activities

The ETL Advance Contact activity area is subdivided into the following operational subactivities:

- ETL Advance Contact [ETL 16-3].
  - Receive Initial ETL Universe from RPO [ETL 16-3.1].
  - Conduct ETL Advance Contact [ETL 16-3.2].

GEO/DITD creates an extract from the MAF, which is the initial enumeration universe. This universe is accessible to clerks in the ACOs for ETLAC. The DITD PCS is the system allocated for the ETLAC operation. Subsequent sections describe the ETL Advance Contact operational subactivities in detail.

3.3.1 Receive Initial ETL Universe from RPO [ETL 16-3.1]

The initial ETL enumeration universe is comprised of existing TL records in the MAF. The existing records are confirmed, updated, or deleted through the In-Office and In-Field Address Canvassing operation. The Address Canvassing operation also identifies new TL records to be added to the universe. As a supplement to In-Office/In-Field Address Canvassing, telephone outreach is made to carnival management companies to confirm schedules and addresses for carnivals, circuses, and fair locations. The multiple sources and methods for updating the universe are designed to include already existing and newly identified TLs. Updates from the TL Advance Contact operation are sent from RPO to update the ETL enumeration universe.
3.3.2 Conduct ETL Advance Contact [ETL 16-3.2]

The “Conduct ETL Advance Contact” operational subactivity is subdivided into the following constituent activities:

- Conduct ETL Advance Contact [ETL 16-3.2].
  - Attempt ETL Advance Contact [ETL 16-3.2.1].
  - Collect ETL Advance Contact Information [ETL 16-3.2.2].
  - Update ETL Advance Contact Status [ETL 16-3.2.3].

A detailed view of the constituent activities that make up the “Conduct ETL Advance Contact” operational subactivity is given in Figure 7 below.

![Figure 7: Conduct ETL Advance Contact](image)

3.3.2.1 Attempt ETL Advance Contact [ETL 16-3.2.1]

A detailed view of the constituent activities that make up the “Attempt ETL Advance Contact” operational subactivity is given in Figure 8 below.
Figure 8: Attempt ETL Advance Contact

Transitory locations to be contacted during ETL Advance Contact are comprised of TLs in the universe provided by RPO and potential adds identified during ETLAC through local knowledge. Census field managers use PCS to assign the ETLAC work. ETL trained clerks in the ACOs call transitory location points of contact. Clerks will use a well-defined call script, including providing confidentiality information, to ensure that all necessary information is obtained from each TL contact called. TL’s that are unable to be contacted by clerks in the office will receive an in-person contact attempt.

3.3.2.2 Collect ETL Advance Contact Information [ETL 16-3.2.2]

A detailed view of the constituent activities that make up the “Collect ETL Advance Contact Information” operational subactivity is given in Figure 9 below.
Figure 9: Collect ETL Advance Contact Information

The PCS will be used to collect the results of the ETL Advance Contact phone calls. Information collected includes verification that the TL is open during the time of the ETL operation, verification or update of the transitory location point of contact, and verification or update of the correct TL address. To support workload forecasting, clerks request the transitory location type, such as marina, RV park, hotel or motel, campground, carnival, racetrack, or other transitory location and seek to obtain the actual number of units at the transitory location and the types of units, such as sites, slips, rooms, or pads. Language requirements are identified to aid in planning the workload for language-specific enumerators. Clerks also collect a preferred schedule for enumeration and additional logistical or other details necessary to the conduct of TL enumeration.

3.3.2.3 Update ETL Advance Contact Status [16-3.2.3]

A detailed view of the constituent activities that make up the “Update ETL Advance Contact Status” operational subactivity is given in Figure 10 below.
If the clerk is able to complete the TL advance contact, the results, including updates, are input into the PCS to support enumeration. Any new TLs that are identified during the ETLAC operation are marked as TL adds and need to be validated before being assigned to the enumeration workload. Paradata is provided to support ETL program management. Clerks identify the status, including whether the contact status is unresolved or if the case status is complete.

3.4 ETL Enumeration Universe and Updates from RPO [ETL 16-4]

Figure 11 shows the BPM for the ETL Enumeration Universe and Updates from RPO [ETL 16-4] activity area (area within the gray rounded rectangle) and its constituent activities within the overall context of the ETL operation.
Figure 11: ETL Enumeration Universe and Updates from RPO [ETL 16-4]

The ETL Enumeration Universe and Updates from RPO activity area has one subactivity as shown below.

- ETL Enumeration Universe and Updates from RPO [ETL 16-4].
  - Receive ETL Universe and Updates from RPO [ETL 16-4.1].

3.4.1 Receive ETL Enumeration Universe and Updates from RPO [16-4.1]

Refer to Figure 11 above for the constituent activities of the “Receive ETL Enumeration Universe and Updates from RPO” operational activity.

GEO/DITD creates the ETL Enumeration Universe based upon a combination of existing ETL records in the MAF. Other sources for updates include ETL addresses identified during the Address Canvassing operation, inputs from local governments, and TLs identified during other 2020 Census operations. In addition, updates from the ETLAC operation are sent from RPO to update the ETL enumeration universe.

3.5 ETL Enumeration [ETL 16-5]

Figure 12 shows the BPM for the ETL Enumeration [ETL 16-5] activity area (area within the gray rounded rectangle) and its constituent activities within the overall context of the ETL operation.
The ETL Enumeration activity area is subdivided into the following operational subactivities:

- **ETL Enumeration [ETL 16-5].**
  - Create Field Work Assignments and Prepare Packets [ETL 16-5.1].
  - Conduct ETL Field [ETL 16-5.2].
  - Process Paper Enumeration Records (ER) and Other Materials From Field [ETL 16-5.3].
  - Conduct ETL QC Data Collection [ETL 16-5.4].

Subsequent sections describe the ETL Enumeration operational subactivities in detail.

### 3.5.1 Create Field Work Assignments and Prepare Packets [ETL 16-5.1]

A detailed view of the constituent activities that make up the “Create Field Work Assignments and Prepare Packets” operational subactivity is given in Figure 13 below.
The ETL field work assignment and packet preparation process has two main components, specifically, ACO in-office activities and in-field activities. The ETL operation IPT develops the workload estimates for the operation. These workload estimates are used to create the initial print requirements for ETL materials to be printed. The Forms Printing and Distribution and the Decennial Logistics Management (DLM) operations ship printed ETL materials from the print vendor and National Processing Center (NPC), respectively, to the ACOs. Clerks in the ACOs create enumerator packets for each of the transitory locations that are part of the ACO’s enumeration work load. The packets are comprised of binders with the following types of materials:

- Blank Questionnaires.
- Continuation Questionnaires.
- Confidentiality Notices.
- Enumeration Record, one for each TL.
- Processing ID Labels (PID).
- Special Notice Pages - these are pages with instructions.
- Transitory Location Listing Sheets.
- Language ID Flashcard.
- Language Assistance Sheet.
- Information Sheet.
• Notices of Visit.

### 3.5.2 Conduct ETL Field [ETL 16-5.2]

The “Conduct ETL Field” operational subactivity is subdivided into the following constituent activities:

- Conduct ETL Field [ETL 16-5.2].
  - Receive Work Assignments for TLs [ETL 16-5.2.1].
  - Enumerate TLs [ETL 16-5.2.2].
  - Review and Send Completed Packets [ETL 16-5.2.3].

A detailed view of the constituent activities that make up the “Conduct ETL Field” operational subactivity is given in **Figure 14** below.

**Figure 14: Conduct ETL Field**

Subsequent sections describe the Conduct ETL Field operational subactivities in detail. CFMs create TL enumeration assignments for each of the CFSs they manage. ACO clerks use the assignment information to prepare the shipping boxes and labels for the packets. The packets are then checked out to the CFS using the FOCS and shipped to the designated CFSs. CFSs receive the packets assigned to them and perform a brief check to verify the packets contain the expected materials. CFSs contact their ACO to inform them of the packets being received. Based on information collected during ETLAC, CFSs assign the transitory locations for enumeration, then...
provide the packets to their enumerators based upon enumerators’ assigned TLs. A minimum of two census field staff will visit each TL at the designated date and time. The number of enumerators assigned to each TL will be determined by the size of the TL in order to complete the enumeration in one visit, unless there are extraordinary circumstances.

3.5.2.1 Receive Work Assignments for TLs [ETL 16-5.2.1]

A detailed view of the constituent activities that make up the “Receive Work Assignments for TLs” operational subactivity is given in Figure 15 below.

![Figure 15: Receive Work Assignments for TLs](image)

TL enumerators receive their work assignments from their assigned Census Field Supervisor (CFS). The assignment decision includes factors such as enumerator location and schedule. TLs are enumerated by teams of at least two enumerators; one enumerator will be designated the lead enumerator and receive the master binder of TL material. The lead enumerator distributes necessary enumeration materials, such as TLQs, continuation questionnaires, confidentiality notices, and Notices of Visit (NOVs), and other materials needed to enumerate the TL to the other enumerators upon arrival at the transitory location.

3.5.2.2 Enumerate TLs [ETL 16-5.2.2]

A detailed view of the constituent activities that make up the “Enumerate TLs” operational subactivity is given in Figure 16 below.
Enumerating TLs

A minimum of two census field staff will visit each TL at the designated date and time. The number of enumerators for each TL will be determined by the size of the TL in order to complete the TL in one visit. If a TL point of contact operator is available, enumerators may attempt to make contact to obtain additional information to help with the enumeration. Operators may volunteer helpful details such as providing a site map and details of whether and which units are currently occupied.

Each enumerator is assigned a specific part of the TL to canvass. The enumerators canvass their assigned area. They locate the first unit in their assigned area and identify whether or not it is occupied. The enumerator updates the listing sheet for the unit. If the site is occupied the enumerator attempts to conduct an interview using the paper questionnaire. If there are more than seven people staying at the unit, the enumerator will use the continuation questionnaire to complete the interview. If the enumerator is able to complete the interview, he/she then goes to the next unit in his/her assigned area and repeats the same process. If no one is available at the unit, the enumerator notes this on the listing sheet as a “No Contact 1” and the unit is eligible for a second visit.

Once all of the units have been canvassed, the enumerator performs second visits to those units for which a person was not previously available. If the enumerator is unable to complete the interview after the second visit to the unit, he/she marks the reason. The enumerator leaves a Notice of Visit (NOV), as shown in Figure 17, then moves on to the next unit until all possible units have been enumerated. The NOV gives the respondent the opportunity to be counted by completing the census questionnaire online or calling Census Questionnaire Assistance.
Puerto Rico ETL Operation

The Puerto Rico ETL advance contact and enumeration operations occur simultaneously with U.S. stateside ETL operations. Bilingual systems and questionnaires are planned, and bilingual office staff will be hired to support 2020 Census Puerto Rico ETL operations. TLQs and continuation questionnaires will be sent to integrated Computer Assisted Data Entry for paper data capture. Postprocessing of ETL response data will occur as part of RPO.

Remote Alaska ETL

2020 Remote Alaska (RA) ETL consists of advance contact and field enumeration components. RA ETL Advance Contact is conducted from January 13, 2020, to February 25, 2020. Transitory Location cases will be initially contacted by phone through advance contact using the PCS. There are no mailings planned for 2020 RA ETL. RA ETL enumeration will be conducted in the field from January 21, 2020, to April 30, 2020.
Collecting Geocodes

During the 2020 Census, ETL enumerators will collect a geocode at the location where an enumeration questionnaire was completed. This approach is designed to accurately count transitory residents at the unit at which they reside. The Census Bureau is using the Listing and Mapping Application (LiMA) Standalone for the ETL geocoding functions.

3.5.2.3 Review and Send Completed Packets [ETL 16-5.2.3]

A detailed view of the constituent activities that make up the “Review and Send Completed Packets” operational subactivity is given in Figure 18 below.

Figure 18: Review and Send Completed Packets

Once all of the units at the TL have been enumerated, the lead enumerator collects the completed work. The lead enumerator checks the completed questionnaires and listing sheets for completeness and resolves any issues with the enumerator. The lead enumerator collects all other enumeration material from the enumerators and completes the enumeration record for the TL. The completed TLQs, accompanying listing sheets, continuation questionnaires, the enumeration record and the binder for the TL to the Census Field Supervisor (CFS). These materials make up the TL packet that CFSs receive and review from enumerators. If the CFSs have questions, they may contact the enumerators or the TL point of contact for resolution. Once resolved, or if no resolutions are necessary after review, the CFS sends the packet to the ACO for processing. ETL enumerators fill in their time and expense records daily and send those to their CFS for review and approval. CFSs review and approve enumerators’ time and expense submittals.

3.5.3 Process Paper Enumeration Records (ER) and Other Materials From Field [ETL 16-5.3]

A detailed view of the constituent activities that make up the “Process Paper Enumeration Records (ER) and Other Materials From Field” operational subactivity is given in Figure 19 below.
Figure 19: Process Paper Enumeration Records (ER) and Other Materials From Field

Clerks in the ACO receive and open the Transitory Location (TL) packets sent by the CFSs. The packets include TL-specific materials such as the TL binder, completed TLQs, continuation questionnaires, listing sheets, and enumeration records. Clerks check in the packet using the FOCS. FOCS send updates in the form of alerts to HQ and the RPO to confirm packet receipts and support overall management of the ETL operation. Clerks perform a review of the TL packet materials, and resolve issues as needed. If the clerk encounters an especially complex issue, it is escalated to the Census Field Manager for resolution.

Clerks scan the barcode on each enumeration record, then scan the barcode on each TLQ in order to link it to its parent Transitory Location. Clerks will enter the phone number and population count from each TLQ. If the population count is greater than seven, FOCS will ask for a continuation questionnaire to be scanned, which will then link the continuation questionnaire to the corresponding TLQ. The scanning is captured in FOCS and is a key part of linking TUs to their parent TLs. Scanning and linking supports tracking of ETL response data throughout processing and post-processing operations. Cases that are identified for RI as part of the Quality Control (QC) process are provided to the CFM. Once the bar codes are scanned, clerks start the shipping process. Shipping is handled by building a box of the TLQs that belong to a TL. Once a box is completed, its accompanying ER is copied, and the original is shipped separately for data capture. A shipping label is generated with the corresponding address, and attached to the box, as part of the checkout process. The box is sent to the Paper Data Capture (PDC) operation to capture response data from the TLQs and ERs.
3.5.4 Conduct ETL QC Data Collection [ETL 16-5.4]

The “Conduct ETL QC Data Collection” operational subactivity is subdivided into the following constituent activities:

- Conduct ETL QC Data Collection [ETL 16-5.4].
  - Conduct ETL Reinterview [ETL 16-5.4.1].
  - Adjudicate Reinterview Results [ETL 16-5.4.2].

A detailed view of the constituent activities that make up the “Conduct ETL QC Data Collection” operational subactivity is given in Figure 20 below.

![Figure 20: Conduct ETL QC Data Collection](image-url)

3.5.4.1 Conduct ETL Reinterview [ETL 16-5.4.1]

A detailed view of the constituent activities that make up the “Conduct ETL Reinterview” operational subactivity is given in Figure 21 below.
A random (RI) sample of 10 percent of eligible enumeration questionnaires will be reinterviewed. The 10 percent RI is planned as a random yet automated selection using the FOCS. The 10 percent sample is obtained by randomly selecting cases from an enumerator’s first three eligible cases, and then every 10th eligible enumeration questionnaire checked in as part of that enumerator’s completed work. Office Operations Supervisors (OOS) receive the initial RI workload and assign RI cases to clerks in the ACO. Based upon the RI workload, clerks print out the corresponding RI forms.

Clerks conduct the RI by phone calls to the respondent point of contact. Three attempts are made to contact the respondent POC, on various days and times of day. Clerks ask three RI questions and record the results on the printed RI form for that enumerator. The first question asks if the respondent was contacted by an enumerator; the second questions asks if the respondent has a usual home elsewhere; the third question asks the population count of the household. RI cases will be given a status of either “Pass,” “Fail,” or “Unable to Contact” based on established business rules. Parameters will be established to compare the production population count and the RI population count within established tolerances. Cases that fall within the population parameters, and for which there are no unresolved issues, receive a “Pass” designation. Cases
that do not receive an initial “Pass” designation undergo further adjudication as described in the following section.

3.5.4.2 Adjudicate Reinterview Results [ETL 16-5.4.2]

A detailed view of the constituent activities that make up the “Adjudicate Reinterview Results” operational subactivity is given in Figure 22 below.

Figure 22: Adjudicate Reinterview Results

Cases that do not receive an initial “Pass” designation are reviewed by OOSs or CFMs. OOSs and CFMs could designate a case as a fail. A fail designation is applied to cases generally
identified as not having resolvable issues, which could necessitate additional training of the enumerator, or possible rework of the case if necessary.

Cases designated as “Fails” are reviewed by the Lead CFM or Area Census Office Manager to determine if there was falsification. Fail cases are assigned to be reworked by a different enumerator. Cases can also be placed into the Supplemental RI category by a manager at any time during the ETL enumeration operation. Supplemental RI reasons could include if the enumerator may not be following proper enumeration procedures. OOSs or CFMs assign all remaining cases for an enumerator that receives a “Fail” for Supplemental RI. The CFS is informed to stop sending cases to that enumerator and to reassign all cases to a different enumerator. Cases that have been reassigned and reworked as part of the QC process are sent to the CFS, once reworked. The CFS performs a review for completeness of the reworked TL materials, then forwards the completed reworked enumeration packet back to the ACO for check in and further processing.

3.6 ETL Operation Closeout [ETL 16-6]

Figure 23 shows the BPM for the ETL Operation Closeout [ETL 16-6] activity area (area within the gray rounded rectangle) and its constituent activities within the overall context of the ETL operation.

Figure 23: ETL Operation Closeout [ETL 16-6] Constituent Activities
3.6.1 Closeout ETL Operation [16-6.1]

A detailed view of the constituent activities that make up the “Closeout ETL Operation” operational subactivity is given in Figure 24 below.

Completion of the TL Advance Contact, TL Enumeration, and TL QC operations closes out the overall ETL operation. The ETL operation IPT will conduct a lessons learned analysis including a field debrief of ETL operational activities. Participating divisions such as Decennial Census Management Division, Decennial Statistical Studies Division, Field Division, Decennial Information Technology Division, Geography Division, the National Processing Center, and others help with identifying lessons learned.

The lessons learned are captured in a lessons learned report that forms a key part of the overall 2020 Census Enumeration at Transitory Locations Assessment report. ETL management gathers relevant program documents such as the 2020 Census ETL schedule, budget information, risks and issues, Program Management documentation, and other artifacts. The ETL artifacts support overall program assessments, analyses, and early research and planning towards the 2030 Census Enumeration at Transitory Locations program.
4. Cost Factors

The investment in ETL is projected to have minimal influence on the overall costs and quality of the 2020 Census.

While the ETL operation is not a major cost driver for the 2020 Census, the following mechanisms from the IDEF0 Context Diagram represent the resources used to support this operation and comprise part of the 2020 Census cost elements:

Staff
- HQ Staff
- RCC Staff
- ACO Staff
- Field Staff
- NPC Staff

Sites
- HQ
- RCC
- ACO
- Field Area
- NPC
- Training Venues

Systems
- PCS
- ECaSE-OCS
- ECaSE-Field OCS
- DAPPS
- UTS
- Address Register/Maps

Other
- Census Networks
- Mobile Networks
- Mobile Devices
- IT Infrastructure
- Office IT Infrastructure
- Kits/Field Supplies
5. Measures of Success

For the 2020 Census operations, the corresponding Measures of Success will be documented in the operational assessment study plans and final reports. The operational assessment study plan documents the criteria that will be used to define successful completion of the operation. The operational assessment report will provide results on whether the criteria were met.

In general, operational assessments report on planned to actual variances in budget, schedules, and production and training workloads. The corresponding Measures of Success (as documented in the operational assessment study plan) include variances that exceed established thresholds. See *Content Guidelines for the 2020 Census Operational Assessments* for the potential scope of assessment.

Types of success measures include:

- **Process Measures** that indicate how well the process works, typically including measures related to completion dates, rates, and productivity rates.
- **Cost Measures** that drive the cost of the operation and comparisons of actual costs to planned budgets. Costs can include workload as well as different types of resource costs.
- **Measures of the Quality** of the results of the operation, typically including things such as rework rates, error rates, and coverage rates.

See the corresponding operational assessment study plan and report for the Enumeration at Transitory Locations (ETL) for details on the measures of success.
Appendix A – Acronyms and Terminology

Table 8 lists the acronyms and abbreviations used within this Detailed Operational Plan document.

Additional Decennial terminology can be found on the Census Bureau intranet.

Table 8: Acronyms and Abbreviations List

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACO</td>
<td>Area Census Office</td>
</tr>
<tr>
<td>AdCan</td>
<td>Address Canvassing</td>
</tr>
<tr>
<td>AdRecs</td>
<td>Administrative Records</td>
</tr>
<tr>
<td>ALU</td>
<td>Address List Update</td>
</tr>
<tr>
<td>BCU</td>
<td>Basic Collection Unit</td>
</tr>
<tr>
<td>BPM</td>
<td>Business Process Model</td>
</tr>
<tr>
<td>BPMN</td>
<td>Business Process Model and Notation</td>
</tr>
<tr>
<td>CDL</td>
<td>Census Data Lake</td>
</tr>
<tr>
<td>CEF</td>
<td>Census Edited File</td>
</tr>
<tr>
<td>CI</td>
<td>Coverage Improvement</td>
</tr>
<tr>
<td>CL</td>
<td>Crew Leader</td>
</tr>
<tr>
<td>CFM</td>
<td>Census Field Manager</td>
</tr>
<tr>
<td>CFS</td>
<td>Census Field Supervisor</td>
</tr>
<tr>
<td>CQA</td>
<td>Census Questionnaire Assistance operation</td>
</tr>
<tr>
<td>CRO</td>
<td>Count Review Operation</td>
</tr>
<tr>
<td>CUF</td>
<td>Census Unedited File</td>
</tr>
<tr>
<td>DAPPS</td>
<td>Decennial Applicant Personnel and Payroll System</td>
</tr>
<tr>
<td>DCMD</td>
<td>Decennial Census Management Division</td>
</tr>
<tr>
<td>DITD</td>
<td>Decennial Information Technology Division</td>
</tr>
<tr>
<td>DLM</td>
<td>Decennial Logistics Management operation</td>
</tr>
<tr>
<td>DPD</td>
<td>Data Products and Dissemination operation</td>
</tr>
<tr>
<td>DRF</td>
<td>Decennial Response File</td>
</tr>
<tr>
<td>Acronym</td>
<td>Meaning</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>DSSD</td>
<td>Decennial Statistical Studies Division</td>
</tr>
<tr>
<td>DSC</td>
<td>Decennial Service Center operation</td>
</tr>
<tr>
<td>EAE</td>
<td>Evaluations and Experiments operation</td>
</tr>
<tr>
<td>ECaSE-OCS</td>
<td>Enterprise Censuses and Surveys Enabling-Operational Control System</td>
</tr>
<tr>
<td>ER</td>
<td>Enumeration Record</td>
</tr>
<tr>
<td>ETLAC</td>
<td>Enumeration at Transitory Locations Advance Contact</td>
</tr>
<tr>
<td>ETL</td>
<td>Enumeration at Transitory Locations operation</td>
</tr>
<tr>
<td>FLD</td>
<td>Field Division</td>
</tr>
<tr>
<td>FLDI</td>
<td>Field Infrastructure operation</td>
</tr>
<tr>
<td>FOCS</td>
<td>Field Operation Control System</td>
</tr>
<tr>
<td>FPD</td>
<td>Forms Printing and Distribution operation</td>
</tr>
<tr>
<td>GDP</td>
<td>Geographic Data Processing</td>
</tr>
<tr>
<td>GEO</td>
<td>Geography Division</td>
</tr>
<tr>
<td>GEOP</td>
<td>Geographic Programs operation</td>
</tr>
<tr>
<td>GQ</td>
<td>Group Quarters</td>
</tr>
<tr>
<td>GQ</td>
<td>Group Quarters operation</td>
</tr>
<tr>
<td>GQE</td>
<td>Group Quarters Enumeration</td>
</tr>
<tr>
<td>GQV</td>
<td>Group Quarters Validation</td>
</tr>
<tr>
<td>HQ</td>
<td>Headquarters</td>
</tr>
<tr>
<td>IA</td>
<td>Island Areas</td>
</tr>
<tr>
<td>IAC</td>
<td>Island Areas Censuses operation</td>
</tr>
<tr>
<td>IDEF0</td>
<td>Integrated Definition, Level 0</td>
</tr>
<tr>
<td>IE</td>
<td>Information Exchanges</td>
</tr>
<tr>
<td>IOD</td>
<td>Integrated Operations Diagram</td>
</tr>
<tr>
<td>IPT</td>
<td>Integrated Project Team</td>
</tr>
<tr>
<td>ISR</td>
<td>Internet Self-Response operation</td>
</tr>
<tr>
<td>ITIN</td>
<td>IT Infrastructure operation</td>
</tr>
<tr>
<td>Acronym</td>
<td>Meaning</td>
</tr>
<tr>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>LCO</td>
<td>Local Census Office</td>
</tr>
<tr>
<td>LiMA</td>
<td>Listing and Mapping Application</td>
</tr>
<tr>
<td>LUCA</td>
<td>Local Update of Census Addresses operation</td>
</tr>
<tr>
<td>MAF</td>
<td>Master Address File</td>
</tr>
<tr>
<td>MDF</td>
<td>Microdata Detail File</td>
</tr>
<tr>
<td>MAF/TIGER</td>
<td>Master Address File/Topologically Integrated Geographic Encoding and Referencing</td>
</tr>
<tr>
<td>NID</td>
<td>Non-ID Processing operation</td>
</tr>
<tr>
<td>NOV</td>
<td>Notice of Visit</td>
</tr>
<tr>
<td>NPC</td>
<td>National Processing Center</td>
</tr>
<tr>
<td>NRFU</td>
<td>Nonresponse Followup operation</td>
</tr>
<tr>
<td>OOS</td>
<td>Office Operations Supervisors</td>
</tr>
<tr>
<td>OLQ</td>
<td>Other Living Quarters</td>
</tr>
<tr>
<td>PCS</td>
<td>Production Control System</td>
</tr>
<tr>
<td>PDC</td>
<td>Paper Data Capture operation</td>
</tr>
<tr>
<td>PM</td>
<td>Program Management</td>
</tr>
<tr>
<td>PR</td>
<td>Puerto Rico</td>
</tr>
<tr>
<td>QC</td>
<td>Quality Control</td>
</tr>
<tr>
<td>RCC</td>
<td>Regional Census Center</td>
</tr>
<tr>
<td>RI</td>
<td>Reinterview</td>
</tr>
<tr>
<td>RV</td>
<td>Recreation Vehicle</td>
</tr>
<tr>
<td>RA</td>
<td>Remote Alaska</td>
</tr>
<tr>
<td>RO</td>
<td>Regional Office</td>
</tr>
<tr>
<td>RPO</td>
<td>Response Processing Operation</td>
</tr>
<tr>
<td>SME</td>
<td>Subject Matter Expert</td>
</tr>
<tr>
<td>SPC</td>
<td>Security, Privacy and Confidentiality</td>
</tr>
<tr>
<td>SR</td>
<td>Self-Response</td>
</tr>
<tr>
<td>Acronym</td>
<td>Meaning</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>TEA</td>
<td>Type of Enumeration Area</td>
</tr>
<tr>
<td>TL</td>
<td>Transitory Location</td>
</tr>
<tr>
<td>TLQ</td>
<td>Transitory Location Questionnaire</td>
</tr>
<tr>
<td>TU</td>
<td>Transitory Unit</td>
</tr>
<tr>
<td>UE</td>
<td>Update Enumerate operation</td>
</tr>
<tr>
<td>UHE</td>
<td>Usual Home Elsewhere</td>
</tr>
<tr>
<td>UL</td>
<td>Update Leave operation</td>
</tr>
<tr>
<td>USPS</td>
<td>United States Postal Service</td>
</tr>
</tbody>
</table>
Table 9 is a glossary of the types and definitions of transitory locations.

### 2020 Census Transitory Location Definitions and Code List

<table>
<thead>
<tr>
<th>Transitory Location (TL)</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitory Location (TL) – A location where people are unlikely to live year-round because of the transitory/temporary/impermanent nature of the location. Transitory locations include places such as campgrounds, recreational vehicle (RV) parks, marinas, hotels, motels, racetracks, circuses, or carnivals. Generally, people living or staying at a transitory location either pay fees to stay there, or they work there temporarily.</td>
<td></td>
</tr>
<tr>
<td>At each transitory location, there are multiple transitory units. A transitory unit can be a room in a lodging facility, or it can be a space (such as a site, slip, or pad) where, a tent, boat, RV or other structure may be parked or located. <strong>If there is at least one person for which a transitory unit serves as a usual residence, then that transitory unit is tabulated as an occupied housing unit.</strong>(^1) If no one is staying at a transitory unit, then that transitory unit is considered to be unoccupied, but it is not tabulated as a vacant housing unit (i.e., unoccupied transitory units are not tabulated as any type of living quarters). Similarly, if a transitory unit is occupied, but all people who are staying there report a usual home elsewhere (UHE), then that transitory unit is not tabulated as a housing unit. Any person who reports a usual home elsewhere should be counted at that UHE.</td>
<td></td>
</tr>
<tr>
<td>Transitory locations are not considered to be group quarters because each occupied transitory unit containing at least one person without a UHE is tabulated as a separate housing unit. A group quarters is a place where people live or stay in a group living arrangement, which is owned or managed by an entity or organization providing housing and/or services for the residents. A service-based group quarters is a place where people experiencing homelessness receive shelter or services.(^2) See “2020 Census Group Quarters Definitions and Code List” for more details regarding group quarters.</td>
<td></td>
</tr>
<tr>
<td><strong>TL Type Codes and Definitions</strong> – Some transitory locations may be multipurpose and may contain various transitory units that align with multiple type codes (e.g., some locations that contain campgrounds may also contain RV parks, marinas and/or hotel/motel lodging facilities). If the majority of units in a transitory location fall within one type code, then that type code should be applied to the entire transitory location. If the majority of units in a transitory...</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) For the purposes of the decennial census tabulations, there are no transitory units; the only types of living quarters are housing units and group quarters.

\(^2\) Places where people are living or staying in groups of cars, vans, trucks, or RVs, or in tent encampments, are considered to be group quarters (GQ Type Code 706: Targeted Non-Sheltered Outdoor Locations), and not transitory locations, if they do not pay to stay at the location where their vehicle is parked or tent is located.
location do not fall within one type code, then a predetermined hierarchy is used to assign a type code to the entire transitory location (i.e., assign the lowest applicable type code value from this list of type codes).

<table>
<thead>
<tr>
<th></th>
<th><strong>Type</strong></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td><strong>Campground</strong></td>
<td>A specific area set aside primarily for people to camp (e.g., in a tent, cabin, or camping trailer). Campgrounds often charge a fee and sometimes provide minimal amenities. This category includes both public campgrounds (e.g., in national/state/local parks or recreation areas) and private campgrounds (e.g., KOA campgrounds, religious campgrounds, hunting camps, or self-improvement camps).</td>
</tr>
<tr>
<td>20</td>
<td><strong>Recreational Vehicle (RV) Park</strong></td>
<td>A specific area set aside primarily for people to temporarily park and occupy recreational vehicles (also referred to as travel trailers or camping trailers). RV parks typically use short-term (e.g., daily, weekly, monthly) rental agreements to provide spaces (with or without basic utility hook-ups) for people to park their RV. RVs are often on wheels while people live or stay in them; they are not permanent structures because they could be easily driven or towed away on any given day. This category includes both public and private RV park facilities.</td>
</tr>
<tr>
<td>30</td>
<td><strong>Marina</strong></td>
<td>A dock or basin where small vessels (commercial or private), such as boats or yachts, can be securely moored or parked, in which some people may use the vessels as their primary residence. Marinas may offer supplies, repairs, and other services/amenities. Marinas may be standalone entities or components of a resort, and they may be owned and operated by public entities (e.g., municipal facilities) or by a private club (e.g., yacht club) or company.</td>
</tr>
</tbody>
</table>

---

3 Campgrounds may contain some number of semipermanent or permanent structures that look more like standard housing units (e.g., for owners/staff to live in, for long-term rentals, or for upscale camping/cabins). In such cases, all units within the transitory location are enumerated as transitory units.

4 Mobile home parks, which are not classified as transitory locations, may have designated areas for RVs. Mobile home parks (also referred to as trailer parks) typically use long-term leases to provide a pad on which a semipermanent home can be placed. People live in trailer homes, mobile homes, or manufactured homes on these pads. These structures are hooked up to utilities associated with the pad, and they may have a covering around the foundation or may be elevated off the ground (i.e., placed on blocks). Semipermanent homes usually do not stay on wheels while people live in them; they are usually placed in one location and are not expected to be moved. If they are moved, they require large tractor-trailers or semitrucks and special permits to be transported.

5 RV parks may contain some number of semipermanent or permanent structures that look more like standard housing units (e.g., for owners/staff to live in, for long-term rentals, or for upscale camping/cabins). In such cases, all units within the transitory location are enumerated as transitory units.
40 **Hotel or Motel**
A lodging facility that some people may use as long-term or permanent housing. Lodging facilities include hotels, motels, hostels, single-room occupancy units, inns, resorts, lodges, and bed and breakfasts. The types of units within these lodging facilities could be single rooms, suites, cabins, cabanas, cottages, or bungalows. In addition, organizations such as the YMCA and YWCA may offer lodging, along with other services, at their facilities.

50 **Racetrack**
A facility used for racing automobiles, motorcycles, horses, or dogs where traveling workers may reside in temporary quarters on site, such as tents, buses, or recreational vehicles. This category includes both commercial and private racetrack facilities.

60 **Circus or Carnival**
A traveling show or amusement enterprise (e.g., a circus, carnival, or fair), where the performers and workers may reside in temporary quarters on site, such as tents, buses, or recreational vehicles.

90 **Other Transitory Location**
Any other transitory location that is not included in the specific categories (10-60) listed above, where some of the people staying there do not have a usual residence elsewhere.

---

6 Lodging facilities are considered transitory locations if some units may be occupied by people who have no usual home elsewhere. However, if lodging facilities are used only to shelter people experiencing homelessness, then they are considered to be group quarters (GQ type code 701: Emergency and Transitional Shelters for People Experiencing Homelessness). In addition, a block of rooms may be set aside for college or university students. That block of rooms is considered to be a group quarters (GQ type code 501: College/University Student Housing owned/leased/managed by the college/university) if the college or university considers it part of their student housing.

7 Employees of the racetrack who stay in more permanent workers quarters on site would be included in the group quarters enumeration (GQ type code 901: Workers' Group Living Quarters and Job Corps Centers).
Appendix B – References

Appendix B lists the documents or other resources used during the development of this Detailed Operational Plan document.


Appendix C – Activity Tree for Enumeration at Transitory Locations (ETL)

This appendix presents the Activity Tree for the ETL operation. An Activity Tree uses an outline structure to reflect the decomposition of the major operational activities in the operation. Each activity is numbered according to its position in the outline. For example, for the current operation numbered “16,” the first activity would be numbered 16-1. Subactivities under this activity would be numbered sequentially, starting again with the number one. For example, the first subactivity under the first activity would be numbered 16-1.1 the second subactivity as 16-1.2. The second activity would be numbered 16-2, and so on.

**ETL Activity Tree:**

- 16-1 ETL Planning and Preparation
  - 16-1.1 Determine ETL Processing Requirements
    - 16-1.1.1 Determine ETL Business Rules
    - 16-1.1.2 Determine ETL Quality Control Plans
  - 16-1.2 Develop Requirements and Approve Systems Supporting ETL
  - 16-1.3 Determine Staff Needs and Performance Metrics
    - 16-1.3.1 Determine Estimated ETL Operational Workload by Geographic Area
    - 16-1.3.2 Define ETL Operational Performance Metrics and Targets
    - 16-1.3.3 Provide Requirements for ETL Staff Supplies and Materials
      - 16-1.3.3.1 Provide Field Enumeration Materials Content
      - 16-1.3.3.2 Provide Kit Requirements
  - 16-1.4 Prepare for and Conduct ETL-Specific Training
    - 16-1.4.1 Prepare for ETL-Specific Training
      - 16-1.4.1.1 Provide ETL-Specific Training Content and Requirements
      - 16-1.4.1.2 Review and Approve ETL-Specific Training
    - 16-1.4.2 Conduct ETL-Specific Training
  - 16-1.5 Conduct Carnival/Circus Research
- 16-2 Progress Monitoring and Issue Resolution
  - 16-2.1 Monitor Progress and Resolve Issues
- 16-3 ETL Advance Contact
  - 16-3.1 Receive Initial ETL Universe from RPO
  - 16-3.2 Conduct ETL Advance Contact
    - 16-3.2.1 Attempt ETL Advance Contact
    - 16-3.2.2 Collect ETL Advance Contact Information
    - 16-3.2.3 Update ETL Advance Contact Status
• 16-4 ETL Enumeration Universe and Updates from RPO
  o 16-4.1 Receive ETL Enumeration Universe and Updates from RPO
• 16-5 ETL Enumeration
  o 16-5.1 Create Field Work Assignments and Prepare Packets
  o 16-5.2 Conduct ETL Field
    ▪ 16-5.2.1 Receive Work Assignments for TLs
    ▪ 16-5.2.2 Enumerate TLs
    ▪ 16-5.2.3 Review and Send Completed Packets
  o 16-5.3 Process Paper Enumeration Records (ER) and Other Materials From Field
  o 16-5.4 Conduct ETL QC Data Collection
    ▪ 16-5.4.1 Conduct ETL Reinterview
    ▪ 16-5.4.2 Adjudicate Reinterview Results
• 16-6 ETL Operation Closeout
  o 16-6.1 Closeout ETL Operation