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2010 CENSUS PLANNING MEMORANDA SERIES

No. 235

MEMORANDUM FOR The Distribution List

From: Burton Reist *[signed]*
Acting Chief, Decennial Management Division

Subject: 2010 Census Enumeration at Transitory Locations Assessment Report

Attached is the 2010 Census Enumeration at Transitory Locations Assessment Report. The Quality Process for the 2010 Census Test Evaluations, Experiments, and Assessments was applied to the methodology development and review process. The report is sound and appropriate for completeness and accuracy.

If you have any questions about this document, please contact Heather Fallica at 301-763-4392 or KeTrena Phipps at 301-763-5931.

Attachment

09/05/12

2010 Census
Enumeration at Transitory Locations Assessment Report

Enumeration at Transitory Locations Production, and Enumeration at Transitory Locations Reinterview

U.S. Census Bureau standards and quality process procedures were applied throughout the creation of this report.

FINAL REPORT

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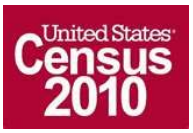

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Executive Summary

The 2010 Census Enumeration at Transitory Locations assessment documents the results of the following:

- Enumeration at Transitory Locations
- Enumeration at Transitory Locations Reinterview

The Enumeration at Transitory Locations operation enumerated people at transitory locations who did not have a usual home elsewhere. Transitory locations are recreational vehicle parks, campgrounds, hotels, motels (including those on military sites), marinas, racetracks, circuses, and carnivals.

The Enumeration at Transitory Locations Reinterview was a quality control check on the enumerators' work. Reinterview had two components, one for the transitory location and the other for the housing unit, or questionnaires received for that housing unit.

The 2010 Census was the first time the Enumeration at Transitory Locations operation was conducted separate from Group Quarters enumeration. Enumeration at transitory locations is different from enumeration at Group Quarters, supporting the need for a separate enumeration operation. Group Quarters enumerators were instructed to interview all people at Group Quarters locations; however, at transitory locations, enumerators were instructed to conduct an interview with only people who had no usual home elsewhere. In addition, the operations used separate questionnaires. The 2010 Census Group Quarters Enumeration operation used an Individual and Military Census Return, and Enumeration at Transitory Locations used the Transitory Location Enumerator Questionnaire to conduct interviews.

Schedule, Workloads, and Cost

The 2010 Census Enumeration at Transitory Locations operation was conducted from March 19 to April 12, 2010. Enumeration at Transitory Locations Reinterview began and ended a few days after the start and finish of fieldwork, March 23 to April 16, 2010.

The Enumeration at Transitory Locations workload totaled 48,180 transitory locations, and the actual cost was $12,700,317 (69 percent) of the $18,415,297 budgeted for the operation.

The Reinterview program had two components, one for the transitory location itself, and one for the Enumerator Questionnaires completed within each transitory location. The objective of the Transitory Location Reinterview program was to ensure that the enumerators understood and followed the appropriate enumeration procedures, as well as to detect and deter enumerator errors and data falsification. The purpose of the Enumerator Questionnaires Reinterview program was to verify that the enumerator properly determined the residence status for each housing unit. Reinterview was conducted for 3,878 transitory locations and 9,212 housing units.

Enumeration at Transitory Locations – Transitory Locations Outcomes

Establishing the transitory location universe in the Enumeration at Transitory Locations operation was a challenge. An unexpected very high incidence of duplicated transitory locations made it difficult for Headquarters to track the workload. The duplication occurred as a result of the following.

- The Master Transitory Location Binder Processing Identification label was not unique in itself. Duplication of transitory locations occurred in the Paper-Based Operations Control System when the preliminary contact forms were checked into the system in error by field staff.
- During the Address Canvassing and the Group Quarters Validation operations, unclear procedures led to thousands of addresses (sites/spaces/slips) being incorrectly listed as transitory locations.

The universe for analysis was determined from the Enumeration at Transitory Locations Cover Page form that contained information recorded by the local census office and was completed by the Crew Leader, including the name of the transitory location, location type, special situations at the location, and consolidated information from the listing sheets from that location.

The analysis universe of 40,621 transitory locations was derived from the total number of unique Census IDs (for the transitory locations) and by subtracting the number of non-valid records and records that did not match during reconciliation of the Paper-Based Operations Control System and National Processing Center files.

Of the 40,621 transitory locations in the analysis universe, the largest percentage (35.17 percent) were classified as hotels/motels. An additional 21.91 percent were campgrounds, 15.76 percent were recreational vehicle parks, and 5.23 percent were marinas. Carnivals and racetracks each were less than one percent of the transitory location universe.

Approximately one-fifth of the 40,621 transitory locations were classified as "Other" on the Enumeration at Transitory Locations Cover Page. From write-in information, the largest category of "Other" was bed and breakfast accommodations, with 1,939 records. Some other entries included hunting lodges, cabins, mobile home parks, church retreats, etc.

Tabulated Cover Page data showed that for the 40,621 transitory locations, there were 1,609,857 spaces, of which 524,038 were occupied. For 189,021 spaces, the respondent stated that they had another residence. There were a total of 116,918 completed Enumerator Questionnaires, 14,316 refusals, 301,190 first no-contacts, and 254,612 second no-contacts. There were a total of 75,334 mobile homes listed at transitory locations.

Enumeration at Transitory Locations - Outcomes

Enumeration at Transitory Locations forms contained specific screener questions unique to the operation, used to identify occupancy of the units at the transitory location. Enumerators used the Unit Verification Page to conduct the eligibility-screening interview and update the

Listing Sheet to list all occupied and unoccupied spaces or units. These two forms helped determine if a Transitory Location Questionnaire should be completed and also assisted with canvassing and listing all the spaces/units within the transitory location. At occupied units, if the resident stated that he or she did not have a usual home elsewhere, the enumerator conducted an interview and updated the Listing Sheet and census maps.

Enumerators were instructed to interview a household member for each space or unit when the respondent stated that he or she or any other occupant(s) had no other residence where they lived and slept most of the time. The April 1, 2010 date was only used to calculate each household member's age on Census Day. Since the Enumeration at Transitory Locations operation was conducted in one visit only to the transitory location, the operation necessitated that proxies be accepted.

Enumerators were able to interview household members a majority of the time (71.18 percent), while over one quarter of the cases were completed by a proxy respondent (27.47 percent). The other 1.35 percent of respondents could not be categorized, either because the enumerator left the response for this question blank or because the boxes were marked for being both a household member on April 1, 2010 and for being a proxy.

English was the most common language in which the interviews were conducted at Enumeration at Transitory Locations housing units, accounting for 96.18 percent of all interviews. Spanish was the second most-spoken at 1.45 percent, and the language was unknown for 2.17 percent of all interviews.

The Decennial Response File showed 119,987 total housing units in transitory locations were occupied on April 1, 2010. Of these, the majority (57.60 percent) contained only one data-defined person (a person who had at least two pieces of information recorded on the Transitory Location Enumerator Questionnaire).

After Geography Division processing for the 2010 operation, the Enumeration at Transitory Locations Tally and Assessment File showed that there were 121,290 Add records received, 1,278 of which were rejected. There were 27,231 records matched to existing units, so 92,781 TUs were added into the Master Address File. Over one-third (approximately 32,000) of those added housing units were located in three states; 16,352 were in California, 9,203 were in Texas, and 6,900 were in Florida. Of the 1,278 rejects, 635 were due to illegal or missing values and 643 were due to illegal block codes.

Enumeration at Transitory Locations Reinterview – Transitory Locations Outcomes

Duplicate transitory locations interfered with the Reinterview selection algorithm and caused the same transitory location to be selected multiple times. Because of this issue during production, Reinterview selection was changed on April 12, 2010 to prevent duplicates from being selected within the Paper-Based Operations Control System. Questionnaires continued to be checked-in to the system until April 16, 2010.

The Paper-Based Operations Control System was supposed to select a ten-percent sample of all transitory locations for Reinterview. Based on the number of transitory locations in the Reinterview universe, the final sample was actually 9.6 percent. There were a total of 3,865 transitory locations included in the Random Reinterview.

The majority (75.8 percent) of transitory locations passed Random Reinterview, and for approximately one-fifth (22 percent) of the transitory locations, the contact person could not be reached by office clerks to verify that the enumeration had occurred. Debriefing data received after the Enumeration at Transitory Locations operation revealed that several of the transitory locations were not open during the operation timeframe. Furthermore, some site managers had residences off-site so they were not available during the preliminary contact visit. When Crew Leaders visited transitory locations to conduct the preliminary contact, some transitory locations were closed during the entire interviewing period or were open periodically from March 19, 2010 to March 31, 2010. Similar reasoning could explain why reinterview clerks were unable to reach one-fifth of the transitory locations during the reinterview period.

There were 2,126 (19.3 percent) enumerators who worked on a transitory location selected in Random Reinterview. Only 12 (0.1 percent) different enumerators were placed in Supplemental Reinterview, indicating that the Area Manager for Quality Assurance may have been suspicious of the enumerator's work. There were 13 transitory locations that underwent Supplemental Reinterview. All of the transitory locations placed in Supplemental Reinterview passed.

Enumeration at Transitory Locations Reinterview – Housing Unit Outcomes

There were 2,126 Reinterview office clerks who performed the Transitory Locations Reinterview and 3,608 Reinterview office clerks who worked on the Enumerator Questionnaire Reinterview.

A total of 11,036 enumerators worked on the Enumeration at Transitory Locations operation throughout the United States and Puerto Rico. Overall, there were a total of 118,486 Enumerator Questionnaires checked in from the field for the Enumeration at Transitory Locations operation. Of these, 102,400 (86.4 percent) Enumerator Questionnaires contained a respondent-provided telephone number. There were 9,212 Enumerator Questionnaires selected for Reinterview. This was a 9.0-percent sample rate of enumerators.

Of those respondents who completed an Enumerator Questionnaire at a transitory location and were reinterviewed, 81 percent verified that they had been interviewed by an enumerator during production. Three percent answered that they were not interviewed. The other 16 percent of respondents were not able to be reached by Reinterview clerks.

Automation Results

The enumerators used paper enumerator questionnaires to interview transitory location residents and to document responses. Once the enumerators completed the questionnaires, staff checked them into the Paper-Based Operations Control System at the local census office. The Paper-Based Operations Control System was the first web-based solution used at the Census Bureau for managing most of the field operations from one centralized location while still maintaining a

regional and local office-level control model. The Paper-Based Operations Control System included many essential functions, such as:

- checking-in completed questionnaires and Cover Pages,
- creating reports for monitoring each operation,
- assigning work to Crew Leaders and enumerators,
- selecting questionnaires for Enumeration at Transitory Locations Reinterview, and
- initially, checking out questionnaires from the local census office to the data capture centers.

The stability of the Paper-Based Operations Control System database created issues for the Decennial Management Division's Cost and Progress system, which affected the Census Bureau's ability to monitor the operations in real time.

The use of a paper questionnaire caused problems for each operation. When clerks in the local census office checked completed Enumeration at Transitory Locations questionnaires into the office, they would key the housing unit status into the Paper-Based Operations Control System. The system would then select questionnaires, based on the eligibility rules, for Reinterview. There were also instances of questionnaires being lost in transit to data capture centers, which required Census Headquarters Processing to create mock returns based on the information keyed into the Paper-Based Operations Control System.

Additionally, continuation forms were not linked to parent forms. The Paper-Based Operations Control System performed consistency checks to ensure that, for example, if the housing unit status was occupied, the population count was not zero. In addition, if the population count was greater than five, the system prompted the clerk to check for continuation forms and the continuation forms should have been electronically associated with the parent questionnaire. While there were some enumerated population count values above five, there were no housing units in the Decennial Response File with an Enumeration at Transitory Locations continuation form with a matching Processing ID to a parent Enumeration at Transitory Locations questionnaire. There were no housings units enumerated in the operation that had an associated continuation form, therefore, no housing units with the number of data-defined persons over five.

Recommendations

The key recommendations from the 2010 Enumeration at Transitory Locations operation are the following:

- **Automate the questionnaire and all related sources of paradata used to record contact details at an interview. Additionally, automate D-308 payroll forms and info-comms[1].**

[1] Info-comms reported accidents or other incidents that occurred in the field or local census office during the operations.

- **Develop a data warehouse to create a consolidated repository of operational data that all systems can access.** The data warehouse will be a repository for all data sources to include Operations Logs, Cost and Progress reports, operational reports by day, etc. This will facilitate the ability to monitor the progress of the Enumeration at Transitory Locations operation in real time.

- **Learn more about the living situations of people counted in the Enumeration at Transitory Locations operation.**

- **Clearly define and identify transitory locations, as well as procedures on how to list transitory units appropriately, in operations that feed the Enumeration at Transitory Locations universe.** The misunderstanding of operational procedures contributed to several universe difficulties in the 2010 Census.

- **Continue to test operational forms.** Because the key component of the Enumeration at Transitory Locations operation is establishing occupancy of the unit, improved materials that are easier to understand and respond to could better serve this population.

- **Associate housing unit questionnaires with the parent transitory location.** There was no linkage between the housing unit enumeration data and the transitory location itself; therefore no analysis could be conducted on the Enumeration at Transitory Locations population by type of transitory location. This will allow further analysis on demographic characteristics of residents by transitory location type. Additionally, improve tracking of the continuation form.

- **Conduct intercensal testing of the Enumeration at Transitory Locations population.** The Census Bureau planned to test the operation during the 2008 Census Dress Rehearsal; however, it was canceled. In lieu of the Dress Rehearsal, the Statistical Research Division conducted qualitative testing using some of the ETL forms. Also, in addition to the system development lifecycle testing, the Census Bureau conducted a Thread Test to validate the design and core functionality of the Paper-Based Operations Control System. Qualitative testing conducted by the Statistical Research Division was the closest testing of the questionnaire and other key operational forms subsequently used in the field.

1 Introduction

1.1 Scope

The 2010 Census Enumeration at Transitory Locations operation (ETL) includes the ETL Production and ETL Reinterview (RI) operations. The purpose of the ETL Assessment is to document the results and major findings from the 2010 Census ETL operation. The assessment includes workload, staffing, training, schedule, and cost. In addition, it addresses the change control process, the use of automation, and operation-specific assessment questions. This assessment will inform the Housing Unit Enumeration-Operational Integration Team (HUE-OIT), stakeholders, and decision-makers of recommended changes or improvements for future censuses.

1.2 Intended Audience

This document assumes that the reader has a basic understanding of the ETL operation. It will serve as input for discussion by the research, planning, and development teams when planning for the 2020 Census. If the reader does not have a basic understanding of the ETL, refer to the *2010 Census Informational Memorandum No. 28, the 2010 Census Detailed Operational Plan (DOP)* for the ETL Operation.

2 Background

The ETL operation was designed to enumerate people at transitory locations (TLs). TLs are recreational vehicle (RV) parks, campgrounds, hotels, motels (including those on military sites), marinas, racetracks, circuses, and carnivals. Enumerators visited the locations, canvassed the sites, and enumerated people who claimed the TL as their usual home of residence. These residences were classified as housing units (HUs) and included in the HU tabulation.

Before introducing and discussing the 2010 Census ETL operation, this assessment opens with a summary on the history of Census 2000 and mid-decade research and testing that influenced the 2010 Census operation.

2.1 Census 2000

2.1.1 Census 2000 T-Night

In Census 2000, the Census Bureau conducted T-Night, under the Group Quarters (GQ) Enumeration (GQE) operations. The operation was conducted in one day and enumeration occurred between the hours of 4:00 pm and 10:00 pm on March 31, 2000. However, for a number of the transient locations that were larger or had a relatively stable population, enumeration occurred over a two week period beginning March 31, rather than during one single night. T-Night was conducted at RV parks, campgrounds, hotels, motels (including those on military sites), marinas, racetracks, circuses, and carnivals.

A team of two enumerators visited each occupied site/space/slip/unit to determine if the occupants had a usual home elsewhere (UHE). If the occupants did not have a UHE, enumerators completed an interview using the enumerator questionnaire (EQ). If the occupants did have a UHE, enumerators did not complete a questionnaire or interview. Those individuals would have been assumed to be enumerated at their primary residence.

The Census 2000 T-Night Evaluation contained insufficient workload information to fully assess the Census 2000 TL and HU workload compared to 2010 Census data.

2.1.2 Census 2000 Budget and Actual Cost and Workload

The Census 2000 T-Night Evaluation shows that the T-Night operation enumerated 87,338 households with a population count of 127,766 people. The budgeted cost for enumeration at the TLs was $3,227,824. Actual cost of the enumeration conducted at the HUs was $4,595,991.

Approximately 63 percent of the T-Night population was enumerated in five Sun Belt states: California, Nevada, Arizona, Texas, and Florida. The Northwest (both Pacific and Rocky Mountain Northwest regions, including Alaska) also had a high portion of persons counted at T-Night locations. Approximately 15 percent of the T-Night population was counted in these northwest states.

2.1.3 Recommendations from Census 2000

The Census 2000 T-Night operation yielded several major recommendations. The Census Bureau incorporated these recommendations into the 2010 Census design, facilitating our ability to conduct a successful census. The recommendations are listed below.

- Remove T-Night enumeration from the Special Place (SP)/GQE operations if these units continue to be defined as HUs.
- Research the transient population trends to ensure that operations include all the segments of this population (18-wheeler truck drivers, business people living in hotels, etc.).
- Improve the explanation for the UHE concept for the general public.
- Design questionnaires to fit the targeted population and how the form will be used (completed by respondent or enumerator interview).

2.2 Mid-Decade Planning for the 2010 Census

The beginning of a new decade historically defines the planning cycle for that decade's decennial census of population and housing. The planning cycle for the 2010 Census was no exception. By 2002, Census Bureau managers had already begun early planning for the 2010 ETL operation.

Key lessons from the Census 2000 experience suggested that the major challenges for the 2010 Census would revolve around the need to improve both data accuracy as well as data relevancy, while developing and implementing more cost-effective operations. Furthermore, managers

anticipated they would need to meet these formidable challenges in an environment of increasingly rapid technological change and demographic diversity.

Census 2000, like other recent decennial censuses, included building a nationwide address file and collecting detailed demographic and socioeconomic data on about one-sixth of the population – the part of the census known as the long form or sample data. A close review of the challenges for the decade prompted Census Bureau managers to rethink the once-a-decade approach to building an address file and collecting long form data. As a result, managers determined that these two complex and costly operations should occur on an ongoing basis throughout the decade to increase timeliness and accuracy, while greatly simplifying the design for the actual enumeration in the 2010 Census. This led to the reengineering strategy for the 2010 Census of Population and Housing composed of the following:

- A modernized and maintained Master Address File/Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) address file and geographic database,
- The implementation of the American Community Survey,
- A short-form-only 2010 Census optimally designed to take advantage of the opportunities afforded by the former two initiatives.

It was believed that the implementation of these three initiatives would enable the Census Bureau to meet its goals for the reengineered 2010 Census. These goals were:

- Improve accuracy (2010 Census specific)
- Reduce risks (2010 Census specific)
- Contain cost (2010 Census specific)
- Provide more relevant data (American Community Survey specific)

To design and implement an optimal short-form-only 2010 Census, the Census Bureau implemented a vigorous research, development, and testing program. The program included several special purpose tests, two census site tests, and a dress rehearsal (DR) of the actual 2010 Census plan. The rationale for having two site tests before the DR was that it allowed for incremental and iterative development. The two tests would provide a number of opportunities to improve coverage and quality, increase efficiency, and contain costs.

However, realizing these opportunities required new methods and supporting systems. The first test in fiscal year 2004 focused on new methods and gathering performance metrics. The subsequent test in fiscal year 2006 focused on new and refined methods integrated with new systems and new infrastructure.

2.3 2008 Census Dress Rehearsal

The Census Bureau planned to test the ETL during the 2008 Census DR; however ETL was one of 13 operations that were canceled. Instead, the primary focus was on testing automated field operations and their interfaces. In lieu of the 2008 Census DR, the Statistical Research Division (SRD) conducted qualitative testing using some of the ETL forms. Also, in addition to the

system development life cycle testing, we conducted a thread test to validate the design and core functionality of the Paper-Based Operations Control System (PBOCS).

Given the Census 2000 experience and the planned enhancements for this operation that drew upon previous census listing and enumeration procedures, the Census Bureau was confident that the operation would be fielded as planned and on schedule. The 2010 Census ETL operational results will be the benchmark for future analysis and formulation for enumerating this population.

For more information regarding the 2008 Dress Rehearsal, please refer to the *2008 Census Dress Rehearsal Memoranda Series No.50 "Reduced Scope of the 2008 Census Dress Rehearsal and a One-Month Delay of Census Day"* document.

2.4 2008 Qualitative Testing

Qualitative testing conducted by SRD was the closest testing of the questionnaire and other key operational forms subsequently used in the field. The test was conducted at one RV park and one marina near Census Headquarters (HQ). In total, researchers knocked on 164 doors and spoke with individuals at 64 HUs. SRD presented the results of the test to the Content and Forms Design IPT and changes were made to the ETL TL EQ, the Unit Verification Page, and the Listing Sheet. The ETL Cover Page was never tested and did not go through the same formal process as the other forms but was a key operational form used during ETL.

The Content and Forms Design IPT gathered the requirements and developed the paper instrument, the ETL EQ (D-15). Field Division (FLD) developed the other key operational forms that were tested, the TL Unit Verification Page (D-693.1) and the ETL Listing Page (D-693.2).

In August 2008, SRD conducted the cognitive test of selected ETL forms. The goal of the test was to identify potential issues with the newly designed EQ and key forms, and to identify operational difficulties.

Two test sites were selected for the test, one RV park and one marina near Census Bureau HQ. The forms tested were:

- ETL EQ (D-15) – the enumerator/interviewer-administered paper questionnaire. SRD tested the front and back of the questionnaire. The middle or interior questions were consistent for all enumerator paper-based questionnaires and were tested in another test.
- TL Unit Verification Page (D-693.1) – contained important introductory questions that ask whether respondents spend more time at the TL or at another residence.
- ETL Listing Sheet (D-693.2) – used by the enumerator to track the sites visited and respondent answers to the screener questions from the TL Unit Verification Page.

SRD conducted a brief training session with two enumerators using 2008 materials designed for the 2010 Census ETL. Of the 164 doors enumerators knocked on at the RV park and marina, 64

people were interviewed: 29 had a UHE, 26 had no UHE and completed the ETL Enumerator Questionnaire, and 9 were refusals (refused to participate in the interview). The remainder did not answer the door. Following the field test, SRD conducted debriefings with enumerators and respondents.

The SRD's cognitive testing and research resulted in several recommendations, which the Census Bureau incorporated into the 2010 Census design. Changes to each testing component are below.

- ETL EQ – changes were made to the introductory and closing questions.
- TL Unit Verification Page – form orientation was resized, some of the wording on the introductory statement was removed, and the introductory question was split into two parts. The explanation on how to distinguish an RV from a mobile home was also revised.
- ETL Listing Page –the page was revised to improve usability (check boxes were incorporated, the questions and formatting were revised) so the interviewer, once accustomed to using the Unit Verification page, could use the Listing Sheet more easily without having to flip pages.

For more information regarding SRD testing of the ETL operation, please refer to the *Study Series (Survey Methodology #2010-14) Qualitative Testing of the 2010 Census ETL Forms* document.

2.5 2009 ETL Thread Test

In fall 2008, the Census Bureau decided to remove the responsibility from the Field Data Collection Automation (FDCA) contract for developing the PBOCS. The Census Bureau immediately began an intensive review and development process to identify how PBOCS would be developed and tested as well as reviewing other areas of the ETL to ensure the operational readiness and integration of this operation for the 2010 Census. The testing strategy built upon and leveraged functionalities tested in the 2006 Census Test, the 2008 DR, cognitive interviews, and lessons learned from Census 2000 in implementing the paper instrument.

The ETL Thread Test validated the design of PBOCS and the core functionality critical to conducting ETL. The test provided stakeholders an opportunity to validate that core functionality worked as required and to identify areas that needed refinement. We established two "pseudo" local census offices (LCO) to conduct the testing, and field representatives were brought in from the Regional Offices (RO) to participate in the testing.

The test did not include a "live field test" because after assessing the option, it was determined that it was too risky to load and test developmental software in the existing LCO infrastructure while the 2010 Census Address Canvassing (AC) and Group Quarters Validation (GQV) operations were in production. It also did not include the enumeration of respondents, but the Census Bureau has a proven history of using a paper instrument.

The ETL Thread Test was conducted from September 17 to October 20, 2009. The test identified function areas that needed corrective action; however, there were no major system problems preventing deployment of the control system to the field.

For more information regarding testing, please refer to the *2010 Census Overview of the Enumeration at Transitory Locations Testing* document.

2.6 Recommendations from Census 2000 and How the Census Bureau Addressed Them in the 2010 Census

The Census 2000 T-Night operation yielded several major recommendations. We incorporated the recommendations into the 2010 Census design, facilitating our ability to conduct a successful 2010 Census. Below are the Census 2000 T-Night recommendations and explanations on how we addressed them in the 2010 Census.

- Remove T-Night Enumeration from SP/GQE operations if these units continue to be defined as HUs.

  For Census 2000, preparing enumerators on how to administer the household questionnaire for a one-night operation was difficult. The distinction between mobile home parks and RV parks was confusing for field and office staff. Campgrounds often looked like mobile home parks since many of the campgrounds now allow owners to permanently park their RVs on the site.

  For the 2010 Census, fundamental differences supported the need for separation of TLs and GQs. The Census 2000 T-Night operation was moved from GQE to HUE and renamed ETL.

- Research the transitory population trends to ensure that operations include all the segments of this population (18-wheeler truck drivers, business people living in hotels, etc.).

  As mentioned above, all transient locations were structured under GQE in Census 2000 before splitting out the RV Parks, marinas, campgrounds, racetracks, carnivals and hotels/motels (those that house people with no other UHE).

  Mid-decade, the Census Bureau shifted TLs to the ETL operation and counted the units as HUs when people said they had no other UHE. People living in hotels/motels were already included in ETL. During the development stage of ETL, there was considerable discussion about adding "truck stops" as one of the designated types of TLs, but the Census Bureau decided these sites would not be included.

- Improve the explanation for the UHE concept for the general public.

In Census 2000, GQ enumerators were instructed to enumerate all people at the GQ; however at TLs, enumerators were instructed to only include people with no UHE. This was a fundamentally different concept that was covered in the same training materials.

Clearer language was developed to determine who should and should not be enumerated. This additional language was incorporated into the 2010 Census enumeration materials, such as a checklist. Training materials minimized the confusion of who to include and who not to include.

- Design questionnaires to fit the targeted population and how the form will be used (completed by respondent or enumerator interview).

  In Census 2000, the GQE operation used the D-1E or D2 E Enumerator Questionnaire form to conduct the enumeration of the T-Night population. This household questionnaire was designed to identify those individuals living at TLs; however, GQ enumerators were not prepared to administer the form.

  The ETL EQ (provided in English and Spanish versions) was a new enumeration tool used in the 2010 Census. The form solicited information about the respondent and others living at the unit, making it very similar to that of the mailout census form and the D-1E EQ used for Nonresponse Followup (NRFU). Basic information, which was the same as gathered by the mailed form, included address, telephone number, number of individuals at the unit (without a UHE), names, relationships, sexes, ages, races, and origins. There were questions designed to reduce under- and over-counting and another question that determined if the unit was owned or rented to establish tenure. If there were more than five household members, the enumerator completed a continuation form for the additional people in the household. Each continuation form accommodated five additional people. ETL used the same continuation form as the NRFU and Update/Enumerate (UE) operations, the D-1E Supplemental Form (SUPP).

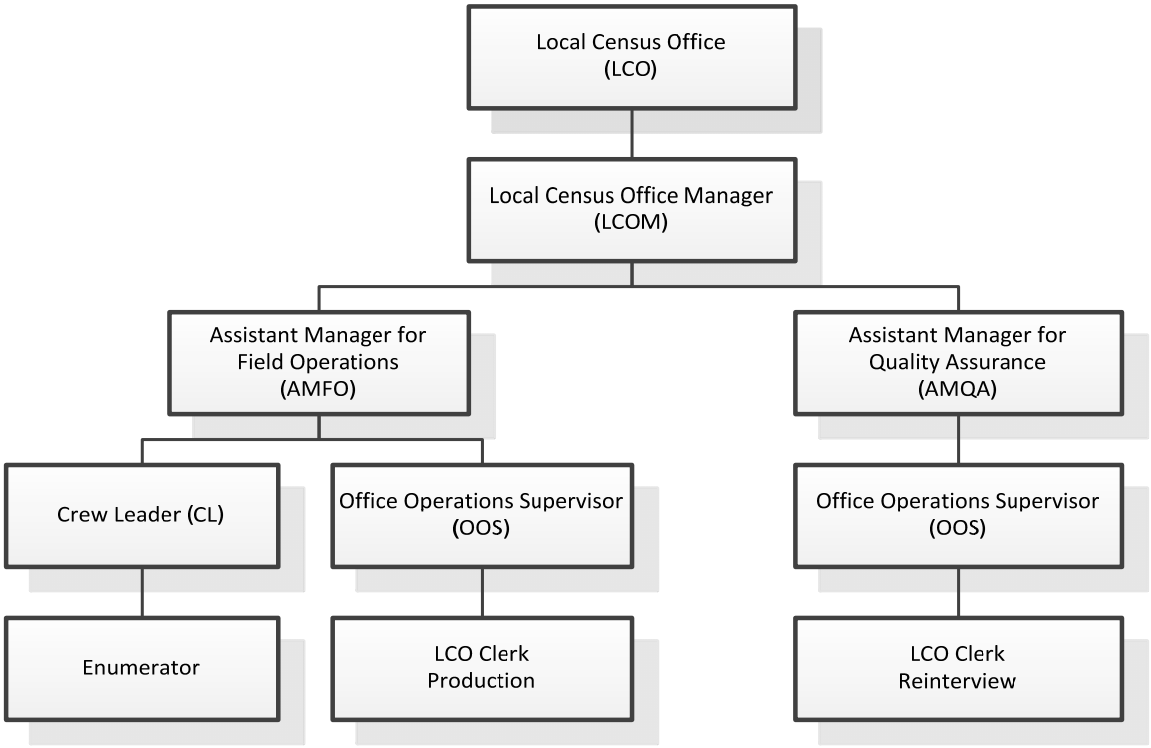
  ETL also used other forms such as the D-1(F) Information Sheet and the Unit Verification Page to help determine if a questionnaire should be completed and to assist respondents in providing accurate answers. The enumerator referred the respondent to the D-1(F) Information Sheet (provided in English and Spanish versions), which provided examples of who to count as part of the household using April 1, 2010 as the reference date. Since the ETL operation did not use April 1, 2010 as the reference date, except for when asking the date-of-birth question, the respondent was told to disregard the reference to April 1, 2010 and to provide the information as of the date of the visit. The Unit Verification Page assisted with canvassing, listing all the sites/slips/spaces/units within the TL, and screened the respondent by asking questions to establish occupancy.

  Additionally, SRD's cognitive testing and research of ETL-specific forms resulted in several recommendations, which the Census Bureau incorporated into the 2010 Census design.

2.7 2010 Census

Regional Census Centers (RCCs) were temporary offices that managed the 2010 Census within a geographical jurisdiction. Twelve RCCs were established in twelve cities where permanent Census Bureau ROs were located. In addition, there was a Puerto Rico Area Office (PRAO) established to manage all census work in Puerto Rico. The 12 RCCs and the PRAO managed 494 LCOs that supervised decennial operations in specific geographic areas. Each LCO reported to the RCC that was responsible for its geographic area. The LCO staff supervised the field staff in its area and provided support to them. LCO staff consisted of both office staff and field staff. Office staff worked on a variety of operations conducted out of the LCO and received specific training for each operation. The ETL operation required the following field staff positions: Crew Leaders (CL) and enumerators. The hierarchy of the field and office staff, for both production and RI, is shown in Figure 1.

Figure 1: Organizational Chart for the Enumeration at Transitory Locations Staff



Source: 2010 Census ETL Office Manual

PBOCS was a Census Bureau-designed system that allowed LCO staff to track field assignments and manage the operations in the field. The PBOCS provided functionality such as case assignment, check-in and check-out of cases, and check-out of questionnaires for shipping to the Decennial Response Integration System (DRIS). Please refer to Appendix B through Appendix H for sample ETL forms.

After assignments for ETL were made available through PBOCS, LCO staff printed address listing pages which listed all the TL addresses for a given assignment area (AA). The HQ

management of the ETL costs was monitored via the Decennial Management Division's (DMD) Cost and Progress (C&P) System. The C&P system tracked the cost and progress of the ETL at the national and RCC levels. Tracking of ETL costs began with CL training and continued for six weeks after the end of the operation.

LCO staff assembled ETL binders (with binder register labels) - usually one binder per TL - to include the following major materials.

- Cover Page (Appendix B: D-693 Cover Page)
- Special Notice Page (provided instructions/reminders)
- Preliminary Contact Forms (Appendix C: Preliminary Contact Form)
- Map envelopes containing GQV maps with TLs, block listing by TL, and site maps (if obtained for the TL)
- Transitory Location Listing Sheet (Appendix D: Transitory Location Unit Verification and Listing Page)
- Unit Verification Page (Appendix D: Transitory Location Unit Verification and Listing Page)
- Other Living Quarter (OLQ) Master List (contained identified GQs)
- Form for Adding a Transitory Location (Appendix E: Form for Adding a Transitory Location)
- Blank Questionnaires with Processing ID (PID) labels

ETL forms have specific screener questions unique to ETL to identify occupancy of the units at the TL. Enumerators used the Unit Verification Page to conduct the eligibility-screening interview and update the Listing Sheet to list all occupied and unoccupied spaces or units. These two forms helped to determine if an EQ should be completed and also assisted with canvassing and listing all the spaces/units within the TL. At occupied units, if the resident stated that he or she did not have a UHE, the enumerator conducted an interview and updated the Listing Sheet and census maps.

After conducting the preliminary contact at each TL, the CL returned the workload information to the LCO. LCO staff printed corresponding AA block maps, as needed, and keyed the preliminary contact information into PBOCS. The LCO then assembled CL assignments, consisting of the Master TL Binder (containing all the addresses in a TL, Public Use Forms, blank questionnaires, and PID labels). CLs then assigned TLs to the enumerators in their district and enumerators conducted work using clipboards with the attached assignment(s).

LCO clerks checked out Master TL Binders (consisting of one or more TLs) to CLs through an automated function performed in PBOCS. History of the TL was recorded on the Cover Page, which was attached to the front of the binder and contained all the information regarding the TL collected by the CL and completed by the LCO.

CLs and enumerators used paper maps and a Master TL Binder containing a Cover Page, Special Notice Page, map envelopes with a TL map package, a Block Listing Page, TL site maps (if obtained), Unit Verification Page, and Listing Sheets. LCOs received the original site map along

with a copy of the GQV field maps containing TL specific updates. Additional maps were printed on an as-needed basis for the operation.

As an enumerator completed interviews, he or she delivered the completed questionnaires along with his or her payroll form (D-308) to the CL, usually on a daily basis. The CL checked the questionnaires for completeness and errors and delivered the questionnaires to the LCO. LCO staff performed an office review that consisted of examining the Master TL Binders, looking for errors, and checked in the questionnaires using PBOCS (which was used for assignment management in all decennial field operations). Check-in consisted of keying specific data items, such as the name of the enumerator, the HU status, the population count, the vacancy type, the type of respondent, and whether or not the enumerator collected a telephone number. Any TLs that failed the office review were sent back to the CL for repair/rework.

PBOCS performed consistency checks to ensure that, for example, if the HU status was occupied, the population count was not zero. In addition, if the population count was greater than five, the system prompted the clerk to check for continuation forms and the continuation forms were electronically associated with the parent EQ. After check-in of the EQs was complete, they were shipped to data capture centers.

2.7.1 2010 Enumeration at Transitory Locations

ETL fieldwork began on March 19, 2010 and lasted until April 12, 2010. Methodology was implemented nationwide, in all LCOs and in the PRAO. The operation enumerated eligible populations that inhabited TLs such as RV parks, campgrounds, hotels, motels (including those on military sites), marinas, racetracks, carnivals, and circuses.

A team of two enumerators visited the TL and each occupied site/space/slip/unit within the TL to determine if the occupants had a UHE. If the occupants did not have a UHE, enumerators completed an interview using the D-15 ETL EQ. If the occupants did have a UHE, enumerators did not complete a questionnaire or interview. Those individuals would have been assumed to be enumerated at their primary residence. Since a majority of the ETL operation occurred earlier than April 1, 2010, the reference date was only used to ask the date-of-birth question. The respondent was told to disregard the reference to April 1, 2010 and to provide the information as of the date of the visit.

2.7.2 Formulation of the Enumeration at Transitory Locations Universe

For the 2010 Census ETL, the initial workload was identified through the GQV operation. GQV validated OLQ addresses, previously identified in AC, as TLs. Section 5.1.1 further discusses how the ETL universe was formulated. The universe was identified by location, that is, the number of TLs, not the number of HUs or transitory units (TU) (please note that HUs and TUs are used interchangeably in this report).

Universe creation started with the 2010 Census AC operation. The AC operation was the first field operation for the 2010 Census. The operation was conducted March 30 through July 10, 2009, and the purpose of the operation was to provide the initial universe of addresses for enumeration within the census by adding/deleting addresses, etc., as well as to classify living

quarters as HUs or OLQs. All OLQs identified within AC, as well as potential GQs identified in other sources were included in the universe for the 2010 Census GQV operation.

The GQV operation was conducted September 28 through October 23, 2009. The GQV operation validated OLQs as a HU, Non-residential, a GQ, or a TL. All TLs were geocoded and transmitted to the Geography Division (GEO) at HQ for update to the MAF/TIGER Database (MTdb) for ETL. The GQV operation was the primary source for the ETL universe.
ETL LCOs received the original site map (if obtained) for the TLs collected during GQV, along with a copy of the GQV field maps containing TL specific updates. Additional maps were printed on an as-needed basis for ETL.

National Processing Center (NPC) Carnival and Circus Research
Another input to ETL was the carnival research that the NPC staff conducted from July 20 through September 10, 2009 which identified any carnivals, circuses, or fairs planned to take place during ETL. This research was conducted as a part of the Service Based Enumeration (SBE) Address Listing Update (ALU). SBE ALU occurred in three phases; ETL was part of Phase 3. The carnival, fair, and circus locations were identified during phone solicitation of management companies. The NPC staff contacted 121 management companies. There were 96 that mentioned they would not have a completed 2010 schedule until December 2009/January 2010. No later follow-up was made to these companies. The 26 management companies NPC successfully contacted were assigned collection block geocodes, and those geocoded records were transmitted to GEO for update to the MTdb for ETL.

In addition to the carnival research, LCOs also had the ability to add to the address list if they had local knowledge of any TL not included in the operation.

2.7.3 Adding to the Universe

The ETL operation had the ability to add to the universe. If any changes needed to be made to the ETL workload before starting production, updates were permitted via two separate procedures.

Local Knowledge
If an LCO had knowledge of a TL not contained in the assignment list, they were able to add the TL if approved by the RCC.

Preliminary Contact
Preliminary contact at TLs began prior to the start of ETL and occurred roughly from March 6, 2010 to April 2, 2010. The preliminary contact visit obtained up-to-date workload information about the TL and gathered information such as the total number of units and those expected to be "occupied" at the TL. The CL made a preliminary contact visit to the TLs to obtain up-to-date workload information about the TL and the HUs within the TL, explain the enumeration process, and to meet with on-site managers before production.

At the initial TL preliminary contact visit and before production activities, CLs recorded information onto the Preliminary Contact form such as:

- names,
- telephone numbers, and
- how many units were at the location

2.7.4 Enumeration at Transitory Locations

A team approach (a minimum of two field staff) 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, which was determined during the preliminary contact.

During ETL, enumerators performed the following activities:

- Canvassed their assigned areas within the TL
- Conducted a personal visit at every unit to establish occupancy and residential status and updated the Unit Verification Page and Listing Pages with contact information
- Updated census maps provided by the LCO
- Conducted an interview using the D-15 TL EQ for those units that did not have a UHE
- Reconciled work on-site to check for completeness and errors

Enumerators canvassed their assigned TL area and updated the TL Listing Sheet and maps to ensure completeness and accuracy. Enumerators also knocked on each HU door and conducted an interview using the Unit Verification Page, contact information, and map details (each TL facility had a map pouch that contained the AA locater, AA map, and census block maps) pertaining to that site. If the CL could not gain access to a locked building or gated TL, they first tried to call or locate the contact person, who could assist in gaining access to the property. If contact could not be made after making every effort to gain access to the building or location, the information was documented on an Info-comm form so a 'Gated Community Letter' could be sent. The letter explained the authority for the decennial census and that access is required by law. If the resident had a UHE, the enumerator updated the Listing Sheet and did not conduct an interview.

LCO staff used PBOCS to print PID labels. Enumerators placed one PID label on each completed EQ. Once the enumeration of the TL was complete, the CL or lead enumerator (who assisted and worked closely with the CL) met with enumerators to conduct on-site reviews. Reviews included on-site binder consolidation, checks for completeness and errors of materials within the Master TL Binder, and records reconciliation of all TL spaces or units. Repairs to completed work occurred before the team left the TL. The CL or lead enumerator compiled all enumeration materials into one Master TL Binder and returned it to the LCO.

All enumerated HUs in ETL were considered potential "adds" because these addresses may or may not have been in the MTdb. During the address update, the field-enumerated ETL records were coded as HUs within a TL in the MTdb; however, the unit is not linked to the TL "parent" record. These updates resulted in the creation of new units in the MTdb.

2.7.5 Enumeration at Transitory Locations Quality Control

Office Review
An office review was conducted on the Master TL Binders along with the clipboards before materials flowed to the processing area. During the office review, RI clerks confirmed that maps contained updates and each map spot was represented with a questionnaire added during enumeration. RI clerks used the D-1174.2 Office Review Checklist as a guideline to verify consistency between the listing sheets and the block maps, legibility of entries, and if all required information was completed.

Reinterview
RI began on March 23 and lasted until April 16, 2010. The ETL RI program was a Quality Assurance (QA) check for the ETL operation and was conducted by LCO office staff via telephone only.

The objective of the TL RI program was to ensure that the enumerators understood and followed the appropriate enumeration procedures, as well as to detect and deter enumerator errors and data falsification. The RI office clerk attempted to reach the TL contact three times, and if unsuccessful, a follow-up personal visit was made to the location.

During check-in, PBOCS selected eligible cases for the ETL RI program, which consisted of two components: a sample of TLs and a sample of EQs.

1. Transitory Location Reinterview: A ten-percent random sample of TLs was selected to confirm that the enumerators visited the correct location and conducted enumeration activities properly

2. Enumerator Questionnaire Reinterview: Telephone RI of a ten-percent random sample of EQs with a telephone number was conducted to assess if proper residence status had been determined by the enumerator

For those TLs and EQs selected for RI, the LCO QA clerks transcribed onto a new form the required information and conducted telephone RI at the LCO.

2.7.5.1 Transitory Location Reinterview

During TL RI, a sample of completed TLs was checked through Random RI. There was also a Supplemental RI into which the Assistant Manager for Quality Assurance (AMQA) could place additional TLs if suspicion of falsification existed or for any other situation where management felt it was necessary to review additional work.

2.7.5.2 Enumerator Questionnaire Reinterview

For RI conducted on the HU, there was a Random RI of a sample of completed EQs checked in with a telephone number. EQs without a telephone number were considered ineligible for RI. There was no Supplemental RI or rework for EQ RI due to the transitory nature of this

population. However, FLD at HQ monitored the results of the RI operation to authorize LCOs to take appropriate corrective or administrative action if it determined that any enumerator(s) may have falsified or otherwise collected inaccurate data.

The LCO staff checked out and shipped materials to NPC at the end of RI. Any TL or EQ selected for RI was not shipped until the TL passed RI.

See *2010 Census Informational Memorandum No. F-04, the 2010 Census Enumeration at Transitory Locations Quality Profile* for a complete description of ETL RI including a description of case eligibility for RI.

2.7.6 National Processing Center

In addition to the carnival and circus research mentioned in Section 2.7.1, the NPC conducted the backend processing to support the 2010 Census operations. Once work in the field was complete, LCOs shipped Master TL Binder contents only (the Master TL Binders were kept in the LCO) containing maps and forms (production EQs, RI EQs, TL EQs, debriefing forms, and Cover Pages) on a flow basis to NPC.

Upon arrival at NPC, binders went to a staging area where the Geography Branch checked in the Master TL Binder contents using the Automated Tracking and Control (ATAC) system. A Master TL Binder could have consisted of one or more TLs. Contents were forwarded to NPC data-capture staff for keying into the Visual Basic Data Capture (Key From Paper) (VB KFP) system. Production EQs, RI EQs, TL EQs, debriefing forms, and Cover Pages were keyed by NPC staff. Address Listing Sheets were not keyed because the ETL operation used information from the Cover Page. Address updates files (that contained HU information) were posted for transmission to GEO at HQ.

Map pouches were also separated from Master TL Binders at initial check-in. All map sheets were scanned into Geographic Acquis-based Topological Real-time Editing System (GATRES), including exception maps (site maps, etc.). Once accepted by the GATRES system, maps sheets were digitized and underwent quality control (QC). Map digitizing was considered complete once the map sheet had passed the QC component.

For those TLs or cases (EQs) selected for RI, all materials are held in the office until RI is complete. EQs are not shipped until the TL has passed RI, in the event the TL failed and had to be reworked.

2.8 ETL Automation

ETL used three integral systems and nine support systems to prepare, conduct, and complete backend activities. The *2010 Census Informational Memorandum No. 28 "2010 Census Operations Plan" and the "2010 Census ETL Detailed Operations Plan"* describes these systems.

2.8.1 Integral Systems

2.8.1.1 Decennial Applicant, Personnel and Payroll System

The Decennial Applicant, Personnel and Payroll System (DAPPS) facilitated the processing of personnel and payroll information for all census operations including ETL. ETL field and office staff submitted daily payroll information via the D-308 paper-based form. At the LCO, payroll forms were then keyed into DAPPS. DAPPS also developed a contingency check-out system in the LCOs that handled all of the checking out of forms sent to the data capture centers.

2.8.1.2 Paper-Based Operations Control System

The PBOCS supported assignment management functions performed in the LCO that were specific to the ETL. This included assignment of work, check-in of cases into the LCO, and creating reports for monitoring ETL progress.

2.8.1.3 Field Data Collection Automation-Office Computing Environment

The Field Data Collection Automation-Office Computing Environment (FDCA-OCE) consisted of hardware, software, telecommunications, technical procedures, training materials, and applications to enable staff to carry out census operations. The FDCA-OCE also included a Map Printing System that allowed printing of small-format maps for the operations.

2.8.2 Support Systems

2.8.2.1 Master Address File/Topologically Integrated Geographic Encoding and Referencing System

The MAF/TIGER database provided geographic services required by the ETL operation.

This included:

- delineation and maintenance of geographic areas,
- mapping,
- address geocoding and matching, and
- creation of geographic data extracts.

2.8.2.2 Universe Control and Management System

The Universe Control and Management (UCM) system provided the capability to create, maintain, distribute, and update all census operations universes. The population and status of HUs from PBOCS updated UCM during the ETL operation.

2.8.2.3 Response Processing System

The Response Processing System (RPS) received response data from DRIS and was the repository for all such data throughout the ETL operation.

2.8.2.4 Decennial Response Integration System

DRIS updated the universal response database schema with response data from questionnaires, and passed this information to RPS.

ETL did not share the same questionnaire as NRFU, NRFU Vacant Delete Check (VDC), and the UE Operations (the D-1(E) EQ). ETL had a specially-designed questionnaire, the D-15 for Stateside and Puerto Rico.

2.8.2.5 Cost and Progress System

The C&P system tracked the cost and operational progress of the ETL operation. Tracking of the ETL started with the training of the CLs and continued through the closeout of ETL. During the course of the operation, the C&P system interfaced with DAPPS and PBOCS to extract the appropriate data to produce reports.

2.8.2.6 Census Evaluations and Experiments System

The Census Evaluations and Experiments (CEE) system interfaced with DRIS to receive auxiliary data keyed from questionnaires and from PBOCS.

2.8.2.7 National Processing Center-Automated Tracking and Control System

The NPC-ATAC system tracked receipt of AA Binders and observation forms mailed from the LCOs to NPC.

2.8.2.8 National Processing Center-Visual Basic Key from Paper

The NPC-VB KFP was an NPC system that keyed data from the CL Observation forms for ETL.

2.8.2.9 Geographic Acquis-based Topological Real-time Editing System

The GATRES system allowed digitizing of the updated ETL maps.

3 Methodology

3.1 Research Questions

This section outlines the questions found in the ETL Study Plan and shows where we answered these questions in the ETL Assessment. The question outline mirrors the same format as in the Results Section (Section 5) of this Assessment.

Questions	Results
3.1.1 Workload and Outcomes	
Enumeration at Transitory Locations Production	
Transitory Locations	
1. How was the ETL workload established and what were the outcomes?	5.1.1
1a. What was the ETL workload by source?	5.1.1
1b. How many and what types of TLs were deleted and/or added to the ETL universe and why?	5.1.1
Housing Unit Status	
2. What was the total number of HUs at the end of the operation?	5.2
Housing Characteristics	
3. What was the average size of households in ETL?	5.3, 5.3.1
4. In what languages did the enumerators conduct the interviews?	5.3.3
5. How many interviews were completed by proxy respondent?	5.3.2
6. What was the demographic/characteristic and relationship distribution of the responses on ETL (considering household tenure, relationship status, age, sex, race, and Hispanic origin for each person)	5.3.4
Enumeration at Transitory Locations Reinterview	
7. What were the outcomes and major findings of ETL RI?	5.4
Results of Additional TL Distribution Data	
8. What was the distribution of: Special Situations, Spaces, Mobile Homes, Occupied HUs, UHEs, Refusals, Completed Questionnaires, and Contact History (First and Second 'No Contact') by TL type?	5.5
9. What was the distribution of TL types?	5.5
10. What was the distribution of TL blocks at the start and close of ETL?	5.6
3.1.2 Cost, Staffing and Production Rates	
11. How did the budgeted costs for the operations compare to the actuals?	5.7

Questions	Results
12. How did the actual staffing levels and production rates compare to the budgeted estimates for ETL?	5.7
3.1.3 Training	
13. What happened during training for ETL?	5.8
3.1.4 Schedule	
14. How did the planned start and finish dates for the operations compare to the actuals for ETL?	5.9
3.1.5 Change Control	
15. What were the primary reasons for implementing schedule changes (for example, multiple changes to baseline dates, incorrect durations, and late changes to the program)?	5.11
16. Was the change control process easy to execute?	5.11
17. What were the primary reasons for implementing requirement changes?	5.11
3.1.6 Automation	
18. What types of automation problems did we experience? What was the frequency of the problems and how were they resolved?	5.10

3.2 Data File Sources

3.2.1 DMD Cost and Progress

Managers and team members used the C&P system to monitor costs and check-in data during the operation. C&P received data from sources including DAPPS, PBOCS, DMD Budget Formulation Branch, and UCM.

PBOCS provided C&P with daily check-in data at the national, RCC, and LCO level. Using national level C&P data, we produced tables that show cumulative check-in summarized by week.

3.2.2 Auxiliary Questionnaire Data

The data-captured information from all the EQs that was not core (extra data captured on the questionnaire that are used for assessment purposes only) was included in this file. DRIS transferred these data daily to the Decennial Statistical Studies Division (DSSD). The Auxiliary

Questionnaire (AUX) data were merged to the Decennial Response Files (DRF) data via the unique Document ID assigned to each paper EQ.

3.2.3 Final Tabulation Master Address File Extract and Operations Table and the ETL Tally and Assessment File

GEO provided these files, which contained the counts of TL records that comprised the ETL address enumeration universe, results of the update in the MTdb in the form of tally files, and number of blocks that contained TLs and TUs.

3.2.4 ETL Cover Page

The enumeration information for each TL was maintained in a Master TL Binder, which included the Cover Page. Cover Pages were sent to NPC for keying and data capture upon completion of the operation. DSSD received the final output file for evaluation.

3.2.5 2010 Decennial Response Files

The 2010 DRF includes the core data (data used during processing for producing the final census counts) that made up the Universal Response Database from all EQs that were data captured. In addition, the DRF included records for cases that were not data captured and the only data available from these records came from PBOCS. The Decennial Systems and Processing Office (DSPO) created the DRF.

3.2.6 NPC Output Data Files

The NPC output data files are records from NPC, including Cover Page data as well as TL and EQ RI data.

3.2.7 FLD Cost and Staffing Spreadsheets

FLD created spreadsheets based on DMD Budget Formulation, DAPPS, and universe data to show staffing, production rates, budget, and actual cost data. We used these data to address the Cost, Production Rates, and Staffing portion of this assessment.

3.2.8 Master Activities Schedule

The Master Activities Schedule (MAS) documented the baseline start and finish, and actual start and finish dates for all scheduled activities. Following the completion of the 2010 Census, the DMD Management Information System staff provided a spreadsheet of baseline and actual dates, related operations and other information for each activity line. Using sort and filter functionality in Microsoft Excel, we were able to determine how many ETL lines were on schedule or late.

3.2.9 Field Staff Debriefings

At the completion of ETL, debriefings were conducted with CLs and enumerators. The Census Bureau HQ FLD documented these findings. FLD QA Branch also distributed and tallied the responses from LCO debriefing questionnaires regarding topics on training, materials, and observations.

3.2.10 DMD Change Control Forms

Change control forms documented all changes to the ETL baseline. For a change control form to be implemented, it needed approval from the HUE-OIT and potentially from the Census Integration Group (CIG).

3.2.11 Risk Register

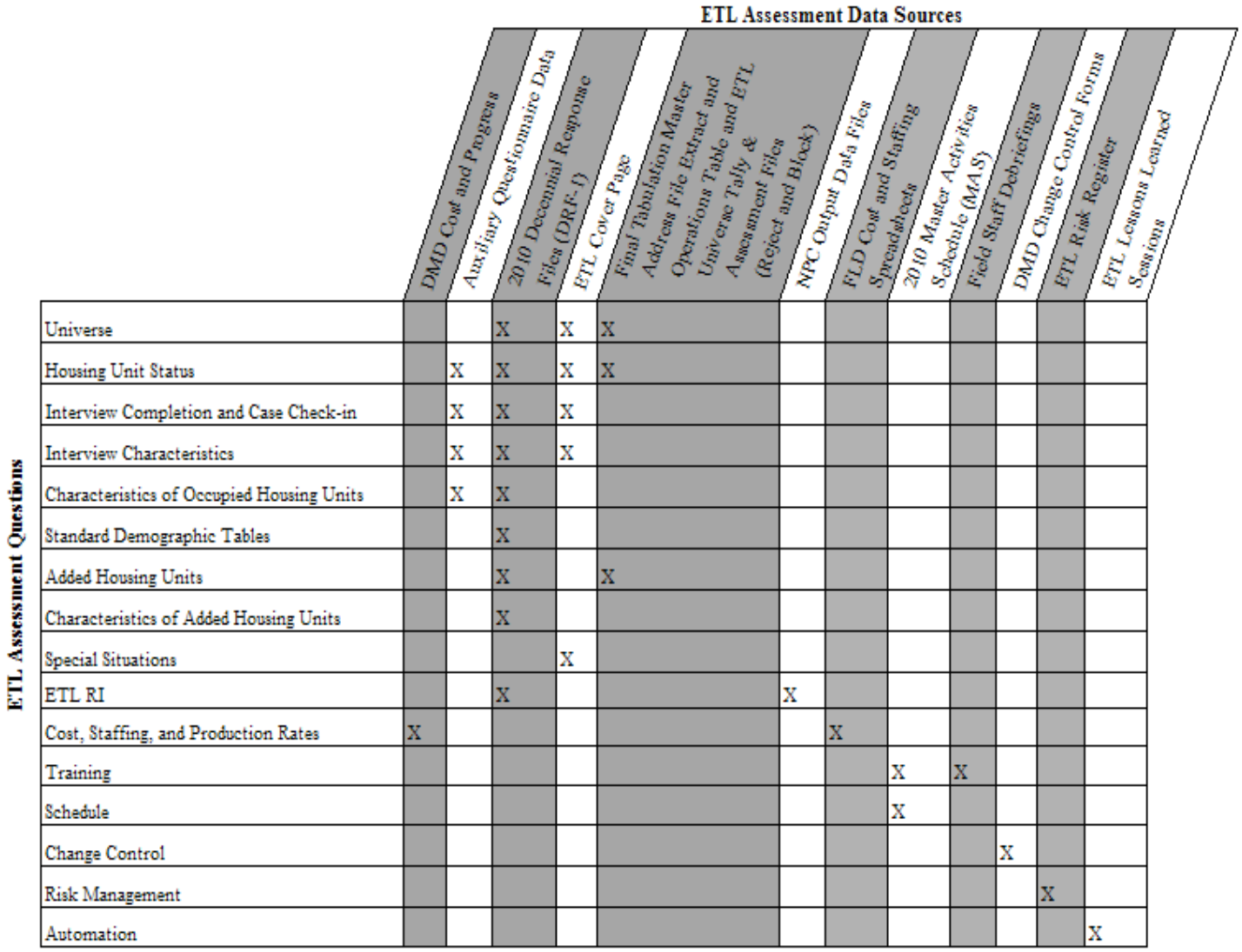
The HUE-OIT documented risks associated with completing ETL. The risks were assigned a probability and impact rating. DMD documented and maintained the risks in the Risk Register.

3.2.12 Lessons Learned

After ETL was completed, DMD conducted several Lessons Learned sessions with Census Bureau HQ and NPC staff involved in the design and monitoring of ETL. Census Bureau HQ and NPC staff documented successes, problems, and recommendations for ETL.

Figure 2 lists the major topics that are addressed in this assessment, along with the corresponding data sources for each topic.

Figure 2: ETL Assessment Topic and Sources



4 Limitations

The type of enumeration areas, enumeration methodologies, and analysis variables for the 2010 Census may differ from previous censuses. Caution should be taken when comparing results across censuses.

4.1 Paper Questionnaires – Universe Discrepancies

For this assessment, four major data sources were used to assess the ETL universe: Final Tabulation MAF Extract and Operations Table, ETL Universe Tally and Assessment Files, ETL Cover Page data, and the DRF. The data files from the sources were created at different times

and had different criteria for what was an acceptable return. Thus, the biggest limitation in this assessment is that there is not one static universe that can be identified.

GEO created the Final Tabulation MAF Extract and Operations Table as well as the Universe Tally and Assessment Files. These files contained counts of TL records that comprised the ETL address enumeration universe, results of the update in the form of tally files, and number of blocks that contained TLs and TUs.

The ETL Cover Page data contained one record for every TL in the ETL universe, which included TL name and address, contact name, number of units to enumerate, etc. It also provided seven classification types for the TL.

The DRF file contained operation code discrepancies, multiple versions of units, and dummy returns created by HQ for cases that were in PBOCS but never data-captured. The DRF also contained added HUs associated with addresses and consisted of all data-captured questionnaires.

To best analyze these operations, a different universe is inevitable when looking at results that are only available from each source. Thus, the total number of HUs will differ slightly between tables that used different data sources.

4.2 Paper Questionnaires – Incomplete or Invalid Data

The use of paper questionnaires required the enumerators to make an effort to write neatly, complete all required sections of the EQ, and enter correct information into the data fields. This unfortunately did not always happen. When enumerators entered invalid dates or contradictory information, the responses were ignored or coding rules were established to document the outcomes from the data fields.

4.3 Quality Control

The TL universe for ETL production included many duplicates. This was an unexpected problem that was not known until the LCOs actually began processing the work. If a duplicate TL was selected, it interfered with the RI selection algorithm and caused the same TL to be selected multiple times. Because of these duplication issues during production, RI selection was changed on April 12, 2010 to prevent duplicate TLs from being selected within PBOCS. Once HQ became aware of the extent of the problem, the LCOs were instructed to identify and eliminate the duplicates. However, these instructions were not always followed.

In addition, the instability of PBOCS caused various limitations in the conduct of the operation and our analysis for this report. There were several problems linking the PBOCS data records to the NPC data records. In some cases, the TL ID numbers were missing or did not match, and in others, some records were on the PBOCS data file and not on the NPC data file or vice versa. In order to accurately report the summary statistics in this report, some of the data from PBOCS and NPC-keyed files required cleaning. DSSD eliminated 14,292 TL records from the analysis because they did not match or were duplicates, all of which we could not resolve.

See *Census 2010 Informational Memorandum No. F-04, the 2010 Census Enumeration at Transitory Locations Quality Profile* for a complete description of ETL RI including a description of case eligibility for RI.

5 Results

This section presents the answers to each of the research questions mentioned in Section 3, Methodology. The research questions are answered in the following order:

Section 5.1 discusses the Workload and Outcomes
Section 5.2 discusses the Housing Unit Status
Section 5.3 discusses the Housing Unit Characteristics
Section 5.4 discusses the ETL RI
Section 5.5 discusses the results of additional TL data
Section 5.6 discusses the Block results
Section 5.7 discusses Cost and Staffing
Section 5.8 discusses Training
Section 5.9 discusses the Schedule
Section 5.10 discusses Automation
Section 5.11 discusses Change Control
Section 5.12 discusses Schedule Changes
Section 5.13 discusses Requirement Changes
Section 5.14 discusses Risk Management

5.1 Workloads and Outcomes

This section presents the ETL workload and outcomes as they pertain to the research questions.

5.1.1 Universe Difficulties

The GQV field operation, GQV MTdb updates, and subsequent identification of the ETL universe were activities that occurred before the deployment of the ETL universe in PBOCS. During production of GQV MTdb updates, the Census Bureau discovered that the number of TLs coming out of GQV was inflated because of an erroneous skip pattern on Tab 7 in the D-351 GQV questionnaire design (Appendix F: D-351 GQV Questionnaire - Tab 7). The erroneous skip pattern led every response below Q.4 to be marked as transitory. GEO was notified of the error, and the necessary action for resolution was agreed to by GEO, DSSD, DMD, and FLD. The resolution required GEO to change some TLs to non-residential units during the GQV MTdb updates so they would not be included in the ETL operation.

The 2010 Census GQV Assessment report shows that GQV identified 80,066 TLs. Some may have been adds and were not part of the OLQ universe that went into GQV. Of the 80,066 TLs that were identified in GQV, approximately 35,000 were converted to non-residentials due to the issue described above and therefore not sent to the ETL operation.

GEO produced the Enumeration MAF Extract, which included the universe for ETL, and delivered the extract to PBOCS. The Enumeration MAF Extract was then loaded into PBOCS with the full enumeration universe, including the TLs to be worked during ETL.

The ETL workload was released to the LCOs in PBOCS on February 22, 2010. Once the workload was received, the CLs made a preliminary contact visit to the TLs to obtain up-to-date workload information, explain the enumeration process, and to meet with on-site managers before production. An example of the Preliminary Contact Form used for this visit is shown in Appendix C: Preliminary Contact Form.

During this time, HQ noticed that there were several TLs duplicated in error during the AC operation; TUs (sites/slips/spaces/units) within a TL were listed as individual TLs. Specifically, cases (TLs) were created for each TU within the TL rather than one case, or address, representing the entire TL. It is possible that the TL, OLQ, and HU concepts were unclear during training and in field materials.

In addition, we also had an issue with duplicated PIDs (see Section 5.8), which also increased the ETL workload. To resolve universe issues, the database in PBOCS was ultimately reset. FLD reset the universe on March 20, 2010, resulting in a workload of 44,716 TLs.

Table 1 displays workload sources at the national level. The GQV identified 44,667 TLs which became a part of the ETL universe. This number included the Census 2000 records that were validated, newly identified OLQs needing validation (validating OLQs as TLs) from AC, and TLs added during GQV. In addition, there were 49 other TLs added from the field (LCO and NPC phone solicitation of carnivals/circuses), 23 of which were TLs in Remote Update/Enumerate (RUE) and Remote Alaska (RA). RUE and RA did not have an address listing component (AC was not conducted) due to the remote nature of these areas.

There were 44,716 TLs (represents all types of enumeration areas) on the Enumeration MAF Extract for the ETL operation.

Table 1: ETL Universe

Source	Counts
Total number of TLs loaded into the PBOCS for the ETL Operation	**44,716**
Total number of TLs that came out of GQV	**44,667**
Total number of TLs that were confirmed by GQV	43,482
Total number of TLs in the GQV universe without a GQV action	497
Total number of TLs added during GQV	688
Total number of other TLs that were loaded into PBOCS for the ETL Operation	**49**
Total number of TLs with a source of SBE – Carnivals and Fairs	26
Total number of TLs from RUE	18
Total number of TLs from RA	5

Source: Final Tabulation MAF Extract and Operations Table

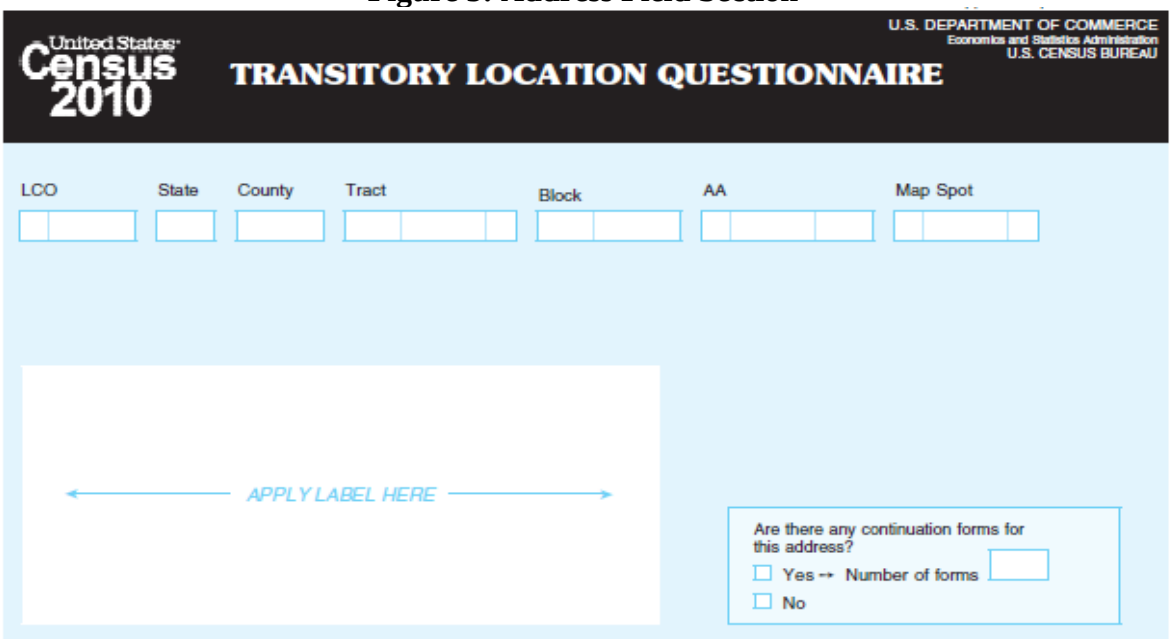
5.2 Housing Unit Status

The ETL operation used forms such as the D-1(F) Information Sheet (Appendix G: Information Sheet) and the Unit Verification Page (Appendix D: Transitory Location Unit Verification and Listing Page) to determine if a questionnaire should be completed and to assist respondents in providing accurate answers. The enumerator referred the respondent to the D-1(F) Information Sheet (provided in English and Spanish versions), which provided examples of who to count as part of the household using April 1, 2010 as the reference date. Since the ETL operation did not use April 1, 2010 as the reference date, except for when asking the Date-of-Birth question, the respondent was told to disregard the reference to April 1, 2010 and to provide the information as of the date of the visit. The Unit Verification Page assisted with canvassing, listing all the spaces/units within the TL, and screened the respondent by asking questions to establish occupancy. If the respondent said they had a UHE, the enumerator thanked the respondent and told them that they would be counted at the other place and did not conduct the interview. However, if the respondent said this was their usual home, the enumerator completed the interview using the ETL EQ (D-15) (Appendix H: ETL Questionnaire).

All enumerated HUs in ETL were considered potential "Adds" because the address may or may not have been in the MTdb. The address information from the ETL EQs was sent to Non-ID Processing where it was processed as Type C Non-ID cases, which were enumerator-generated adds with a complete geocode (i.e., state, county, and block number). The address information necessary for geocoding Type C Non-ID cases has always been the same (state, county, and block). For Type C Non-ID cases, the enumerator was expected to provide the information to be geocoded since the added HU should have been in their AA. The state, county, and block codes were printed on the Unit Verification Page that enumerators received with their assignments (shown in Appendix D: Transitory Location Unit Verification and Listing Page). Address Listing Sheets for the ETL operation were blank. For 2010 Census Non-ID Processing, the ETL Type C cases with incomplete address information were rejected and not included in the census universe. For more information on the Non-ID Processing, please refer to the 2010 Non-ID Processing Assessment.

The front of the EQ, as shown in Figure 3, shows the fields to be filled for a Type C Non-ID case, or add, that captured the collection geography - LCO, State, County, Tract, Block, AA, and map spot.

Figure 3: Address Field Section



Source: D-15 ETL Enumerator Questionnaire

Appendix I: Transitory Units Added and Not Added into the MTdb shows how many TUs were added/not added into the MTdb and the reason (i.e., illegal or missing values, illegal block code) by state. There were 121,290 Add records received, 1,278 of which were rejected. There were 27,231 records matched to existing units in the MTdb, so 92,781 TUs were added into the MTdb. Of those, 16,352 were in California, 9,203 were in Texas, and 6,900 were in Florida. Of the 1,278 rejects, 635 were due to illegal or missing values and 643 were due to illegal block codes. Of the 635 with illegal or missing values, 416 did not have appropriate state FIPS codes and are classified under "Other."

5.3 Housing Unit Characteristics

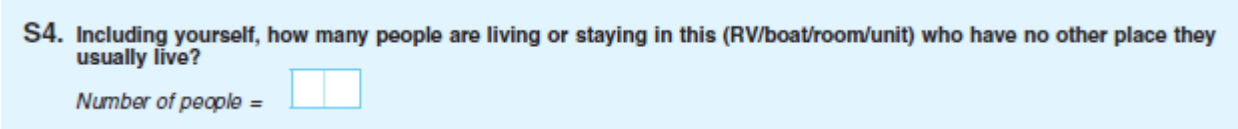
The tables in this section discuss characteristics of the occupied HUs that were interviewed during ETL. This section includes results on the reported population count in occupied HUs, as well as the number of data-defined persons (DDP) within the HU. The rules for a DDP are the same throughout all Census operations, but as a reminder, a DDP is a person who has at least two pieces of information recorded, which could be three characters of a name, relationship, sex, age or date of birth, Hispanic origin, or race. The source for this data is the DRF, so the number of HUs is slightly different than what is seen in Appendix I: Transitory Units Added and Not Added into the MTdb, which came from the ETL Tally and Assessment file.

5.3.1 Household Population Count

After an address was classified as occupied, the next piece of information collected was the number of people that live or stay there. This is called the population count. There are three sources that can be used to report population count:

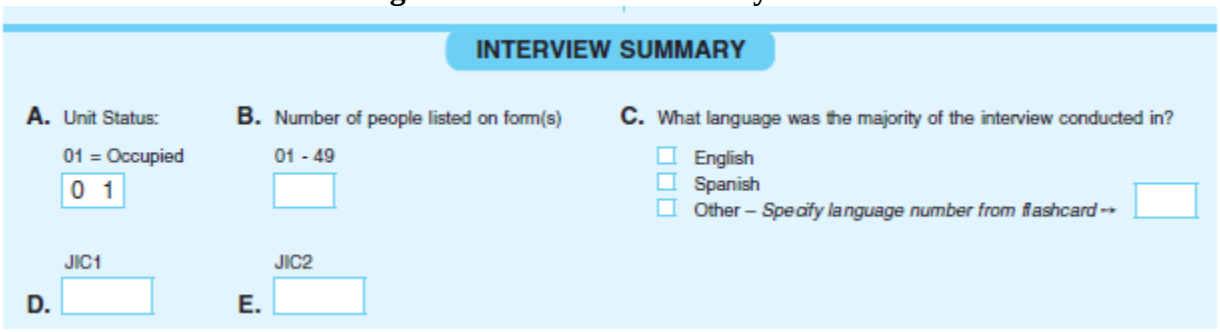
- the preliminary population count that the respondent stated at the beginning of the interview (shown in Figure 4 below),
- the number of DDPs on the form, or,
- the enumerator-reported population count in Item B of the Interview Summary (shown in Figure 5), the final population count ascertained by the end of the interview by the enumerator. That variable also captures information about whether a unit was known to be occupied but had an unknown population count (POP 99 cases).

Figure 4: Population Count Question



Source: D-15 ETL Enumerator Questionnaire

Figure 5: Interview Summary Section



Source: D-15 ETL Enumerator Questionnaire

The preliminary population count could undercount people if the respondent remembered to count some people as the interview progressed. The number of DDPs could also undercount people if respondents did not want to provide the demographic information necessary for an individual to be data-defined. Table 2 shows the distribution of population count within HUs contacted during ETL using both the enumerator-reported population count and the number of DDPs.

Table 2: Population Count of Housing Units During ETL

	Enumerator-Reported		Data-Defined People	
Population Count	**Number of Housing Units**	**Percent**	**Number of Housing Units**	**Percent**
0	52	0.04	2,839	2.37
1	70,867	59.06	69,117	57.60
2	35,354	29.46	35,030	29.19
3	6,546	5.46	6,498	5.42
4	3,901	3.25	3,855	3.21
5	1,710	1.43	2,648	2.21
6	587	0.49	N/A	N/A
7	266	0.22	N/A	N/A
8	106	0.09	N/A	N/A
9	48	0.04	N/A	N/A
10	14	0.01	N/A	N/A
11 – 15	35	0.03	N/A	N/A
16 – 20	8	0.01	N/A	N/A
21 – 30	13	0.01	N/A	N/A
31 – 40	17	0.01	N/A	N/A
41 – 49	3	<0.01	N/A	N/A
50 – 97	121	0.10	N/A	N/A
Missing	339	0.28	N/A	N/A
Total Occupied Housing Units	**119,987**	**100.00%**	**119,987**	**100.00%**

Source: DRF
Note: Percents may not total 100.00 percent due to rounding.
Note: N/A is shown because there were no continuation forms.

Table 2 shows that, of the 119,987 HUs occupied, 2.37 percent did not provide enough information about individuals for anyone to be classified as a DDP. From the enumerator-reported population count, 339 HUs (0.28 percent) that were determined to be occupied had this field left blank on the EQ. There are some population count values in Table 2 that do not make sense for occupied units; population counts of zero or population counts of 50 or higher (the Census Bureau had set 49 as the maximum allowable reported number of people living in a HU). On a paper questionnaire, it is possible to have conflicting pieces of information due to enumerator or data-capture errors. We report here the data as captured from the questionnaire. The most frequently seen household count was one, with 59.06 percent for enumerator-reported population counts and 57.60 percent for data-defined people. Appendix J: Number of Data-Defined Persons in the ETL Household shows the distribution of the number of DDPs in the ETL household, by state.

The TL EQ had space to roster five people in a household. If a HU had up to five people enumerated, a continuation form was not needed. While there were some enumerated population count values above five, there were no HUs in the DRF with an ETL continuation form with a matching D-15 TL Questionnaire PID, the parent form. Therefore, there were no HUs

enumerated in ETL that had an associated continuation form, and hence no HUs with the number of DDPs over five. There was only one potential case, but it did not match to a D-15.

Ten of eleven records on the DRF with an operation code consistent to ETL did not have PIDs, which an ETL case (being all adds) would be expected to have. Two-thirds of the ten cases were residential, brick and mortar-style suburban housing. The other one-third are farm-style housing, which could be trailers or some other type of structure but with no trailer park type housing in the vicinity. The eleventh record had a PID consistent with a FLD add, but appears to be farm-style housing, again with no trailer park type housing in the vicinity. It is possible that for all eleven cases, the operation code may have been recorded incorrectly and that none of these were sourced from ETL. However, we have no means of validating that one way or the other.

Furthermore, there were no continuation forms with the ETL operation code that had a PID assigned by DRIS. DRIS did not provide HQ any data-capture output for the supplemental forms that showed up at the data-capture center from ETL without an ID of any kind, to which they then would have applied a PID. From an HQ perspective, it looks as if ETL continuation forms did not make it through data-capture for delivery to HQ processing.

The large difference in the number of households with population counts of five as seen in Table 2 can be explained by these missing continuation forms. Since there were no associated continuation forms, any HU that truly had more than five people in the household would not have information on any of those people beyond the five listed on the TL EQ and hence would have no more than five DDPs.

5.3.2 Type of Respondent

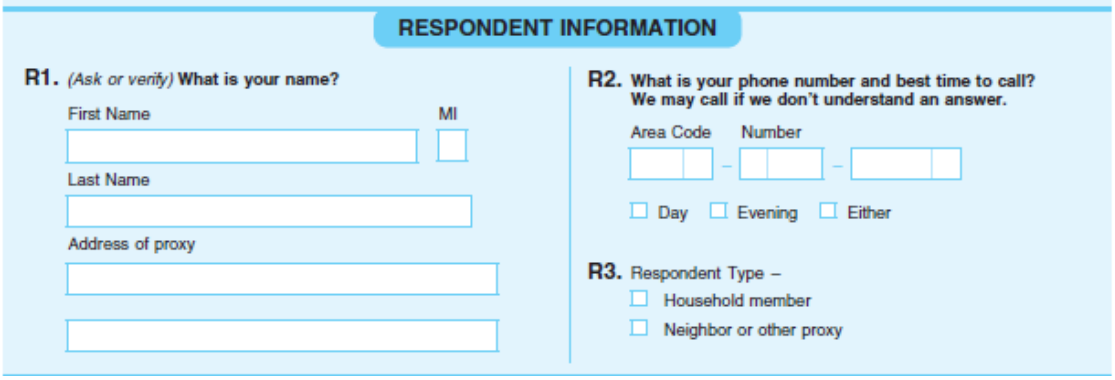
To complete a questionnaire for an address, an enumerator was instructed to interview a household member for each space or unit when the respondent states that he or she or any other occupant(s) has no other residence where they live and sleep most of the time. Household members are preferred respondents because they can generally provide more information about the household than neighbors or another proxy.

A proxy is someone who provides information about the ETL address but is not a member of the ETL household. Since the ETL operation was conducted in only one visit to the TL, the operation necessitated that proxies be accepted. The enumerator was encouraged to speak with a knowledgeable respondent and the use of proxies was limited. Proxies were allowed under two circumstances:

- if a household member (at least 15 years of age) that lived at the address at the time of visit stated that he or she has no other residence where they live and sleep most of the time but refused to provide additional information, and
- if a non-household member is at the unit, no other household member was present, and the non-household member knows that the owner or renter has no other residence where they live and sleep most of the time.

Figure 6 shows the respondent information section of the EQ, where the enumerator would indicate the type of respondent interviewed.

Figure 6: Respondent Information Section of EQ



Source: D-15 ETL Enumerator Questionnaire

Table 3 shows the type of respondents for HUs interviewed during the ETL operation.

Table 3: Type of Respondent for ETL Interviews

Respondent Type	Total	Percent
Household Member	85,407	71.18
Proxy Respondent	32,955	27.47
Marked as Both	27	0.02
Unknown	1,598	1.33
Total Housing Units	**119,987**	**100.00%**

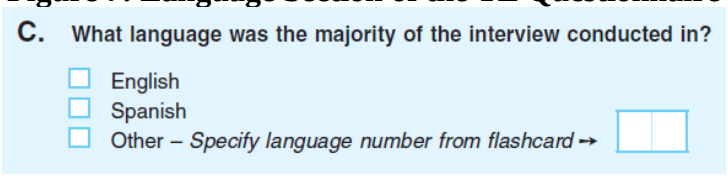
Source: DRF
Note: Percents may not total 100.00 percent due to rounding.

Information was collected for more than a quarter of all the ETL HUs by a proxy respondent – a neighbor or other proxy (landlord, property manager, etc.). Actual April 1, 2010 household members were 71.18 percent of all respondents. There were an additional 1.35 percent of respondents who could not be categorized, either because the enumerator left this question blank or because the boxes were marked for being both a household member on April 1, 2010 and for being a proxy.

5.3.3 Language

As seen in Figure 7, the TL EQ asked enumerators to record the language in which the majority of an interview was conducted via checkboxes provided for English and Spanish, the two most common languages, as well as for "Other".

Figure 7: Language Section of the TL Questionnaire



Source: D-15 ETL Enumerator Questionnaire

Other languages were to be indicated using the number assigned to them on the Language Identification Flashcard (shown in Appendix K: Language Flashcard). There were 51 languages officially supported and identified on the Language Identification Flashcard.

If an enumerator encountered a respondent who did not speak English and the enumerator did not speak the respondent's language, the enumerator tried to find an interpreter in the household and conduct the interview. If unsuccessful, the respondent tried to find a neighbor who could interpret.

If there was no interpreter in the household, and the enumerator could not find a proxy, the enumerator tried to determine what language the person spoke by using the D-3309, Language Identification Flashcard. If the respondent could not identify his or her language on D-339, the enumerator should have asked a neighbor or other knowledgeable respondent(s) in the area to tell them where the residents of the household are from or what language they speak. The enumerator then documented the situation and language difficulty on an Info-comm form and submitted it to the CL.

The CL reviewed the Info-comm and tried to reassign the interview to another enumerator in the crew who spoke the language. If no one in the crew spoke the language, the CL notified his or her Supervisor before the TL enumeration was complete, so the case could be assigned to an enumerator who spoke the language.

If the respondent and enumerator both spoke Spanish, then the enumerator completed the interview in Spanish. If the interview was conducted in some language other than English, the language was indicated on the back of the EQ form.

Table 4 shows the top five languages in which ETL interviews were conducted.

Table 4: Top Five Languages in which ETL Interviews were Conducted

Language	Total	Percent
English	115,403	96.18
Spanish	1,734	1.45
Chinese	129	0.11
Korean	25	0.02
Russian	11	0.01
All other languages	34	0.03
Multiple languages indicated	46	0.04
Unknown	2,605	2.17
Total Housing Units	**119,987**	**100.00%**

Source: DRF and AUX
Note: Percents may not total 100.00 percent due to rounding.

English was the most common language used, accounting for 96.18 percent of all ETL interviews. Spanish was used for 1.45 percent of ETL interviews, Chinese was used for 0.11 percent of interviews, and both Russian and Korean were used less than 0.05 percent of the time.

An additional three rows are shown at the bottom of Table 4. The "All other languages" row combines the 46 additional languages that are on the Language Identification Flashcard. The "Multiple languages indicated" row reflects the interviews where both the English and Spanish boxes were marked, or where one of those boxes was marked and a number was also written in to indicate a different language from the flashcard. We do not know if this was intended to indicate that the interview took place using a mix of languages (or at different points of time with different respondents) or if it reflects an error by the enumerator. More interviews fit that description (46 interviews) than for any single language besides English, Spanish, and Chinese.

Additionally, the language of interview was unknown for 2.17 percent of all ETL interviews. This is a sizable number of interviews and could influence the distribution of languages if this information had been recorded. Appendix L: Complete Language Tables shows the distribution of all languages in which an ETL interview was conducted.

5.3.4 Standard Demographic Tables

There were 187,331 DDPs included on 119,987 ETL forms for occupied HUs in the 2010 Census. This section presents the demographic characteristics for these persons on the ETL form. Appendix M: Standard Assessment Demographic Table for ETL Interviews gives ETL person demographic characteristics: age, Hispanic origin, race, relationship to person 1, and sex. Age was calculated based on the date of birth provided; if no date of birth was provided, then the write-in age was used. Age was calculated only if the date of birth fell within valid date ranges. Similarly, the calculated age or write-in age was used only if it fell within valid age ranges; otherwise, it was considered missing. Appendix M: Standard Assessment Demographic Table

for ETL Interviews also gives the distribution of tenure responses for HUs included in the ETL operation.

Because the demographic data used in this assessment are unedited, direct comparisons with published 2010 Census results are not possible. The tables include a row for people with missing values for the specific characteristic. The data in published census reports have undergone editing and imputation and therefore will have no missing values.

Age/Date-of-Birth Item Nonresponse rates are typically higher at TLs as compared to other returned forms. Previous research indicates that these results are linked to the specific populations enumerated on these forms. ETL populations are traditionally harder to enumerate, as evidenced by specialized personal-visit enumeration procedures.

For more information on Item Nonresponse and Imputation, refer to the *2010 Census Informational Memorandum No. 173, the 2010 Decennial Census: Item Nonresponse and Imputation Assessment Report.*

5.4 Enumeration at Transitory Locations Reinterview

There were a total of 40,621 TLs in the ETL analysis universe. This number is derived from the total number of unique Census IDs (for the TLs) and subtracting the number of non-valid records and records that did not match during reconciliation of PBOCS and NPC files.

PBOCS was supposed to select a ten-percent sample for RI. Based on the number of TLs in the RI universe, it was actually a 9.6-percent sample. Although we fell slightly short of the ten-percent goal, the known issues with PBOCS and data limitations may explain the differences.

All work was completed in the field on April 12, 2010; however, check-in continued for four days after the operation, until April 16, 2010. After April 16, 2010, all remaining ETL materials including Cover Pages, Enumerator Questionnaires, and Map Pouches were shipped outside of the control system and tracked manually. DSSD handled the reconciliation.

5.4.1 Transitory Location Reinterview

There were 2,126 (19.3 percent[2]) enumerators who worked on a TL selected in Random RI. (Because there were two enumerators per case, a 9.6-percent sample for RI resulted in 19.3 percent of the enumerators being selected.) Only 12 (0.1 percent) different enumerators were placed in Supplemental RI, indicating the AMQA may have been suspicious of the enumerator's work. All of the TLs placed in Supplemental RI passed.

There was a total of 3,865 TLs included in the Random RI and 13 were in Supplemental RI. While the majority (75.8 percent) of TLs passed, for approximately one-fifth (22 percent) of the TLs, the contact person could not be reached by office clerks to verify that the enumeration had occurred.

[2] Due to rounding.

Debriefing data received after the ETL operation revealed that several of the TLs were not open during the operation timeframe. Furthermore, some site managers had residences off-site so they were not available during the preliminary contact visit. When CLs visited TLs to conduct the preliminary contact, some TLs were closed during the entire interviewing period or were open periodically from March 19, 2010 to March 31, 2010. Similar reasoning could explain why RI clerks were unable to reach one-fifth of the TLs during the RI period. Table 5 summarizes the TL RI by interview type.

Table 5: Transitory Location Reinterview Outcome by Reinterview Type

Reinterview Outcome	Random Reinterview		Supplemental Reinterview		Total	
	Number	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Pass	2,927	75.7	13	0.3	2,940	75.8
Unable to Contact	854	22.1	NA	NA	854	22.0
Soft Fail (Unintentional Mistake)	67	1.7	NA	NA	67	1.7
Hard Fail (Falsification)	17	0.4	NA	NA	17	0.4
Total	**3,865**	**99.7%**	**13**	**0.3%**	**3,878**	**100.0%**

Source: DSSD ETL Data File
Note: Percents may not total 100.0 percent due to rounding.

If an AMQA determined that the CL or lead enumerator falsified data instead of actually conducting the enumeration, they instructed the RI office clerk to record the final outcome as a "Hard Fail". A total of 17 TL RIs were classified as "Hard Fail".

FLD has indicated that some of these cases were erroneously marked as a "Hard Fail" when they should have actually been coded as a "Soft Fail", an honest or unintentional enumerator error. PBOCS did not allow the user to change the RI outcome field once it had been saved. Therefore, we have no way to know which cases were affected.

Any TL not selected for Random RI could have been put into Supplemental RI for any enumerator, at any time, for any reason (e.g., if it was suspected that the enumerator was not following proper procedures). The AMQA could also use Supplemental RI as an investigative tool for any enumerator who failed RI.

Table 5 above shows that 13 TLs were placed into Supplemental RI. All of the TLs placed into Supplemental RI passed.

5.4.2 Enumerator Questionnaire Reinterview

Table 6 shows the distribution of the number of EQs completed at each TL. More than half (56.4 percent) of the TLs appear to have been empty, had respondents who reported they had a UHE, or were in the ETL universe by mistake because the enumeration resulted in no completed EQs.

Table 6: Total Number of Questionnaires Completed at a Transitory Location

Number of EQs per TL	Number	Percent
No EQs	22,913	56.4
1 – 49	17,458	43.0
50 – 99	210	0.5
100 – 149	27	0.1
150 – 199	8	0.0
200 +	5	0.0
Total	**40,621**	**100.0%**

Source: DSSD ETL Data File
Note: Percents may not total 100.0 percent due to rounding.

PBOCS should have selected a 10-percent sample of EQs with a telephone number for Random RI. Overall, there were a total of 118,486 EQs checked in from the field for the ETL operation. Of these, 102,400 (86.4 percent) contained a telephone number and were therefore eligible for Random RI. There were 9,212 EQs selected. This is a 9.0 percent sample rate. Although we fell slightly short of the 10-percent goal, the known issues with PBOCS and data limitations may explain the differences.

Table 7 shows that most of the respondents (81 percent) who were contacted for EQ RI verified that they had been interviewed by an enumerator. Three percent of the EQ RI respondents enumerated at a TL answered that they were not interviewed by an enumerator, and RI office clerks reported that they were unable to reach about 16 percent of the RI respondents by telephone. A total of 272 EQs failed the RI. Of these, 175 EQ RI respondents responded, "Yes, they did have a usual home elsewhere," indicating that they should not have been enumerated in ETL. These cases were used for research only. The results were not removed from the ETL workload.

Table 7: Enumerator Questionnaire Reinterview Outcome

Reinterview Outcome	Number	Percent
Pass	7,453	80.9
Fail	272	3.0
Unable to Contact	1,487	16.1
Total	**9,212**	**100.0%**

Source: DSSD ETL Data File
Note: Percents may not total 100.0 percent due to rounding.

There were a total of 3,608 enumerators whose EQs were selected for random EQ RI. There was no Supplemental RI for EQs.

5.5 Results of Additional TL Data

To answer the additional TL questions, we used the data from the ETL Cover Page (D-693 (ETL)). The Cover Page was the first document found inside the Master TL Binder. Cover Page data were completed by the LCO office staff and the CL. As mentioned in Section 5.4, the

analysis universe of 40,621 TLs is derived from the total number of unique Census IDs for TLs, subtracting the number of non-valid records and records that did not match during reconciliation of PBOCS and NPC files. This universe is used for analysis throughout this section of the assessment.

The two sections of the Cover Page used to answer these questions were:

1. Location Information (Completed by the LCO)
2. Enumerator Information (Completed by the CL)

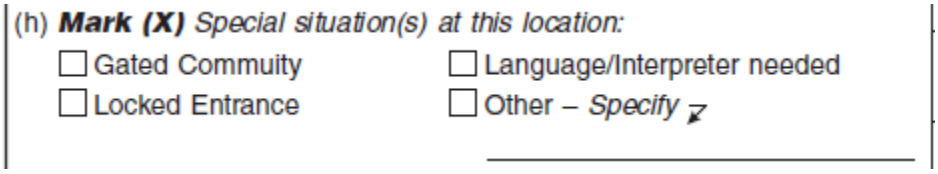
These sections included information on:

- Special Situations Encountered at the TL
- Types of TLs
- Number of Spaces or Units at the TL
- Number of Mobile Homes at the TL
- Number of Occupied Spaces or Units at the TL
- Number of Occupied Spaces or Units with a Usual Home Elsewhere at the TL
- Number of Refusals at the TL
- Number of First No-Contacts at the TL
- Number of Second No-Contacts at the TL
- Number of Completed Questionnaires at the TL

5.5.1 Special Situations

For each TL in the ETL universe, the LCO was to complete information on the ETL Cover Page, Form D-693, which included the special situations encountered at the TL, as seen in Figure 8. A full example of the form is shown in Appendix B: D-693 Cover Page.

Figure 8: LCO Record of Special Situations at TL from ETL Cover Page



Source: ETL Cover Page

There were originally four classifications for a special situation: Gated Community, Locked Entrance, Language/Interpreter Needed, and Other. However, due to the frequency with which "Other" was selected, additional classes were created for analysis.

For the individual classes of Gated Community, Locked Entrance, and Language/Interpreter needed, the TL was determined to belong to that group and only that group. Because multiple boxes could be selected, we also have combinations of those three as their own classes.

Whenever "Other" was selected, the following additional classifications are used to further analyze this category:

- "Animals Present" includes any situation where there was a mention of animals, dogs, or pets on the premises in the "Other" field.
- "Closed" includes any situation where the TL was listed as being closed, whether for the season or permanently.
- "Dates/Times/Contact Information" includes the situations where dates or hours of operation and/or contact information were written in the "Other" field.
- "No Long-Term Residents" are for those situations where "Other" included mentions that long-term residents were not allowed or that they did not have any long-term residents.
- "Not Otherwise Specified Above" includes those TLs where the special situation did not fall within any of the above-mentioned situations.
- Lastly, when "None" or "N/A" was listed in the "Other" field, these were put into their own category outside of "Other".

Table 8 shows that the majority of TLs (83.67 percent) had no special situation identified at all (if the situations where "None" or "N/A" are included, this becomes 84.10 percent). Of those with a special situation listed, the most encountered situations were "Locked Entrance" (2.62 percent) and "Closed" (2.53 percent). An additional 6.37 percent were "Other" (Not Otherwise Specified Above). The Cover Pages listing dates or hours of operation and/or contact information under the special situations section constituted 1.70 percent of the TLs. The remaining classifications each had less than 1.00 percent of the TL universe.

Table 8: Types of Special Situations Encountered

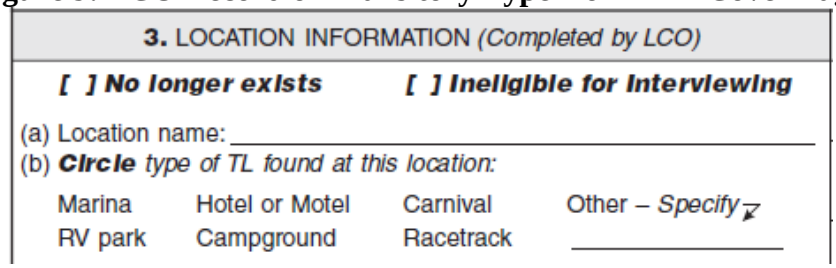
Special Situation	Number of TLs	Percent
Gated Community	403	0.99
Locked Entrance	1,066	2.62
Interpreter Needed	374	0.92
Combination – Gated and Locked	154	0.38
Combination – Gated and Interpreter Needed	4	0.01
Combination – Locked and Interpreter Needed	7	0.02
Other	4,451	10.96
Animals Present	63	0.16
Closed	1,027	2.53
Dates/Times/Contact Information	690	1.70
No Long-Term Residents	85	0.21
Not Otherwise Specified Above	2,586	6.37
Written "None" or "N/A"	173	0.43
Blank	33,989	83.67
Total Transitory Locations	**40,621**	**100.00%**

Source: NPC ETL Cover Page Data
Note: Percents may not total 100.00 percent due to rounding.

5.5.2 Types of Transitory Locations

As mentioned previously, for each TL in the ETL universe, the LCO was to complete information on the ETL Cover Page, Form D-693, which also included the location name and type, as seen in Figure 9. A full example of the form is shown in Appendix B: D-693 Cover Page.

Figure 9: LCO Record of Transitory Type from ETL Cover Page



3. LOCATION INFORMATION *(Completed by LCO)*

[ ] No longer exists ***[ ] Ineligible for interviewing***

(a) Location name: _____

(b) ***Circle*** *type of TL found at this location:*

Marina	Hotel or Motel	Carnival	Other – *Specify*
RV park	Campground	Racetrack	_____

Source: ETL Cover Page

The ETL Cover Page allowed for a TL to fall into one of seven classifications: 1) marina, 2) RV park, 3) hotel/motel, 4) campground, 5) carnival, 6) racetrack, and 7) other – specify. Due to numerous blanks on the NPC ETL Cover Page, as well as multiple selections, we used location name to create additional analysis classes.

For the individual classes of Marina, Carnivals, and Racetracks, the TL was determined to belong to that group and only that group. Hotel/Motel includes locations determined to be hostels. Campground includes any combination of campground and marina and/or RV park. After discussion, combinations of RV park and hotel/motel were placed into the RV park category. The following additional categories were examined:

- "Bed & Breakfast" includes bed & breakfasts and inns that were determined to not be hotels/motels.
- "Boarding House" includes boarding houses, rooming houses, YMCA, YWCA, and things labeled as "Rooms" that were determined to not be hotels or bed & breakfasts.
- "Business/Not Lodging" includes stores, restaurants, taverns, logging houses, etc., that were not listed to be a lodging.
- "Cabins" include cabins, cabanas, cottages, bungalows, etc. that were not determined to fit in other categories.
- "Camp" contains camps, not completely public campgrounds, such as bible camps.
- "Mobile Homes Only" contains those parks that had names listing them as mobile home parks (if it was suspected to be an RV park in any way, it was included in RV park).
- "Organization" includes social groups (such as Elk's Lodge), schools, prisons, military, etc.
- "Park/Forest Service/Nature" includes parks that were not identified to be campgrounds, forest services, department of natural resources, department of wildlife, lakes, islands, etc.
- "Private/Housing Unit" were those that were listed as private property or HUs where no evidence elsewhere on the form suggested that it was not private property or a HU.

- "Resort/Vacation Rental/Condos/Lodge" contains resorts, vacation rental homes, condominiums, lodges, combinations of hotel/motel and campground, etc.
- "Special Housing" contains retirement homes, assisted living facilities, medical homes (such as Ronald McDonald House), group homes, and shelters.
- "Sporting" contains places specifically for sports, such as hunting camps. However, yacht clubs were separated and classified as Marinas.
- "Blank or N/A" are those that had both the TL name and TL type blank or were listed as "No Name" or "N/A".
- "Not Otherwise Specified Above" includes those TLs where it could not be determined into what category the TL belonged.

Table 9 shows that of the 40,621 TLs, the largest percentage (35.17 percent) were classified as hotels/motels. An additional 21.91 percent were campgrounds, 15.76 percent were RV parks, and 5.23 percent were marinas. The remaining classifications each had less than 5.00 percent of the TL universe. When combined, the "Other" subcategories make up just over one-fifth of the TLs, while 0.33 percent of the Cover Pages provided no information on the TL name or type.

Table 9: Types of Transitory Locations

Transitory Location Type	Number of TLs	Percent
Marinas	2,125	5.23
RV Park	6,400	15.76
Combination Marina and RV Park	136	0.33
Hotel/Motel	14,286	35.17
Campground	8,902	21.91
Carnival	69	0.17
Racetracks	106	0.26
Other	8,462	20.83
Bed & Breakfast	1,939	4.77
Boarding House	408	1.00
Business/Not Lodging	79	0.19
Cabins	284	0.70
Camp	1,222	3.01
Mobile Homes Only	228	0.56
Organization	102	0.25
Park/Forest Service/Nature	655	1.61
Private/Housing Unit	257	0.63
Resort/Vacation Rental/Condos/Lodge	1,214	2.99
Special Housing	199	0.49
Sporting	560	1.38
Not Otherwise Specified Above	1,315	3.24
Blank or N/A	135	0.33
Total Transitory Locations	**40,621**	**100.00%**

Source: NPC ETL Cover Page Data
Note: Percents may not total 100.00 percent due to rounding.

There were 8,462 records where the enumerator wrote in the "Other" field of the ETL Cover Page. Of these, 1,939 (22.6 percent) were bed & breakfast accommodations. Some other entries include hunting lodges, cabins, mobile home parks, church retreats, etc.

5.5.3 Transitory Location Characteristics of Interest

For each TL, the CL was to complete information on the TL, including the HU statuses and contact history at each location, as seen in Figure 10.

Figure 10: CL Record of Statuses and Contact History at TL from ETL Cover Page

4. EMUMERATION INFORMATION *(Completed by CL)*	
(a) Actual number of spaces or units at location	
(b) Total number of Mobile Homes at TL (total 'MH' on TL Listing Sheet(s))	
(c) Total number of occupied spaces or units at location (total units on TL Listing Sheet(s))	
(d) Total number of spaces or units with another residence (total units on Listing Sheet(s))	
(e) Total number of Refusals (total Refusals on Listing Sheet(s))	
(f) Total number of first No-Contacts (total 'NC1' on TL Listing Sheet(s))	
(g) Total number of second No-Contacts (total 'NC2' on TL Listing Sheet(s))	
(h) Total number of completed TL Questionnaires	

Source: ETL Cover Page

This information was to be consolidated for each TL by the CL, meaning that after the TL had been enumerated, the CL was responsible for combining the information from all of the listing sheets for that TL and recording it on the Cover Page. Each of the boxes on the Cover Page, Section 4. *Enumerator Information*, as seen in Figure 10, should have been filled out in all cases. Unfortunately, many of these boxes were left blank on the Cover Pages, meaning that there are incomplete summary data on these TLs.

Table 10 shows the counts and percent of responses on the Cover Page for each of the characteristics of interest listed above in Figure 10. Of the 40,621 TLs, the box on the Cover Page next to the question regarding how many actual spaces/units at the TL contained a response 32,466 times and was left blank 8,155 times, meaning that this question was left unanswered just over 20 percent of the time. Most of the characteristics of interest had similar response rates, but the response rates did vary, meaning that the CLs were not consistent in filling out the boxes, even within a single Cover Page. Notice, however, that the response rate is better for the number of completed TL questionnaires, with only 13.48 percent of those boxes on the Cover Page being left unanswered. For more detailed tables on the response/non-response for each of the characteristics of interest, by TL type, please see Appendix N: Response/Non-Response for the Cover Page Characteristics of Interest, by TL Type.

Table 10: Response/Non-Response for the Characteristics of Interest at the TLs

Characteristic of Interest (Total number of)	TL Count		TL Percent	
	With No Response	With Response	With No Response	With Response
Spaces/units at location	8,155	32,466	20.08	79.92
Mobile homes at location	8,209	32,412	20.21	79.79
Occupied spaces/units at location	7,731	32,890	19.03	80.97
Spaces/units with another residence	8,498	32,123	20.92	79.08
Refusals	8,348	32,273	20.55	79.45
First No-Contacts	8,291	32,330	20.41	79.59
Second No-Contacts	8,411	32,210	20.71	79.29
Completed TL Questionnaires	5,476	35,145	13.48	86.52

Source: NPC ETL Cover Page Data

Table 11 shows a summary of the national totals from Section 4 of the Cover Page. We see that for the 40,621 TLs, there were a total of 1,609,857 spaces, and 524,038 were occupied. For 189,021 spaces, the respondent stated that they had another residence. There were a total of 116,918 completed EQs, with 14,316 refusals, 301,190 first no-contacts, and 254,612 second no-contacts. There were a total of 75,334 mobile homes listed at TLs.

Table 11: Summary of National Totals from the CL Record of Statuses and Contact History at TL from ETL Cover Page

Characteristic of Interest	National Total
Total number of TLs	40,621
Actual number of spaces/units at location	1,609,857
Total number of Mobile Homes at TL	75,334
Total number of occupied spaces/units at location	524,038
Total number of spaces/units with another residence	189,021
Total number of refusals	14,316
Total number of first No-Contacts	301,190
Total number of second No-Contacts	254,612
Total number of completed TL Questionnaires	116,918

Source: NPC ETL Cover Page Data

Logically, it is expected that the sum of the spaces with another residence, the refusals, the second no-contacts, and the completed TL questionnaires would equal the number of occupied spaces. Unfortunately, the numbers from Table 11 do not meet this expectation due to the incomplete information given on the Cover Page forms, as was shown in Table 10.

Table 12 shows the distribution of responses on the Cover Page for each of the characteristics of interest listed in Figure 10. Only a portion of the 40,621 TLs had responses for each characteristic, so next to each characteristic is the count of TLs with a response on the Cover Page. The distribution of each characteristic is represented by the mean, total, minimum, first

quartile, median, third quartile, 95th percentile, and maximum. Below is a description of each of these statistics:

- Mean: the average of the responses that were recorded
- Total: the sum of the responses that were recorded
- Minimum: the smallest observed response recorded
- First quartile: the cutoff for the lowest 25th percentile of the observed responses recorded; the value below which one quarter of the responses are located
- Median: the cutoff for the 50th percentile of the observed responses recorded
- Third quartile: the cutoff for the highest 25th percentile of the observed responses recorded; the value below which three quarters of the responses are located
- 95th percentile: the cutoff for the highest 5th percentile of the observed responses recorded; the value below which 95 percent of the responses are located
- Maximum: the largest observed response recorded

These statistics were selected to represent the distribution of these data because each of the characteristics of interest had strongly right-skewed distributions, meaning that the mean would not be a good indicator of the middle of the data. For more detailed tables on the distribution for each of the characteristics of interest, by TL type, please see Appendix O: Distribution for the Cover Page Characteristics of Interest, by TL Type.

Looking at Table 12, the row corresponding to the total number of completed TL questionnaires shows that the mean is higher than the value for the third quartile, which is an example of the right-skewness of the data and illustrates why the distribution is presented by these statistics. For the row corresponding to the total number of mobile homes at the TL, 75 percent of the TLs had no mobile homes and 95 percent had five or fewer. The row corresponding to the total number of second no-contacts shows a total of 254,612, which means that any residents in those units with no UHE would have been missed in the ETL enumeration.

Table 12: Distribution for the Characteristics of Interest at the TLs

Characteristic of Interest	Count of TLs with Response	Mean	Total	Minimum	First Quartile	Median	Third Quartile	95th Percentile	Maximum
Actual Number of Spaces/Units at TL	32,466	49.59	1,609,857	0	5	20	57	185	6,301
Total Number of Mobile Homes at TL	32,412	2.32	75,334	0	0	0	0	5	2,800
Total Number of Occupied Spaces/Units at TL	32,890	15.93	524,038	0	0	2	12	70	2,836
Total Number of Spaces/Units with Another Residence	32,123	5.88	189,021	0	0	0	1	27	2,800
Total Number of Refusals	32,273	0.44	14,316	0	0	0	0	2	172
Total Number of First No-Contacts	32,330	9.32	301,190	0	0	0	4	40	2,699
Total Number of Second No-Contacts	32,210	7.90	254,612	0	0	0	3	34	2,647
Total Number of Completed TL Questionnaires	35,145	3.33	116,918	0	0	1	3	16	380

Source: NPC ETL Cover Page Data

Because of the skewness of the data, it is difficult to compare the responses between the characteristics. Caution must be used when summarizing these data with the mean, but that statistic allows for easier comparison between characteristics. The mean number of refusals is very small in comparison to the mean number of occupied spaces, and it appears that roughly one-third of the occupied spaces are those with UHEs. An attempt at a second interview did reduce the number of no-contacts, as can be seen by comparing the mean for the number of first no-contacts with that of the number of second no-contacts.

5.6 Blocks

Appendix P: Blocks at the Start of the Operation and Blocks which Contain Housing Units after ETL Address Updated, by State shows the distribution of ETL blocks, by state, at the start of the operation, as well as the distribution of the blocks that contained HUs after the ETL address updates. At the start of the operation, there was a national total of 29,981 ETL blocks. After address updates, there was a national total of 16,828 blocks containing HUs from the ETL operation. From these data, there were over 13,000 blocks which were worked in ETL but had no HUs enumerated.

5.7 Cost and Staffing

The program office staff used methods predating the U.S. Census Bureau's commitment to comply with the Government Accountability Office's cost estimating guidelines and the Society of Cost Estimating and Analysis best practices to generate the cost results presented in this assessment. The Census Bureau believes these cost results are accurate and met the needs for which they were used. The Census Bureau will also adhere to these guidelines in producing 2020 Census cost estimates.

The budget for the ETL operation was based on cost estimates using a number of components that were developed early in the decade. For the 2010 Census, the T-Night operation was moved from GQE to HUE and renamed to ETL. The 2010 Congressional submission (baselined cost model) reflects the changes made to the operation. The baselined production workload was 15,288 TLs, with a $14,108,024 field budget.

As we approached implementation of the ETL operation, our knowledge of the components improved based on experience and data. We learned from similar field operations such as AC and GQV, as well as revisiting Census 2000 observations and Census Tests. The Census Bureau also looked at current external challenges and opportunities and worked with panels of experts at Census HQ to determine the impact of this information on cost drivers. Analysis was a collaborative effort among the DMD, FLD, and DSSD divisions. The final budget represented the DMD Cost Model in the C&P System, which DMD and FLD used to manage the operations during production. For this assessment, we also used the DMD C&P system to analyze the budgeted and actual costs for ETL.

The working sessions identified components of the original estimate that should remain the same and those that needed updates. The components of greatest concern were workload and productivity due to the high uncertainty and high impact on cost. The cost estimate validation,

completed in January 2010, resulted in increased workload, realignment of the ETL component, and revised assumptions.

Table 13 shows the budgeted and actual workload, cost, and variances for the ETL operation. Total field costs include production and training salary, mileage, other costs, Social Security tax, and Medicare. The budget for ETL was based on cost estimates using a number of components that were developed early in the decade. The estimated workload was 44,716 TLs at a cost of $18,415,297.

Table 13: 2010 Census ETL Budgeted and Actual Costs

	Budget Workload	Budget Cost	Actual Workload	Actual Cost	Cost Variance	Percent Cost Variance
ETL	44,716	$18,415,297	48,180	$12,700,137	$5,715,160	31

Source: DMD C&P

The ETL operation was underspent by 31 percent even though the workload was higher than planned. The actual workload was 48,180 TLs with a cost of $12,700,137 for the field operation. We believe that part of the reason costs were lower than budgeted and workload was higher than planned is because we visited more TLs but many required little fieldwork. See Section 5.4 for more information on the duplicate TL workload.

5.7.1 Summary of the ETL Field Operation Costs

Table 14 depicts the total ETL budget and actual cost, as well as a distribution of the budget and actual cost-by-cost factor. The table also shows each cost factor as a percentage of the total operational cost. The Census Bureau spent $12,700,137 or 69.0 percent of the total production budget for the ETL operation. Production salary was the largest category of spending, accounting for 47.5 percent of the total costs. Other areas of spending included training salary (27.6 percent of the total cost), mileage costs (21.8 percent of the total cost), and other miscellaneous costs (3.2 percent of the total cost).

Table 14: Summary of Field Operation Costs

	Budget	Actual	Percent of Budget Used	Percent of Actual Total Cost
Total	**$18,415,297**	**$12,700,137**	**69.0%**	**100.0%**
Workload	44,716	48,180	--	--
Production Salary	$9,463,882	$6,027,974	63.7	47.5
Training Salary	$5,519,799	$3,506,340	63.5	27.6
Mileage Cost	$3,355,490	$2,762,044	82.3	21.8
Miscellaneous	$76,126	$403,779	530.4	3.2

Source: DMD Budget and Formulation

All of the cost factors were under budget, excluding miscellaneous costs where we overspent by nearly five times the budgeted amount. Miscellaneous costs only accounted for 3.2 percent of the total operational costs. The large discrepancy between the budgeted and actual costs contributed to the overall budget surplus.

The largest component of the production budget was production salary cost, making up 47.5 percent of the total operational cost. In this cost category, we spent $6,027,974 or 63.7 percent of the production salary budget. The second-largest contributing factor to the budget was mileage cost. The Census Bureau spent $2,762,044 or 82.3 percent of the mileage cost budget. Another significant factor was training salary. In this cost category, we spent $3,506,340 or 63.5 percent of the training salary budget. The miscellaneous cost category was too small to have a real impact on the budget surplus; however, we did greatly overspend the budget for this category.

5.7.2 ETL Staffing

For ETL production, Census budgeted for 15,547 total field staff positions. ETL only had two positions, CLs and enumerators. CLs conducted the preliminary contact and appointed one or more lead enumerators to assist them in making assignments. Lead enumerators assisted in reviewing enumerator payroll but did not certify pay records. Table 15 presents the ETL production staffing counts, both budgeted and actual. The actual total field positions filled were 10,837, yielding a variance of 29.9 percent.

Table 15: ETL Production Staffing

Position	Frontloading Rate	Number of Positions Budgeted	Number of Positions Actual	Percent Variance of Budget
Total	**--**	**15,457**	**10,837**	**29.9%**
Enumerators and Lead Enumerators	50	14,416	9,553	33.7
Crew Leaders	--	1,041	1,284	-23.3

Source: DMD Budget and Formulation

5.8 Training

RCC/LCO managers received comprehensive high-level training on all operations during the period when the LCOs were opening. Primarily, these sessions were conducted during the period from October to December 2009. In addition, the RCC and LCO managers received job-specific training on larger operations to include NRFU and GQ. Managers for operations like ETL completed a self-study on the job-specific details.

The ETL workload was made available in PBOCS on February 22, 2010. When deployed for the operation, the LCO managers could look at their actual workload and make adjustments to Crew Leader Districts (CLD) based on the actual workload and the geographic distribution of TLs.

CLs were trained for four days, March 2, 2010 through March 5, 2010. Once the CLs were trained, they were given the preliminary contact forms and began contacting each TL to gather information about the TL and to obtain a site map. The information was returned to the LCO to be processed so enumeration packages could be prepared.

LCO office staff was instructed on how to use PBOCS to prepare assignments, check out TLs and check in each TL along with any accompanying EQs. Unfortunately, some of the LCOs misunderstood how to use the preliminary contact form. It was designed to be a tool for the CL to use to gather information from the TL owner/manager. The contact forms should not have been "checked-out" to the CLs, nor "checked-in" after the CL gathered the information. Due to the late development of some of the control functions, the label that was printed from PBOCS contained the same information as the label that was attached to the enumeration package given to the CL. In the LCOs where the staff erroneously checked-out and checked-in the preliminary contact form, PBOCS thought the TL was complete. In order to correct this situation, the database was reset.

Enumerators were trained for 3.5 days, March 16, 2010 through March 19, 2010. Much of their training was identical to other data collection enumerator trainings, but there were some differences. The differences included the concept that the enumerators would only complete an

EQ for those respondents who told them they had no other usual home other than the location where they were at the time of the ETL contact. Also, enumerators were trained on the 'team' concept that there would be at least two enumerators for every TL enumeration and the ETL enumerator would canvass their described area of the TL at the same time the other ETL enumerator(s) were canvassing their designated area. In addition, they were taught how to complete the companion forms that verified their canvassing activities.

5.8.1 Crew Leader Debriefing Results

CLs in the ETL operation were responsible for a variety of tasks as detailed in Section 0. The following information was collected after the close of ETL and is based on CL experiences with various aspects of training and working on the operation. The sample size was 160 CLs. The majority of responses were collected from the Kansas City and Seattle ROs.

Of the people that responded, the majority (57.4 percent) had experience working during earlier 2010 Census operations (AC, GQV, etc.); 35.2 percent had not worked for the Census Bureau prior to the ETL operation.

A large number of responses showed that CLs referred to their ETL materials as a reference source at least once a day (mainly the CL Manual) to several times a week for clarification of concepts and procedures. The concepts and procedures that proved difficult to understand were geocoding, making updates to census maps, and documenting additional TLs. CLs felt that the map spot number should be listed on the Cover Page, as well as other details about the TL, including contact name, phone numbers, and hours of operation, that were collected during the preliminary interview.

For enumerator training, there did not seem to be any issues with receiving and preparing assignments. The majority of CLs responded that they had enough materials to conduct the training for their crew, kits were complete, and there was enough training space. However, about half of the regions that responded said that they did not receive GQV large-format maps prior to the start of training. Of the responses, 61 regions responded that 1 percent to 25 percent of TLs were misclassified or incorrectly identified on Census maps. When visited, some were closed during the entire interviewing period of March 19, 2010 to April 16, 2010 or were open periodically during March 19, 2010 to March 31, 2010. Several of the TLs were not open during the ETL operation, and site managers had residences offsite.

Results from CLs on how successful they believed the training to be showed that enumerators struggled the most with canvassing procedures for racetracks, carnivals, bed & breakfasts, and cabins. Of the 120 responses, 19 RCCs responded that enumerators in their crew required a second observation because they did not appear to have a good understanding of the procedures.

Debriefing results from the CL review of the Master TL Binder submitted by enumerators showed that a majority of enumerators did not submit Info-comm forms and the Cover Page was not complete. While conducting ETL, enumerators encountered closed TLs and dangerous locations, as well as entrance problems such as locked buildings and restricted neighborhoods.

Of the CLs that responded on the Debriefing Questionnaire, the average AA that a CL had in their workload was 35, and repair work had to be conducted on at least 2 TLs during production. The most frequent types of TLs according to responses were hotels and motels, RV Parks, and campgrounds.

5.8.2 Enumerator Debriefing Results

Enumerators in the ETL operation were responsible for a variety of tasks as detailed in Section 0. The following information was collected after the close of ETL and is based on enumerator experiences with various aspects of training and working on the operation. The sample size was 1,218 Enumerators. The majority of responses were collected from the Kansas City, Charlotte, and Seattle ROs.

Of the people that responded, 42 had experience working during earlier 2010 Census operations (AC, GQV, etc.), and the majority (48) had not worked for the Census Bureau prior to the ETL operation.

A large number of responses to the question that asked how often ETL materials were used as a reference source (e.g., the Enumerator Manual) for clarification of concepts and procedure showed that enumerators felt comfortable completing their daily work. They referred back to materials fewer times than the CL. The same types of TLs were most frequently encountered, which were hotels and motels, RV Parks, and campgrounds. Based on results data from enumerators who provided feedback, the majority (68 percent) of respondents at RV parks, campgrounds, and marinas had not already been enumerated. Additionally, as stated in the CL section, many TLs were closed when the ETL operation occurred. More TLs could have been counted if enumerators were allowed to return at a different/second time. However, since these locations were closed at the time of enumeration, there were no individuals who could have occupied the slips/sites/spaces.

Overall, enumerators did not find canvassing procedures to be as difficult as the CLs. Enumerators used a combination of maps to locate and find their way around their AAs, mostly GPS and computer-generated maps, such as MapQuest, in addition to census maps that were provided. Site maps and GPS proved to be the most helpful in navigating campgrounds and marinas. Enumerators thought that census maps could have used more definition of back-roads, landmarks, etc., to make it easier to find a TL. In addition, map spots were found to be miles away from where they should have been.

For the interview component of the enumerator's job, identifying units or site numbers and distinguishing between trailers, campers, RVs, and mobile homes was sometimes a challenge. When conducting the interviews at each slip/space/unit, enumerators felt that, in trying to establish occupancy and determine if the respondent had a UHE, the process was confusing for respondents. The wording in Question 3 and Question 4 from the TL EQ seemed redundant to enumerators and confused respondents, causing them to answer yes instead of no, and vice versa. For example, "everyone" compared with "anyone" was confusing and respondents did not know who to include on the roster if a person was temporarily staying at the unit. In addition, some

respondents stated that they spent an equal amount of time at two different places and were unclear how to answer Question 4.

Enumerators also had difficulty in getting respondents to properly list people on the roster (overcount/undercount). Respondents did not know how to treat relatives and/or college students staying with them or kids who split time between divorced parents. About 28 percent of the time, the enumerator had to reword and explain one or both of Question 3 and Question 4.

5.9 Schedule

The Census Bureau used the 2010 DMD MAS to monitor and track the 2010 Census. The MAS was created and maintained by the Decennial Census staff through a web-based version of Primavera scheduling software - included 10,875 activity lines. Of the 10,875 activities, ETL directly related to 248 (2.3 percent). Of the 248 activities, 33 were housed under the 'ETL' Work Breakdown Structure (WBS), and the remaining 215 activities spanned all functional areas related to ETL (e.g., MTdb, FDCA, UCM, and assessments).

As shown in Table 16, of the finished activities, 177 activities (79 percent) both started and finished on time or ahead of schedule according to baseline dates.

Table 16: ETL Activities that Started and Finished On Time

	Number of Activities	Percent of Activities
Activities that Started and Finished on Time or Ahead	177	79.0
Activities that Started or Finished Late	48	21.0
Completed ETL Activities	**225**[3]	**100.0%**

Source: Master Activities Schedule

Table 17 shows the counts and percentages of activities that started and finished on time, and by groupings of all activities, milestone starts, milestone finishes, and task-dependent activities (all other activities that are not contingent on just a start or finish date). There were 145 (64 percent) activities that started on time or early and 131 (58 percent) activities that finished on time or ahead of schedule. Overall, the milestone activities, particularly the milestone finishes, were less frequently on schedule than task-dependent activities.

[3] There are 248 total ETL schedule activities. The schedule lines that are not finished relate to the ETL assessment and are not reported here.

Table 17: ETL Activities that Started or Finished on Time, by Activity Type

	All Activities		Milestone Starts		Milestone Finishes		Task Dependent Activities	
	Number	**Percent**	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Activities Started on Time or Early	145	64.0	8	50.0	NA	NA	137	62.0
Activities Finished on Time or Early	131	58.0	NA	NA	6	60.0	125	56.0
Completed Activities	**225**	**100.0%**	**16**	**100.0%**	**10**	**100.0%**	**222**	**100.0%**

Source: 2010 Census Master Activities Schedule

To generate the count of all activities that started on time or early, we added the milestone starts that started on time or early, the milestone finishes that finished on time or early[4], and the task-dependent activities that started on time or early. Similarly, to calculate the count of all activities that finished on time or early, we added the milestone starts that started on time or early[5], the milestone finishes that finished on time or early, and the task-dependent activities that finished on time or early.

5.10 Automation

The ETL used three Integral Systems and nine Support Systems to prepare, conduct, and complete backend activities. Those systems were described in Section 2.8.

The sections that follow will detail both how the systems worked in production and any issues documented for each system during ETL.

5.10.1 Integral Systems

5.10.1.1 Decennial Applicant, Personnel and Payroll System

DAPPS experienced performance issues in spring/summer 2009 during the early AC operation; by March 2010 a new architecture for the DAPPS environment was successfully deployed. DAPPS stability and performance improved tremendously, enabling DAPPS to meet the ETL and subsequent operations peak demands on the system. For example, at peak processing on May 4, 2010, DAPPS supported over 8,000 concurrent users who performed the necessary administrative functions to facilitate the hiring, training and paying of the temporary workforce needed to conduct the critical 2010 Census operations.

[4] Signify that we finished an activity earlier than expected.
[5] Signify that we started an activity earlier than expected.

5.10.1.2 Paper-Based Operations Control System

In fall 2008, the decision[6] was made to implement a contingency plan to de-scope the operational control system development for all paper-based operations from the FDCA contract. The PBOCS was established as the contingency application to manage and control the work conducted by field enumerator staff and to provide status reporting to management staff within the LCOs, the RCCs, and at Census Bureau HQ. As a direct result of the contingency nature of the PBOCS, reduced testing time affected the performance of the application throughout operations. The paragraphs below highlight the most prominent issues dealt with during ETL.

PBOCS was the first web-based operations control solution used at the Census Bureau. Using PBOCS, we were able to manage most of the field operations from one centralized location while still maintaining a regional and local office control model. This design led to some major gaps in executing, monitoring, and tracking operations not only from HQ, but also from RCCs and LCOs. Given the limitation of users prescribed on the system, the regions implemented administrative controls to ensure adherence to directives from HQ. However, the west coast was most impacted by the daily maintenance windows of 12:01AM – 7AM EST. As a result, offices on the west coast would often begin work at 4AM local time in order to maximize system use while available. The lesson learned from this experience is to separate regional data, even though it may be physically located in the same location. This centralized regional design scenario and reduced testing cycle time, coupled with an incompatibility between operating system software (Redhat), the hardware (Egenera) and the Oracle database created a scenario such that no more than three users (prescribed, but four or five actual) could be on the system at one time performing functions within the application at each site.

Cost and progress monitoring at all levels during the 2010 Census was another tremendously visible issue within PBOCS. Because of the challenges noted above, the stability of the database caused an unrecoverable impact to the design of the reports solution, which utilized Oracle Streams to synchronize data to a reporting database. The backlog of transactions to be synchronized became so great that over time, it could not be caught up. Modifications were also made to the C&P interface to ensure progress numbers were matching the field reports.
The Enumeration MAF Extract and the Universe were ingested successfully. PBOCS did not experience performance problems with check-in/check-out and shipping as in other operations. However, the ETL universe database was reset on March 20, 2010 due to problems created in PBOCS with checking out the Preliminary Contact Forms, which contained the same label barcode (PID) as the Master TL Binder. The Preliminary Contact Form was not intended to be checked out of PBOCS. The form was to be given to CLs for their use in gathering information only. Once they had received the form, they were to return it (along with any site maps) to the LCO for internal use in preparing TL assignments. In error, some LCOs checked out the form. This action caused confusion within the system when it was time to check out the TL, as PBOCS identified the TL as having been already checked out. Therefore, tracking and monitoring of the Preliminary Contact Forms was performed manually.

Although the duplication of the PIDs was an issue that affected the ETL operation, the biggest problem in tracking TL Binders was the duplication of TLs from the GQV operation. Listers in

[6] This decision is discussed more thoroughly in Section 3.1.3 Training of this document.

GQV incorrectly identified TUs within the TL as individual TLs. Instructions on how to identify all of the duplicates were sent to the field. Only one TL was to be selected and one TL ID as the survivor. However, many LCOs did not follow the instructions correctly. Additionally, the increase in TLs resulting from the GQV questionnaire skip pattern allowed all hotel/motels to be validated as TLs (unless it was a homeless shelter), instead of only those who had long-term occupants (e.g., extended stay). This issue also impacted RI selection. For more information, see Section 5.1.1.

Despite the above, due to dedication and commitment of contractor and government staff, data analysis and performance monitoring during operations revealed that work would be completed on time.

5.10.1.3 Field Data Collection Automation – Office Computing Environment

Small-Format Map Printing

The design decision to retain small-format map file metadata in a central database but to cache small-format map files to the LCOs worked well. Metadata could be updated easily without worry of synchronization issues, and maps, once cached, could be printed without impact on network performance.

Using generic small-format Block maps across all operations eliminated the need to create and distribute electronic copies of the small-format Block maps to the LCOs for each operation. Also, use of the same Locator and AA maps across multiple operations (e.g., GQV, Group Quarters Advance Visit (GQAV), GQE, and ETL) eliminated the need to create and distribute electronic copies of the small-format Locator and AA maps to the LCOs for some operations. The ETL operation reused the small-format Locator, AA, and Block maps delivered to the LCOs and printed at the LCOs for the GQV operation. The only map printing performed for the ETL operation was on-demand map printing. LCOs printed maps on-demand for the ETL operation when (1) maps printed during GQV were damaged and needed to be reprinted and (2) when extra copies of maps were needed. The on-demand print count for the ETL operation was tracked together with the on-demand print count for the GQAV and GQE operations. Approximately 71,600 maps were printed on-demand for the GQAV, GQE, and ETL operations combined.

The need for FLD reports was emphasized during the design of the map printing control system. However, there was not sufficient emphasis placed on the needs of the FLD Geographic Support Branch (GSB) for reports to monitor the ingest of maps and the workload printing of maps. As a result, daily, weekly, and monthly ad hoc reporting was developed and refined during production operations. While FLD reports are essential, reports to monitor the ingest of maps and the workload printing of maps across all LCOs and across all operations for the FLD GSB are also essential.

While workload map printing was tracked via the D-1189, Map Printing Report for LCO, neither FLD nor the FLD GSB had a requirement to track on-demand map printing.

The map printing control system was designed on the assumption that address delineation for each operation would result in CLDs with a limited number of AAs in each CLD (i.e., less than 150) and AAs with a limited number of Blocks in each AA (i.e., less than 150). This assumption proved to be wrong. It was discovered that address delineation produced some CLDs for some operations in which there were thousands of AAs and some AAs for some operations in which there were thousands of Blocks. As a result, the map printing control system user interface had to be redesigned to display in drop-down lists these 'large' CLDs as ranges of AAs within the CLD and these 'large' AAs as ranges of Blocks within the AA.

Passwords

A lack of understanding of how the FDCA-OCE related to PBOCS and other applications made it challenging for staff to understand how passwords and access rights worked (e.g., a user might have a PBOCS account but could not access the system if they did not also have a FDCA account).

If staff without an email address forgot their password, then a new password could not be sent through email, increasing the number of remedy tickets.

Enumerators moving between LCOs

The system could not accommodate enumerators moving between LCOs, so if an enumerator was moved to another LCO, it required manual intervention from DAPPS in order for transferred enumerators to show up in the control system.

5.10.2 Support Systems

5.10.2.1 Master Address File/Topologically Integrated Geographic Encoding and Referencing System

The MTdb automation components for the ETL operation were the Geographic Reference File – Code (GRF-C), Address List, Field Operations Supervisor District/CLD Delineation Software, Large-Format Map Software, and Small-Format Map Software. There were no issues reported with the GRF-C, Address List, Large-Format Maps Software and Small-Format Maps Software. The large-format maps and address list were printed without any problems.

5.10.2.2 Universe Control and Management System

Due to a defect within PBOCS, resulting in the duplication of PIDs across operations, HQ Processing successfully performed unplanned programming to replace and track PIDs.

5.10.2.3 Response Processing System

There were no specific issues with the RPS.

5.10.2.4 Decennial Response Integration System

Due to the de-scope of the shipping functionality from PBOCS, the defined interface between PBOCS and DRIS was unsuccessful in completely satisfying all of the required functions to achieve comprehensive inventory control. The following describes each of the interfaces between DRIS and PBOCS and the operational deviations that were actually performed during production:

- **Linkage of enumerator continuation forms to parent forms**

  As a result of job scheduling decisions, delays, and users shipping questionnaires without checking into PBOCS, many continuation forms were received from the LCOs before the linkage information was received electronically. A special linking application was created by DRIS to periodically search for the linking data necessary to associate continuation forms that were previously unlinked. See Section 5.1.3.1 for more on continuation forms.

- **Questionnaire Version Number**

  The primary issue with the DRIS-PBOCS interface was related to DRIS tracking/sending the version number for the case. All the forms from DRIS were coming with the same version number even though multiple versions were shipped from the LCO. Despite the version number conflict, all cases were reconciled through the last operation. FLD was provided with custom reports and data queries for this additional reconciliation. In many instances, forms encountered by DRIS did not contain a proper version number. DRIS was instructed to capture the handwritten version number (if one existed) if the labeled version number was missing. The handwritten number was subject to legibility issues and data capture error. DRIS was instructed to default to the same version number if no version could be ascertained from either the label or handwritten information on the form. In some instances, PBOCS printed the labels "out of register" such that the break between labels fell across the middle of the label area, resulting in labels that contained multiple case ID barcodes and multiple versions on one label. DRIS instituted a manual workaround, but if the true version number could not be determined, DRIS was instructed to use the default version number.

- **DRIS to PBOCS Notification of box receipt**

  DRIS transmitted receipt notifications to PBOCS of all boxes received. However, once shipping was discontinued from PBOCS, the DRIS interface did not send box confirmations to PBOCS. However, all form notifications were received by PBOCS and reconciled by making some changes in the implementation to reflect absence of the shipping functionality. Due to the removal of the shipping functionality from PBOCS, these data were not used as intended during ETL. Very few acknowledgments were received from PBOCS in response to these notifications.

- **Notification of form receipt**

  DRIS transmitted receipt notifications to PBOCS of all forms received from the field. During most of the production period, no acknowledgements were received in response as a result of the shipping de-scope. PBOCS worked extensively with UCM to ensure accountability.

5.10.2.5 Cost and Progress System

Due to a compressed PBOCS development and testing schedule, PBOCS had to limit the number of variables that they would provide to C&P, which resulted in the need for DMD operational staff to modify and eliminate several reports. Reports had to be revised because we could not receive certain variables from PBOCS. Examples of variables not delivered included "TLs Assigned", "TLs Checked In", the number of HUs selected for Random RI, and the number of TLs selected for Random RI. Two reports were eliminated, for RI and for shipping.

Because of these late changes, there were inaccuracies in the progress data that PBOCS provided C&P that were later corrected. There were many days in which no file was transmitted to C&P because the processing was taking so long. This resulted in time-consuming workarounds (monitoring production and check-in manually) and occasionally required that DMD operational staff use Microsoft Excel spreadsheets to report on the ETL, increasing the chance of human error. As a work-around, PBOCS started sending C&P the data from alternative tables within the PBOCS schema. These alternative tables were refreshed within the timeframe needed to pass the data to C&P.

C&P experienced only occasional automation problems with the other source systems for the ETL. Other problems included database links that were not operational because the source database was down at the time the scheduled jobs ran.

5.10.2.6 Census Evaluations and Experiments System

CEE was the interface that transferred data from DRIS directly to DSSD. The AUX data from paper questionnaires data-capture were transferred through CEE. The AUX data were not part of the core data that DRIS transferred to DSPO. The core data created the DRF and Census Unedited File. The AUX data arrived daily to DSSD starting on February 25 and ending on October 5. There were several days during this period that DRIS was unable to transfer the data to DSSD. This was due to the interface being down or not working. It happened infrequently and when it did happen, it was fixed the next day. There were no negative repercussions for DSSD for receiving the data a day later. DRIS would then transfer the data on the following day when the interface was working.

5.10.2.7 National Processing Center - Automated Tracking and Control System

There were no automation problems with the ATAC System for the check-in of ETL forms and TL Binders.

Check-in of binders and map pouches occurred from late March to late April 2010. Operational forms were not tracked through PBOCS. NPC conducted the check-in of ETL forms, from March 26 to April 20, 2010. A total of 4,326 TL RI forms, 9,858 EQ/HU RI forms, and 47,280 Cover Pages were checked into the NPC ATAC system. NPC checked in just over 1,500 debriefing forms.

5.10.2.8 National Processing Center - Visual Basic Key from Paper

There were no automation problems for the VB KFP for the data-capture of the ETL Cover Page forms, debriefing forms, and address listing pages.

5.10.2.9 National Processing Center - Geographic Acquis-based Topological Real-time Editing System

GATRES did not undergo testing before it was fielded. During production, the functionality was slow.

Map scanning and map digitizing occurred May 6 through the end of July 2010. The ETL operation received just over 150,000 map pages, including 26,375 exception (non-census) maps.

5.11 Change Control

Change control was the process of identifying, documenting, approving or rejecting, and controlling changes to the ETL baseline. The ETL baseline reflected the original project plan, including requirements, schedule, and budget documentation. The HUE-OIT - and if necessary, the CIG - carefully reviewed proposed changes before incorporating changes to a revised baseline. The change control process successfully facilitated the implementation of changes throughout the lifecycle of the ETL.

Following a decision made by CIG on December 17, 2008, many ETL changes only required approval at the HUE-OIT level. The CIG approved a revision to the Change Control Management Plan that empowered teams, such as the HUE-OIT, to make changes to the schedule when appropriate without direct involvement from the CIG. The purpose of the Change Control Management Plan revision was to accomplish the following:

- Create a more effective and efficient change control process
- Improve integration of schedule changes
- Define the roles and expectations of stakeholders
- Define the change control documentation and communication process

The new process allowed integration teams to make their own changes except in the following instances:

- Increase in costs to the baseline budget
- Impact to other key activities on the alert report (for example, a change to a planned start or finish date)

- Owners of impacted activities did not agree on change
- Change to operation scope
- At discretion of the initiator

In general, the change control process was user-friendly. Most divisions submitted change requests (CR) for their schedule activities in a timely manner. However, at times, DMD staff had to prepare CRs for other areas to get the requests submitted in a timely manner. These situations occurred during the most demanding time of the operations and created additional work for DMD staff that was already short-staffed.

The ability of the team to make decisions on operational changes as long as scope creep, budget, and operation impacts were contained was a big advantage. It allowed quick implementation of changes that enabled the operation to continue on a reasonably uninterrupted course.

5.12 Schedule Changes

The 2010 MAS contained 10,875 schedule lines. Of the 10,875 activities, 248 had a WBS for the ETL operation. There were 33 activities specific to the ETL operation code.

The 2010 Census schedule was baselined on May 22, 2008. Subsequent to the baseline schedule, we approved and implemented 19 related CRs. Several program-related CRs were required to correct the MAS (specifically for Address Register and Map data at NPC) and separate the ETL operation, including the activities that occur in each of the mentioned WBSs. From July to October 2009, there were several issues surrounding preparation and delivery of training and field materials causing ETL production to schedule late. A number of meetings were required, a number of CRs were submitted, and a lockup was later implemented. All included discussion of and changes to dates, logic, relationships (including bounding), and durations within the Infrastructure, DMD, and NPC owned portions of the schedule. Training and field materials issues included 1) delivery of training materials and forms, which were late and pushed back on printing/kitting activities, and 2) changes to quantities (kit specification revisions).

ETL operation schedule changes affected many areas including - but not limited to - the following:

- Field staff training and operation start and finish dates
- Cost and progress
- Address extract and the universe
- Assignment preparation
- Matching and Review Coding System development
- Assessments

The changes included revisions to lags, durations, baseline dates, predecessor and successors, and responsible divisions. Some changes also added or deleted activities from the schedule.

5.13 Requirement Changes

The majority of CRs were program-related; however, there was one requirement change specific to ETL. This change was for the late deployment of PBOCS. The Census HQ building lost power the weekend of January 16-18, 2010, and due to this, the PBOCS Steering Committee agreed to change the deployment date from January 15, 2010 to January 19, 2010 so that the system would not need to be shut down the day after it was released to production. These changes affected when FLD could begin printing listings for affected operations, as well as when C&P began to receive data from PBOCS. The date change did not negatively influence completion of the operation.

5.14 Risk Management

Risk management for the 2010 Census focused on the identification, analysis, and mitigation of potential risks to the success of the program. The 2010 Census Risk Management plan allows for positive identification and mitigation of identifiable risks with the potential to affect overall program cost, schedule, technical, or compliance objectives.

Six primary functions comprise the program-level risk management process: Identify Risks, Analyze Risks, Plan Mitigation, Mitigate Risks, Assess Effectiveness, and Reassess Exposure.

As shown in Table 18, the 2010 Census Risk Register for ETL and ETL QC contained 18 risks. The ETL subteam monitored these risks on a monthly basis prior to and during production. There were no risks escalated to the CIG prior to the start of production. Stakeholders delivered requirements for the operations on time, and the load of the universe from UCM into PBOCS was successful. The only identified risk prior to entering the field was related to the universe and data capture of the GQV workload. A contingency plan was created for the unresolved OLQ address records by the GQ Operational staff. The table below shows the total numbers of risks identified for ETL under the HUE-OIT along with their risk status (red, yellow, and green).

Table 18: ETL Summary of Risks Status

Team	Operation	Total Risks	Number of Red Risks	Number of Yellow Risks	Number of Green Risks
HUE-OIT	Enumeration at Transitory Locations	18	2	8	8

Source: ETL Risk Register

The Census Bureau escalated one risk to the CIG during ETL production for backend activities. To resolve the issues, stakeholders implemented a work-around for tracking shipped forms, binders, and maps to NPC. DMD staff met weekly with all parties and used spreadsheets to track work using NPC system data.

In addition, there were no risks escalated to the CIG after the operations closed in the field. The C&P system was fully functional throughout production, yet PBOCS data were unreliable which

made reporting to senior staff a challenge. The C&P does not reflect actual close-out data from PBOCS.

6 Related Evaluations, Experiments, and/or Assessments

- 2010 Census Address Canvassing Operational Assessment Report
- 2010 Census Address Canvassing Profile Report
- 2010 Decennial Census: Item Nonresponse and Imputation Assessment Report
- 2010 Census Field Office Administration and Payroll Assessment Report
- 2010 Census Recruiting and Hiring Field Staff Assessment Report
- 2010 Census Decennial Applicant, Personnel, and Payroll System Assessment Report
- 2010 Census Content and Forms Design Assessment Report
- 2010 Census Decennial Response Integration System Paper Questionnaire Data Capture Assessment Report
- 2010 Operational Assessment for Type of Enumeration Area Delineation Assessment Report
- 2010 Census Universe Control and Management and Response Processing System Assessment Report
- 2010 Census Non-ID Processing Assessment Report
- 2010 Census Cost and Progress Assessment Report
- 2010 Census Group Quarters Validation Operation Assessment Report
- 2010 Census Group Quarters Enumeration Assessment Report
- 2010 Census Local Update of Census Addresses Assessment Report
- 2010 Census Service-Based Enumeration, Group Homes, and Carnival Locations Address List Update Assessment Report
- 2010 Census Service-Based Enumeration Operation Assessment Report
- 2010 Census Field Verification Operational Assessment Report

7 Key Lessons Learned, Conclusions, and Recommendations

Following the completion of the ETL operation, DMD conducted a series of Lessons Learned sessions, which included stakeholders from the ETL subteam and the HUE-OIT. They identified and gathered the following top lessons learned, conclusions, and 2020 Census recommendations listed below. The group used a modified nominal group technique to gather information from all participants on a range of topics related to the ETL operation.

This section of this assessment highlights the key successes, challenges, and recommendations identified by the group for production and RI.

7.1 Enumeration at Transitory Locations

7.1.1 Successes

1. DMD documented the planning design and process improvement for the 2010 Census ETL. Documentation included a complete workflow, narrative, and schedule. The ETL Decennial Operations Plan became a useful resource that describes in detail the ETL field operation.
2. Communication between HQ and the RCCs and the RCCs to LCOs for ETL was effective. Video teleconferencing and operational logs were successful.
3. The FDCA map printing system was successful for printing the ETL enumerator maps.
4. ETL used a unique TL EQ which captured whole households.
5. The SRD qualitative testing was successful in providing several recommendations to ETL based on observations and research conducted in the operational test.
6. The Content and Forms Design IPT coordinated efforts with SRD to report on ETL findings.
7. Preliminary contact procedures helped identify when the majority of people living at that TL would be home.
8. Group enumeration (teams of two enumerators) was effective. Group enumeration allowed for flexibility in staffing in order to complete an entire TL in one visit.

7.1.2 Challenges

1. Minimal testing was conducted for the operation.
2. There was an unexpected very high incidence of duplicated TLs in PBOCS which caused problems tracking the workload.
3. Maps:
    a. During AC, the field staff may have added map spots for individual sites in OLQs such as RV parks, marinas, and so forth. These updated maps were digitized after AC so if erroneous map spots were added, they were displayed on the block maps.
    b. The CLD boundaries for GQAV/E large format maps did not represent ETL CLDs. LCOs had to determine the number of CLDs needed for ETL, based on workload and geography of the LCO, and then draw the correct boundaries for the ETL CLDs.
    c. During GQV the staff was instructed to add a map spot for any added TL, and to correct any errors previously made during AC. In some instances, the GQV staff added map spots for individual sites just as the AC staff did. The changes were not made in the mapping system, so they showed up on the photo copied maps from GQV.
4. NPC staff contacted 121 management companies as a part of SBE ALU. There were 96 that mentioned they would not have a completed 2010 schedule until December 2009/January 2010. No later follow-up was made to these companies.
5. Debriefing result data showed that:
    a. CLs had difficulty geocoding, making updates to census maps, and documenting additional TLs. Additionally, CLs felt that the map spot number should be listed on the Cover Page, as well as other details about the TL, including contact name,

phone numbers, hours of operation, etc., that were collected during the preliminary interview.
   b. Many TLs were closed when the ETL operation occurred.
   c. When conducting the interviews at each slip/space/unit, enumerators felt that, in trying to establish occupancy and determine if the respondent had a UHE, the process was confusing for respondents.
6. There were operational design and PBOCS decisions made at HQ that came late to ETL planning. Late decisions led to changes in plans and affected materials and procedures.
7. There was no linkage between the HU enumeration data and the TL itself; therefore no analysis could be conducted on the ETL population by TL type.
8. Research conducted on ETL continuation forms revealed that the forms may have gone astray from the ETL operation. Only eleven records were found on the DRF with an ETL operation code, none of which had a matching PID to the D-15 TL Questionnaire parent form. Additionally, DRIS did not provide HQ with output for any of the supplemental forms, to which they would have applied a PID to.
9. There was a lack of full integration, which made reporting a daily challenge. Data compiled for reports came from multiple sources (DAPPS, C&P, FLD, etc.) and required several reviews for accuracy.
10. Changes to the 2010 program design in 2008 resulted in changes in requirements and requirement processing. Due to time constraints, this often resulted in gaps in requirements integration.
11. Creating the budget for the 2010 Census ETL operation was a challenge since the Census 2000 budget contained limited information. The Census 2000 budget also focused on Census 2000 budget instead of actual cost.

7.1.3 Recommendations

1. Learn more about the living situations of the ETL population.
2. Conduct more testing for the ETL operation. For example, include the operation in the DR to permit early testing.
3. Training:
   a. Conduct classroom training for LCO Office Managers instead of providing a self-study. This will allow Office Managers to become thoroughly familiar with procedures and receive answers to any questions or concerns during training.
   b. Provide more training on the TL population in AC and GQV
      i. Revise the GQV training procedures and GQV Questionnaire
4. Provide the ETL operation with their own (operation-specific) maps, not use GQ's maps.
5. Keep preliminary contact and team enumeration procedures.
6. Continue to use ETL operation-specific forms and EQ.
7. Develop a method to link the TL facility with the TL units (EQs) (associate HU questionnaires with the parent TL).
8. Ensure ETL continuation forms are tracked through processing systems and linked to D-15 TL Questionnaire parent forms.
9. Automate ETL Production and QC and develop a data warehouse.

10. Improve NPC procedures to follow-up with management companies as a part of SBE ALU.
11. Develop a Census Bureau data dictionary to include ETL common acronyms and terminology.
12. Improve communication through stakeholders by ensuring teams meet regularly through production and utilize a shared portal site or share drive to communicate information.
13. Develop reporting systems (requirements documenting, planning, status reporting, etc.) that meet the needs of all stakeholders, including those specifically needed by FLD. Include other program areas in the development and testing of reports needed by stakeholders other than FLD.
14. Develop a public website or method to inform the public about what type of enumeration will occur in their area and the timeframe.
15. Continue the same method of printing enumerator maps as used in the 2010 Census FDCA map printing system, if paper maps are used in the 2020 Census.
16. Continue sharing field materials in advance of the operations.
17. Improve materials and material review process:
    a. Improve ETL-specific forms.
    b. Follow the plan to conduct the FLD material reviews - draft 1, draft 2 and a dry run.
    c. Distribute a list of form numbers used by enumerators/field staff in the operation, or post to the portal in an accessible, usable location.

7.2 Conclusions

The ETL operation was scheduled from March 19 to April 12, 2010, but several of the TLs were not open during the ETL timeframe. Furthermore, site managers had residences off-site so they were not available during the preliminary contact visit. Debriefings showed that when CLs visited TLs to conduct the preliminary contact, some TLs were closed during the entire interviewing period or were open periodically from March 19, 2010 to March 31, 2010. The Office of Inspector General (OIG) Quarterly Report to Congress from May 2010 noted that some of these locations included cold-climate areas (e.g., Augusta, Maine; Morgantown, West Virginia; and Asheville, North Carolina).

Additionally, in the same OIG observation report, respondents at RV parks replied that they were likely moving north when northern parks opened on or around April 1, 2010. This nationwide movement is described as the RV caravan "mass migration." It is unknown if there are implications in census data as to this trend. For the 2020 Census, the Census Bureau should focus on implementing the ETL operation on: 1) at a date and a time when the transitory population is stationary (if it is around April 1, 2010, this is a non-trivial complication) and 2) when most respondents will be home. This will reduce the likelihood of missing and duplicating people.

The preliminary contact procedure was a late addition to the ETL operation that was intended to obtain information about the HU workload before entering the field to conduct enumeration. The preliminary contact was successful in capturing such information and identifying the tools/methods needed to conduct the enumeration, but the form created issues in PBOCS.

Because of late changes to the ETL design and hasty development of materials, procedures for using the form were unclear to the LCOs. The preliminary contact form was checked into the control system in error and contained the same PID as the Master TL Binder. The Census Bureau had overlooked the duplication of the PID labels, which caused duplication of the TL universe within the system, affecting tracking and monitoring of the operation.

It is critical that we improve procedures across the board for ETL in 2020, clearly identify the TL universe, and list TUs appropriately. The misunderstanding of procedures contributed to the following operational difficulties:

- The Master TL Binder PID label was not unique in itself. Duplication of TLs occurred in PBOCS when preliminary contact forms were checked into the system in error by the field.
- During AC and GQV, unclear procedures led to thousands of addresses (sites/spaces/slips) being incorrectly listed as TLs.
- Enumerators used site maps to make updates, not official census maps as directed in the 2010 Census ETL enumerator manual. Map spots may have not been placed in correct locations.

The Census Bureau should also continue to test operational forms. Because the key component of ETL is establishing occupancy of the unit, improved materials that are easier to understand and respond to could better serve the ETL population.

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Appendix A: Terminology and Acronyms

Term	Definition
Usual Home Elsewhere (UHE)	A place the respondent lives and sleeps most of the time that is different from where they are staying on April 1, 2010 (Census Day).
Transitory Unit (TU) or Housing Unit (HU)	A housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from any other persons in the building and which have direct access from the outside of the building or through a common hall.

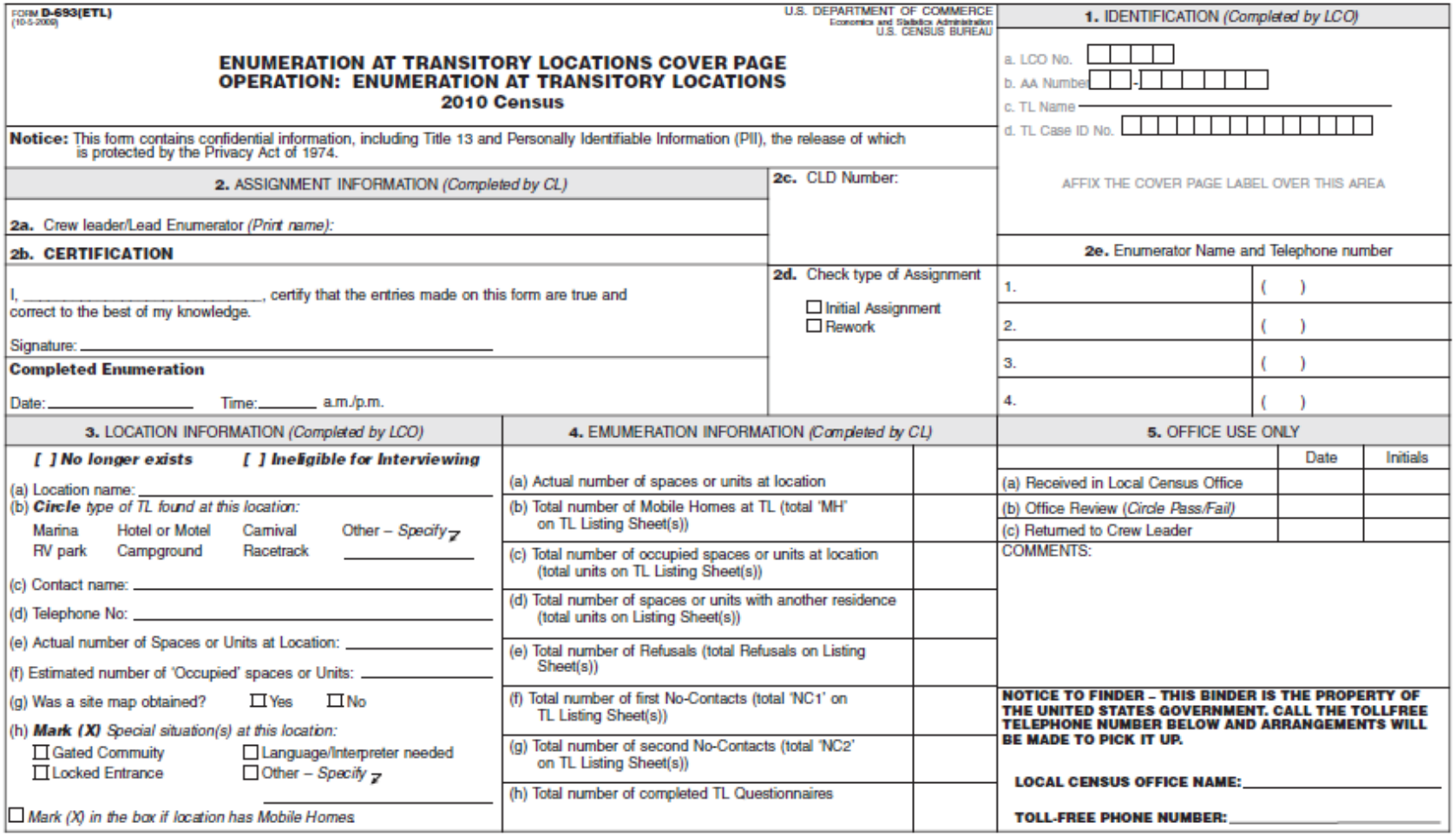
Acronym	Meaning
AA	Assignment Area
AC	Address Canvassing Operation
ALU	Address Listing Update
AMQA	Assistant Manager for Quality Assurance
ATAC	Automated Tracking and Control System
AUX	Auxiliary Questionnaire
C&P	Cost and Progress
CEE	Census Evaluations and Experiments System
CIG	Census Integration Group
CL	Crew Leader
CLD	Crew Leader District
CR	Change Request
DAPPS	Decennial Applicant, Personnel and Payroll System
DDP	Data-Defined Person
DMD	Decennial Management Division
DOP	Detailed Operational Plan
DR	Dress Rehearsal

Acronym	Meaning
DRF	Decennial Response Files
DRIS	Decennial Response Integration System
DSPO	Decennial Systems and Processing Office
DSSD	Decennial Statistical Studies Division
EQ	Enumerator Questionnaire
ETL	Enumeration at Transitory Locations
FDCA	Field Data Collection Automation
FDCA-OCE	Field Data Collection Automation-Office Computing Environment
FLD	Field Division
GATRES	Geographic Acquis-based Topological Real-time Editing System
GEO	Geography Division
GQ	Group Quarters
GQAV	Group Quarters Advance Visit
GQE	Group Quarters Enumeration
GQV	Group Quarters Validation
GRF-C	Geographic Reference File - Code
GSB	Geographic Support Branch
HQ	Headquarters
HU	Housing Unit
HUE	Housing Unit Enumeration
HUE-OIT	Housing Unit Enumeration-Operational Integration Team
IPT	Integrated Program Team
LCO	Local Census Office
MAF/TIGER	Master Address File / Topologically Integrated Geographic Encoding and Referencing System
MAS	Master Activities Schedule
MTdb	MAF/TIGER Database
NPC	National Processing Center
NRFU	Nonresponse Follow-Up

Acronym	Meaning
OIG	Office of Inspector General
OLQ	Other Living Quarters
PBOCS	Paper-Based Operations Control System
PID	Processing ID
PRAO	Puerto Rico Area Office
QA	Quality Assurance
QC	Quality Control
RA	Remote Alaska
RCC	Regional Census Center
RI	Reinterview
RO	Regional Office
RPS	Response Processing System
RUE	Remote Update/Enumerate
RV	Recreational Vehicle
SBE	Service Based Enumeration
SP	Special Place
SRD	Statistical Research Division
SUPP	D-1E Supplemental Form
TL	Transitory Location
T-Night	Transient Enumeration
TU	Transitory Unit
UCM	Universe Control and Management
UE	Update/Enumerate
UHE	Usual Home Elsewhere
VB KFP	Visual Basic Data Capture System (Key From Paper)
VDC	Vacant Delete Check
WBS	Work Breakdown Structure

Appendix B: D-693 Cover Page

The image on this page shows an example of a D-693 Cover Page. CLs gathered information about TLs from the Preliminary Contact Form and then transferred it onto this form and attached it to the Master TL Binder.



FORM **D-693(ETL)** (10-5-2009)

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU

ENUMERATION AT TRANSITORY LOCATIONS COVER PAGE
OPERATION: ENUMERATION AT TRANSITORY LOCATIONS
2010 Census

Notice: This form contains confidential information, including Title 13 and Personally Identifiable Information (PII), the release of which is protected by the Privacy Act of 1974.

2. ASSIGNMENT INFORMATION *(Completed by CL)*

2a. Crew leader/Lead Enumerator *(Print name)*:

2b. CERTIFICATION

I, _____, certify that the entries made on this form are true and correct to the best of my knowledge.

Signature: _____

Completed Enumeration

Date: _____ Time: _____ a.m./p.m.

2c. CLD Number:

2d. Check type of Assignment

☐ Initial Assignment
☐ Rework

1. IDENTIFICATION *(Completed by LCO)*

a. LCO No. ☐☐☐
b. AA Number ☐☐-☐☐☐☐☐
c. TL Name _____
d. TL Case ID No. ☐☐☐☐☐☐☐☐☐☐☐☐☐

AFFIX THE COVER PAGE LABEL OVER THIS AREA

2e. Enumerator Name and Telephone number

1.	( )
2.	( )
3.	( )
4.	( )

3. LOCATION INFORMATION *(Completed by LCO)*

[ ] No longer exists ***[ ] Ineligible for Interviewing***

(a) Location name: _____
(b) ***Circle*** *type of TL found at this location:*
Marina Hotel or Motel Carnival Other – *Specify*
RV park Campground Racetrack _____
(c) Contact name: _____
(d) Telephone No: _____
(e) Actual number of Spaces or Units at Location: _____
(f) Estimated number of 'Occupied' spaces or Units: _____
(g) Was a site map obtained? ☐ Yes ☐ No
(h) ***Mark (X)*** *Special situation(s) at this location:*
☐ Gated Community ☐ Language/Interpreter needed
☐ Locked Entrance ☐ Other – *Specify* _____

☐ *Mark (X) in the box if location has Mobile Homes*

4. EMUMERATION INFORMATION *(Completed by CL)*

(a) Actual number of spaces or units at location	
(b) Total number of Mobile Homes at TL (total 'MH' on TL Listing Sheet(s))	
(c) Total number of occupied spaces or units at location (total units on TL Listing Sheet(s))	
(d) Total number of spaces or units with another residence (total units on Listing Sheet(s))	
(e) Total number of Refusals (total Refusals on Listing Sheet(s))	
(f) Total number of first No-Contacts (total 'NC1' on TL Listing Sheet(s))	
(g) Total number of second No-Contacts (total 'NC2' on TL Listing Sheet(s))	
(h) Total number of completed TL Questionnaires	

5. OFFICE USE ONLY

	Date	Initials
(a) Received in Local Census Office		
(b) Office Review *(Circle Pass/Fail)*		
(c) Returned to Crew Leader		

COMMENTS:

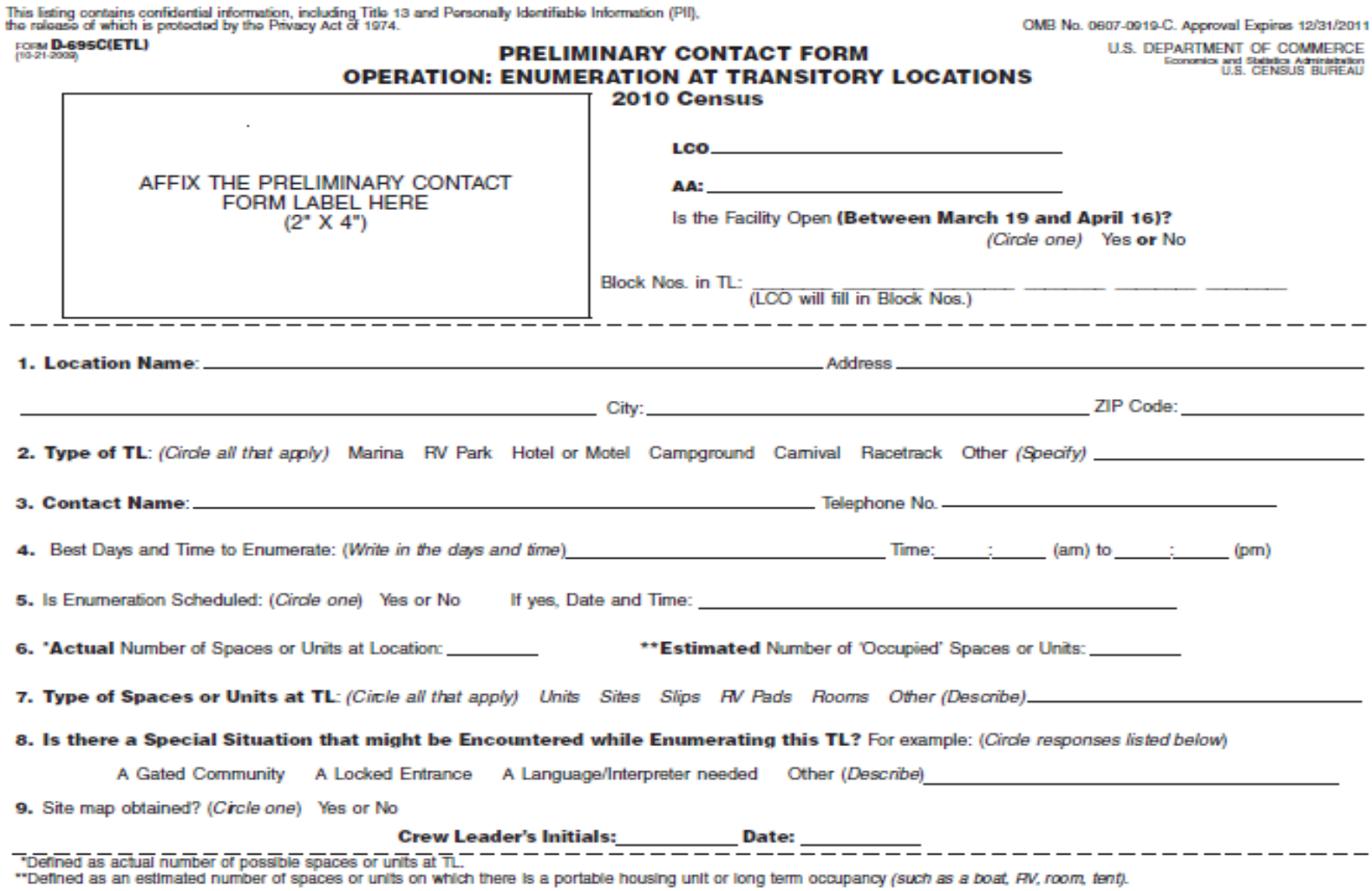
NOTICE TO FINDER – THIS BINDER IS THE PROPERTY OF THE UNITED STATES GOVERNMENT. CALL THE TOLLFREE TELEPHONE NUMBER BELOW AND ARRANGEMENTS WILL BE MADE TO PICK IT UP.

LOCAL CENSUS OFFICE NAME: _____

TOLL-FREE PHONE NUMBER: _____

Appendix C: Preliminary Contact Form

The image on this page shows an example of a D-695C Preliminary Contact Form that CLs used to gather information about TLs prior to the start of the operation.



This listing contains confidential information, including Title 13 and Personally Identifiable Information (PII), the release of which is protected by the Privacy Act of 1974.

OMB No. 0607-0919-C. Approval Expires 12/31/2011

FORM **D-695C(ETL)** (10-21-2009)

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU

PRELIMINARY CONTACT FORM
OPERATION: ENUMERATION AT TRANSITORY LOCATIONS
2010 Census

AFFIX THE PRELIMINARY CONTACT FORM LABEL HERE (2" X 4")

LCO _____

AA: _____

Is the Facility Open **(Between March 19 and April 16)?** *(Circle one)* Yes **or** No

Block Nos. in TL: _____ _____ _____ _____ _____ _____
(LCO will fill in Block Nos.)

1. Location Name: _____ Address _____

_____ City: _____ ZIP Code: _____

2. Type of TL: *(Circle all that apply)* Marina RV Park Hotel or Motel Campground Carnival Racetrack Other *(Specify)* _____

3. Contact Name: _____ Telephone No. _____

4. Best Days and Time to Enumerate: (*Write in the days and time*)_____ Time:_____:_____ (am) to _____:_____ (pm)

5. Is Enumeration Scheduled: (*Circle one*) Yes or No If yes, Date and Time: _____

6. ***Actual** Number of Spaces or Units at Location: _____ ****Estimated** Number of 'Occupied' Spaces or Units: _____

7. Type of Spaces or Units at TL: *(Circle all that apply) Units Sites Slips RV Pads Rooms Other (Describe)*_____

8. Is there a Special Situation that might be Encountered while Enumerating this TL? For example: (*Circle responses listed below*)

A Gated Community A Locked Entrance A Language/Interpreter needed Other (*Describe*)_____

9. Site map obtained? (*Circle one*) Yes or No

Crew Leader's Initials:_____ **Date:** _____

*Defined as actual number of possible spaces or units at TL.
**Defined as an estimated number of spaces or units on which there is a portable housing unit or long term occupancy *(such as a boat, RV, room, tent)*.

Appendix D: Transitory Location Unit Verification and Listing Page

The image on this page shows an example of the Unit Verification, and the image on the next page shows the Address Listing Page. These blank pages listed only the TL addresses known to the Census Bureau at the start of the ETL operation.

Enumerator Name: _____ Page _____ of _____

FORM **D-693.1(ETL)** (11-17-2009)

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU

OMB No. 0607-0919-C: Approval Expires 12/31/2011

1. IDENTIFICATION (LCO fills out)

a. LCO No./Name ☐☐☐ / _____

b. State ☐☐ c. County ☐☐☐ d. Tract ☐☐☐☐☐☐

e. AA Number ☐☐-☐☐☐☐☐

f. TL Case ID No. ☐☐☐☐☐☐☐☐☐☐☐☐

g. TL Name _____

h. TL Address _____

_____

TRANSITORY LOCATION UNIT VERIFICATION PAGE
OPERATION: ENUMERATION AT TRANSITORY LOCATIONS
2010 Census

Notice: This form contains confidential information, including Title 13 and Personally Identifiable Information (PII), the release of which is protected by the Privacy Act of 1974.

2. INSTRUCTIONS

The following instructions will assist you in filling out the necessary information on the D-693.2(ETL), Transitory Location Listing Sheet.

Column 1: Print the unit or site number (occupied or unoccupied – except for hotels or motels where you will only write in the unit numbers provided by contact person). Be sure to list units as they appear on the ground. Identify which sites have mobile homes (with or without wheels) on them by marking box with an "X" in the MH in Column 1. See definition below*.

Column 2: *Is this site occupied? (For example, an RV, boat, tent, or camper is parked there.)*
Mark 'Yes' or 'No' in this column. If 'No', mark box with an "X" in the 'No–End' column, continue to on the next site. if 'Yes,' mark box with an "X" in the 'Yes,' column and knock on the door.
Use the following script:
Hello, I'm (Your name) **from the U.S. Census Bureau.** (*Show ID card*). **To make sure we count everyone in the Census, we visit places like hotels, motels, RV parks, and marinas.**

Column 3: *Hand the respondent a D-1(F), Information Sheet, and allow time so they can read the Confidentiality Notice.*
Ask, **Does everyone here have another place to live besides this** (*RV/boat/room/unit*)**?**
If 'Yes,' mark box with an "X" in the 'Yes' column and go to the next column.
If 'No, no other place to live,' mark box with "X" in the 'No' column. Then complete a D-15, Transitory Location Questionnaire, and fill in Column 5 with the respondent's name.
If the respondent refuses to give any additional information, but confirms that he or she has no usual home elsewhere, then you have established that the respondent should be counted at the site.
Refer to Enumerator Checklist, Task 8, Handling Problem Situations.
If the respondent refuses to give any additional information at all, mark "X" in the 'R' column for refusal, continue on to the next site.
If no one is available or not at home, mark "X" in the 'NC1' column for No Contact on 1st visit. Before leaving the location, do a 2nd visit to see if anyone arrived home. If someone is there, conduct an interview. If no one is home yet, mark "X" in the 'NC2' column for No Contact on 2nd visit. Your assignment is complete.

Column 4: *Ask,* **Does anyone spend more time in this** (RV/boat/room/unit) **than at another place?**
If more time in this unit, mark "X" in the "Yes," 'more time in this unit' column. Then complete a D-15, Transitory Location Questionnaire, and fill in Column 5 with the respondent's name.
If more time at another residence, mark "X" in the 'No' column. Then say, **You will be counted at the other place. Thank you.** *END THE INTERVIEW.*

Column 5: *Print Last Name and First Name Initial of the respondent.*

Note: *Print the totals for each column in the bottom row.*

**Mobile homes (also called trailers) are usually placed in one location and not expected to be moved, but may retain the ability to be moved. They may have a covering around the foundation or they may be elevated off the ground. A recreational vehicle (RV) or camping trailer is expected be moved either under its own power or towed.*

TL Case ID No: ____________ Enumerator Name: ____________ Page ______ of ______

FORM D-693.2(ETL)
(5-15-2009)

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU

TRANSITORY LOCATION LISTING SHEET

OPERATION: ENUMERATION AT TRANSITORY LOCATIONS

2010 Census

This form contains confidential information, including Title 13 and Personally Identifiable Information (PII), the release of which is protected by the Privacy Act of 1974.

Print site number and if the site is occupied in columns (1) and (2). Approach the unit and use the following script: **Hello, I'm** *(your name)* **from the U.S. Census Bureau.** *(Show ID card.)* **To make sure we count everyone in the Census, we visit places like hotels, motels, RV parks, and marinas.** *Hand the respondent a D-1(F), Information Sheet, and allow time so they can read the Confidentiality Notice.*

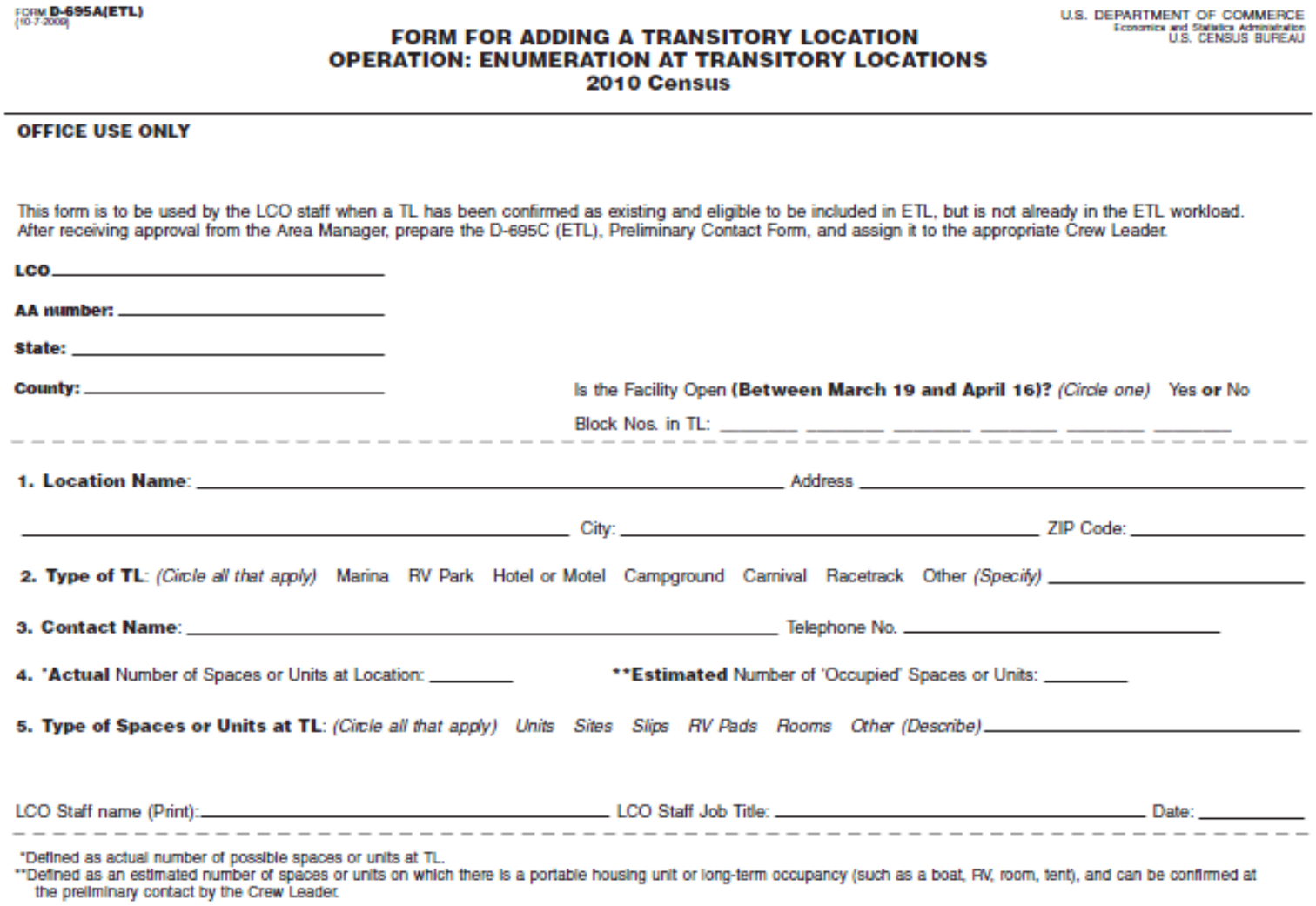
Print the unit or site number	Is this site occupied? *Yes or No*	**Does everyone here have another place to live besides this** *(RV/boat/room/unit)***?** Yes – *Go to column (4)* → No – *Complete D-15*	**Does anyone spend more time in this** *(RV/boat/room/unit)* **than at another place?** Yes – *Complete D-15* No – *Go to column (5)* →	Name of Respondent *(Last Name, First Name Initial)*
(1)	(2)	(3)	(4)	(5)
☐ MH	☐ Yes ☐ No – *END*	☐ Yes ☐ No – *Complete D-15* ☐ R ☐ NC1 ☐ NC2	☐ Yes, more time in this unit – *Complete D-15* ☐ No	
☐ MH	☐ Yes ☐ No – *END*	☐ Yes ☐ No – *Complete D-15* ☐ R ☐ NC1 ☐ NC2	☐ Yes, more time in this unit – *Complete D-15* ☐ No	
☐ MH	☐ Yes ☐ No – *END*	☐ Yes ☐ No – *Complete D-15* ☐ R ☐ NC1 ☐ NC2	☐ Yes, more time in this unit – *Complete D-15* ☐ No	
☐ MH	☐ Yes ☐ No – *END*	☐ Yes ☐ No – *Complete D-15* ☐ R ☐ NC1 ☐ NC2	☐ Yes, more time in this unit – *Complete D-15* ☐ No	
☐ MH	☐ Yes ☐ No – *END*	☐ Yes ☐ No – *Complete D-15* ☐ R ☐ NC1 ☐ NC2	☐ Yes, more time in this unit – *Complete D-15* ☐ No	
☐ MH	☐ Yes ☐ No – *END*	☐ Yes ☐ No – *Complete D-15* ☐ R ☐ NC1 ☐ NC2	☐ Yes, more time in this unit – *Complete D-15* ☐ No	
☐ MH	☐ Yes ☐ No – *END*	☐ Yes ☐ No – *Complete D-15* ☐ R ☐ NC1 ☐ NC2	☐ Yes, more time in this unit – *Complete D-15* ☐ No	
☐ MH	☐ Yes ☐ No – *END*	☐ Yes ☐ No – *Complete D-15* ☐ R ☐ NC1 ☐ NC2	☐ Yes, more time in this unit – *Complete D-15* ☐ No	
☐ MH	☐ Yes ☐ No – *END*	☐ Yes ☐ No – *Complete D-15* ☐ R ☐ NC1 ☐ NC2	☐ Yes, more time in this unit – *Complete D-15* ☐ No	
☐ MH	☐ Yes ☐ No – *END*	☐ Yes ☐ No – *Complete D-15* ☐ R ☐ NC1 ☐ NC2	☐ Yes, more time in this unit – *Complete D-15* ☐ No	
☐ MH	☐ Yes ☐ No – *END*	☐ Yes ☐ No – *Complete D-15* ☐ R ☐ NC1 ☐ NC2	☐ Yes, more time in this unit – *Complete D-15* ☐ No	
☐ MH	☐ Yes ☐ No – *END*	☐ Yes ☐ No – *Complete D-15* ☐ R ☐ NC1 ☐ NC2	☐ Yes, more time in this unit – *Complete D-15* ☐ No	
☐ MH	☐ Yes ☐ No – *END*	☐ Yes ☐ No – *Complete D-15* ☐ R ☐ NC1 ☐ NC2	☐ Yes, more time in this unit – *Complete D-15* ☐ No	
☐ MH	☐ Yes ☐ No – *END*	☐ Yes ☐ No – *Complete D-15* ☐ R ☐ NC1 ☐ NC2	☐ Yes, more time in this unit – *Complete D-15* ☐ No	
☐ MH	☐ Yes ☐ No – *END*	☐ Yes ☐ No – *Complete D-15* ☐ R ☐ NC1 ☐ NC2	☐ Yes, more time in this unit – *Complete D-15* ☐ No	
☐ MH	☐ Yes ☐ No – *END*	☐ Yes ☐ No – *Complete D-15* ☐ R ☐ NC1 ☐ NC2	☐ Yes, more time in this unit – *Complete D-15* ☐ No	
☐ MH	☐ Yes ☐ No – *END*	☐ Yes ☐ No – *Complete D-15* ☐ R ☐ NC1 ☐ NC2	☐ Yes, more time in this unit – *Complete D-15* ☐ No	
☐ MH	☐ Yes ☐ No – *END*	☐ Yes ☐ No – *Complete D-15* ☐ R ☐ NC1 ☐ NC2	☐ Yes, more time in this unit – *Complete D-15* ☐ No	

TOTALS FOR THIS PAGE – *The Units total* ***includes*** *mobile homes.*

	Units		MH		Yes		No		Yes		No		R		NC1		NC2		Yes, more time in unit		No	

Appendix E: Form for Adding a Transitory Location

The image on this page shows an example of a D-695 Add Page for TLs. If a TL was not included in the ETL Universe, then the LCO was to write address information for the TL on this blank page and the RCC would verify the add.



FORM **D-695A(ETL)**
(10-7-2009)

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU

FORM FOR ADDING A TRANSITORY LOCATION
OPERATION: ENUMERATION AT TRANSITORY LOCATIONS
2010 Census

OFFICE USE ONLY

This form is to be used by the LCO staff when a TL has been confirmed as existing and eligible to be included in ETL, but is not already in the ETL workload. After receiving approval from the Area Manager, prepare the D-695C (ETL), Preliminary Contact Form, and assign it to the appropriate Crew Leader.

LCO _____

AA number: _____

State: _____

County: _____ Is the Facility Open **(Between March 19 and April 16)?** *(Circle one)* Yes **or** No

Block Nos. in TL: _____ _____ _____ _____ _____ _____

1. Location Name: _____ Address _____

_____ City: _____ ZIP Code: _____

2. Type of TL: *(Circle all that apply)* Marina RV Park Hotel or Motel Campground Carnival Racetrack Other *(Specify)* _____

3. Contact Name: _____ Telephone No. _____

4. *Actual Number of Spaces or Units at Location: _____ ****Estimated** Number of 'Occupied' Spaces or Units: _____

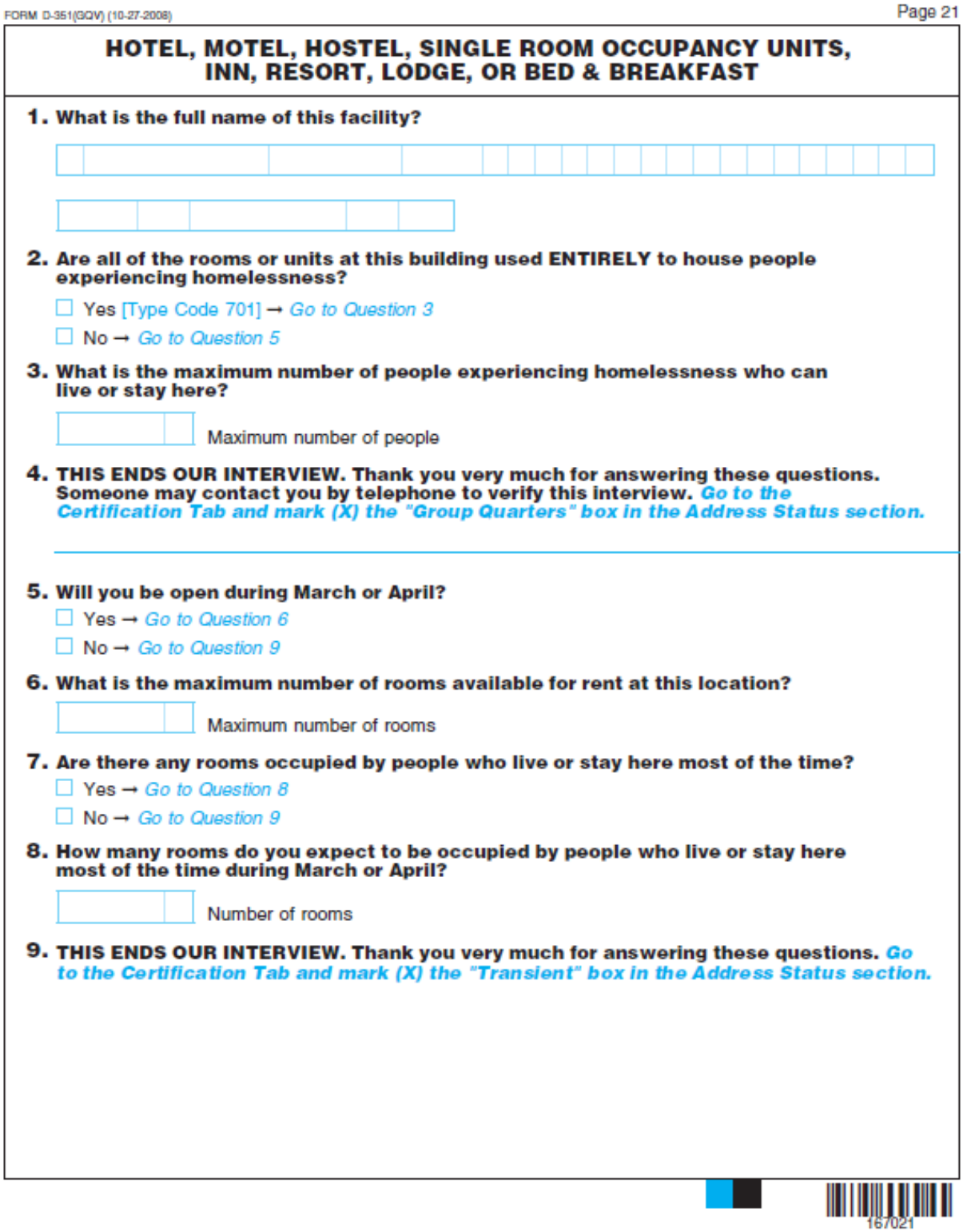
5. Type of Spaces or Units at TL: *(Circle all that apply)* *Units Sites Slips RV Pads Rooms Other (Describe)* _____

LCO Staff name (Print): _____ LCO Staff Job Title: _____ Date: _____

*Defined as actual number of possible spaces or units at TL.
**Defined as an estimated number of spaces or units on which there is a portable housing unit or long-term occupancy (such as a boat, RV, room, tent), and can be confirmed at the preliminary contact by the Crew Leader.

Appendix F: D-351 GQV Questionnaire - Tab 7

The image on this page shows an example of the GQV Form Tab for hotels/motels.



FORM D-351(GQV) (10-27-2008) Page 21

HOTEL, MOTEL, HOSTEL, SINGLE ROOM OCCUPANCY UNITS, INN, RESORT, LODGE, OR BED & BREAKFAST

1. What is the full name of this facility?

2. Are all of the rooms or units at this building used ENTIRELY to house people experiencing homelessness?

☐ Yes [Type Code 701] → *Go to Question 3*

☐ No → *Go to Question 5*

3. What is the maximum number of people experiencing homelessness who can live or stay here?

Maximum number of people

4. THIS ENDS OUR INTERVIEW. Thank you very much for answering these questions. Someone may contact you by telephone to verify this interview. *Go to the Certification Tab and mark (X) the "Group Quarters" box in the Address Status section.*

5. Will you be open during March or April?

☐ Yes → *Go to Question 6*

☐ No → *Go to Question 9*

6. What is the maximum number of rooms available for rent at this location?

Maximum number of rooms

7. Are there any rooms occupied by people who live or stay here most of the time?

☐ Yes → *Go to Question 8*

☐ No → *Go to Question 9*

8. How many rooms do you expect to be occupied by people who live or stay here most of the time during March or April?

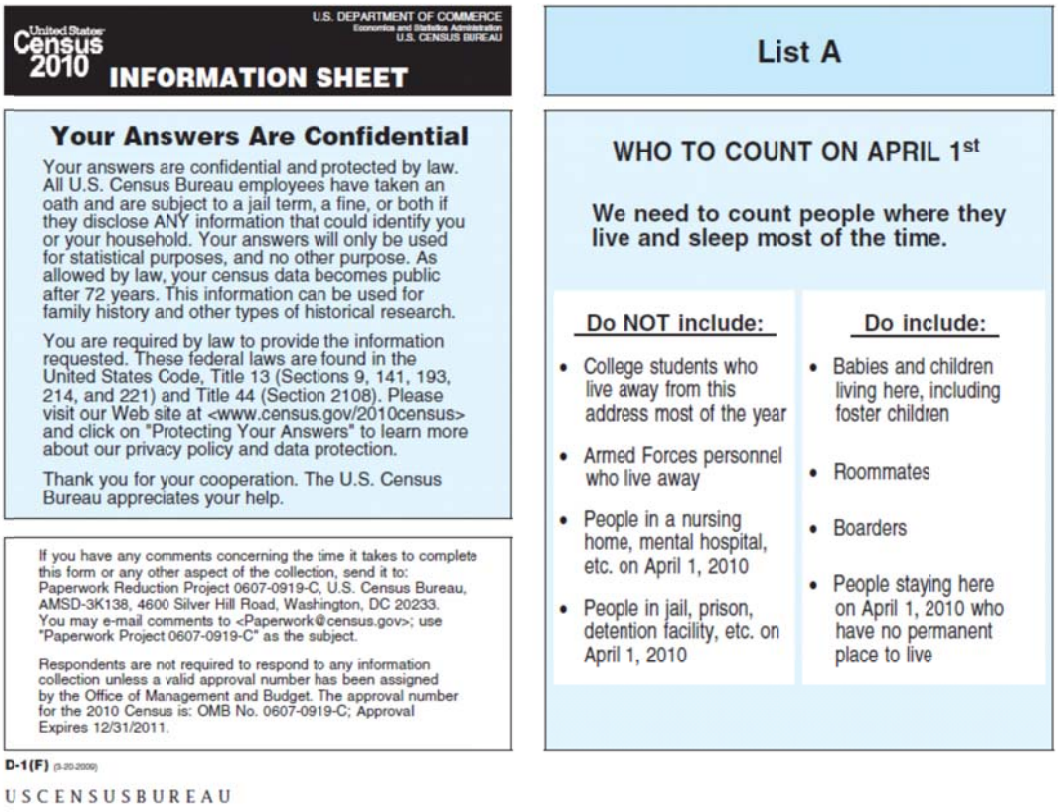
Number of rooms

9. THIS ENDS OUR INTERVIEW. Thank you very much for answering these questions. *Go to the Certification Tab and mark (X) the "Transient" box in the Address Status section.*

167021

Appendix G: Information Sheet

The image on this page shows the front side of the information sheet. The left column presents the information about confidentiality that enumerators were required to convey to respondents. The right side presents the Residence Rules and examples of how the census counts people in various living situations.



United States Census 2010

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU

INFORMATION SHEET

Your Answers Are Confidential

Your answers are confidential and protected by law. All U.S. Census Bureau employees have taken an oath and are subject to a jail term, a fine, or both if they disclose ANY information that could identify you or your household. Your answers will only be used for statistical purposes, and no other purpose. As allowed by law, your census data becomes public after 72 years. This information can be used for family history and other types of historical research.

You are required by law to provide the information requested. These federal laws are found in the United States Code, Title 13 (Sections 9, 141, 193, 214, and 221) and Title 44 (Section 2108). Please visit our Web site at <www.census.gov/2010census> and click on "Protecting Your Answers" to learn more about our privacy policy and data protection.

Thank you for your cooperation. The U.S. Census Bureau appreciates your help.

If you have any comments concerning the time it takes to complete this form or any other aspect of the collection, send it to: Paperwork Reduction Project 0607-0919-C, U.S. Census Bureau, AMSD-3K138, 4600 Silver Hill Road, Washington, DC 20233. You may e-mail comments to <Paperwork@census.gov>; use "Paperwork Project 0607-0919-C" as the subject.

Respondents are not required to respond to any information collection unless a valid approval number has been assigned by the Office of Management and Budget. The approval number for the 2010 Census is: OMB No. 0607-0919-C; Approval Expires 12/31/2011.

D-1(F) (3-20-2009)

USCENSUSBUREAU

List A

WHO TO COUNT ON APRIL 1st

We need to count people where they live and sleep most of the time.

Do NOT include:

- College students who live away from this address most of the year
- Armed Forces personnel who live away
- People in a nursing home, mental hospital, etc. on April 1, 2010
- People in jail, prison, detention facility, etc. on April 1, 2010

Do include:

- Babies and children living here, including foster children
- Roommates
- Boarders
- People staying here on April 1, 2010 who have no permanent place to live

The image on this page shows the back of the information sheet. These three lists were to help respondents answer person-level demographic questions. List B presents the 14 relationship categories, List C presents answers to the Hispanic origin question, and List D presents answers to the race question. The categories printed on the Information Sheet were the same as the ones printed on the census questionnaire.

List B

RELATIONSHIP

- ☐ Husband or wife
- ☐ Biological son or daughter
- ☐ Adopted son or daughter
- ☐ Stepson or stepdaughter
- ☐ Brother or sister
- ☐ Father or mother
- ☐ Grandchild
- ☐ Parent-in-law
- ☐ Son-in-law or daughter-in-law
- ☐ Other relative

- ☐ Roomer or boarder
- ☐ Housemate or roommate
- ☐ Unmarried partner
- ☐ Other nonrelative

List C

HISPANIC, LATINO, OR SPANISH ORIGIN

- ☐ **No**, not of Hispanic, Latino, or Spanish origin

- ☐ Yes, Mexican, Mexican American, or Chicano
- ☐ Yes, Puerto Rican
- ☐ Yes, Cuban
- ☐ Yes, another Hispanic, Latino, or Spanish origin – *For example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadoran, Spaniard, and so on.*

List D

RACE
(Choose one or more races.)

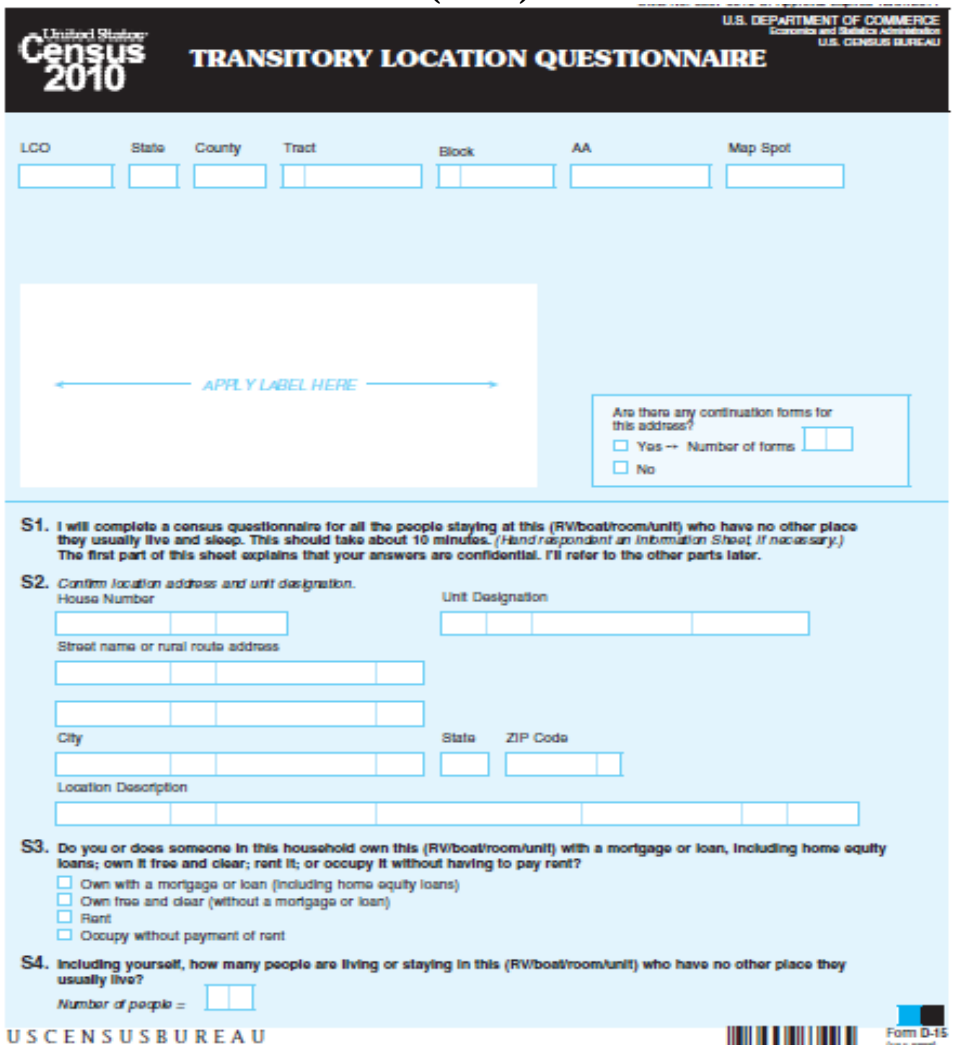
- ☐ White
- ☐ Black, African American, or Negro
- ☐ American Indian or Alaska Native
- ☐ Asian Indian
- ☐ Chinese
- ☐ Filipino
- ☐ Japanese
- ☐ Korean
- ☐ Vietnamese
- ☐ Other Asian – *For example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on.*
- ☐ Native Hawaiian
- ☐ Guamanian or Chamorro
- ☐ Samoan
- ☐ Other Pacific Islander – *For example, Fijian, Tongan, and so on.*
- ☐ Some other race

D-1(F) (3-20-2009)

Appendix H: ETL Questionnaire

The following images are of the D-15 EQ, the paper enumeration instrument used to conduct ETL Interviews.

(Front)



United States Census 2010

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU

TRANSITORY LOCATION QUESTIONNAIRE

LCO | State | County | Tract | Block | AA | Map Spot

APPLY LABEL HERE

Are there any continuation forms for this address?
☐ Yes → Number of forms
☐ No

S1. **I will complete a census questionnaire for all the people staying at this (RV/boat/room/unit) who have no other place they usually live and sleep. This should take about 10 minutes.** *(Hand respondent an Information Sheet, if necessary.)* **The first part of this sheet explains that your answers are confidential. I'll refer to the other parts later.**

S2. *Confirm location address and unit designation.*
House Number
Unit Designation
Street name or rural route address
City
State
ZIP Code
Location Description

S3. **Do you or does someone in this household own this (RV/boat/room/unit) with a mortgage or loan, including home equity loans; own it free and clear; rent it; or occupy it without having to pay rent?**
☐ Own with a mortgage or loan (including home equity loans)
☐ Own free and clear (without a mortgage or loan)
☐ Rent
☐ Occupy without payment of rent

S4. **Including yourself, how many people are living or staying in this (RV/boat/room/unit) who have no other place they usually live?**
Number of people =

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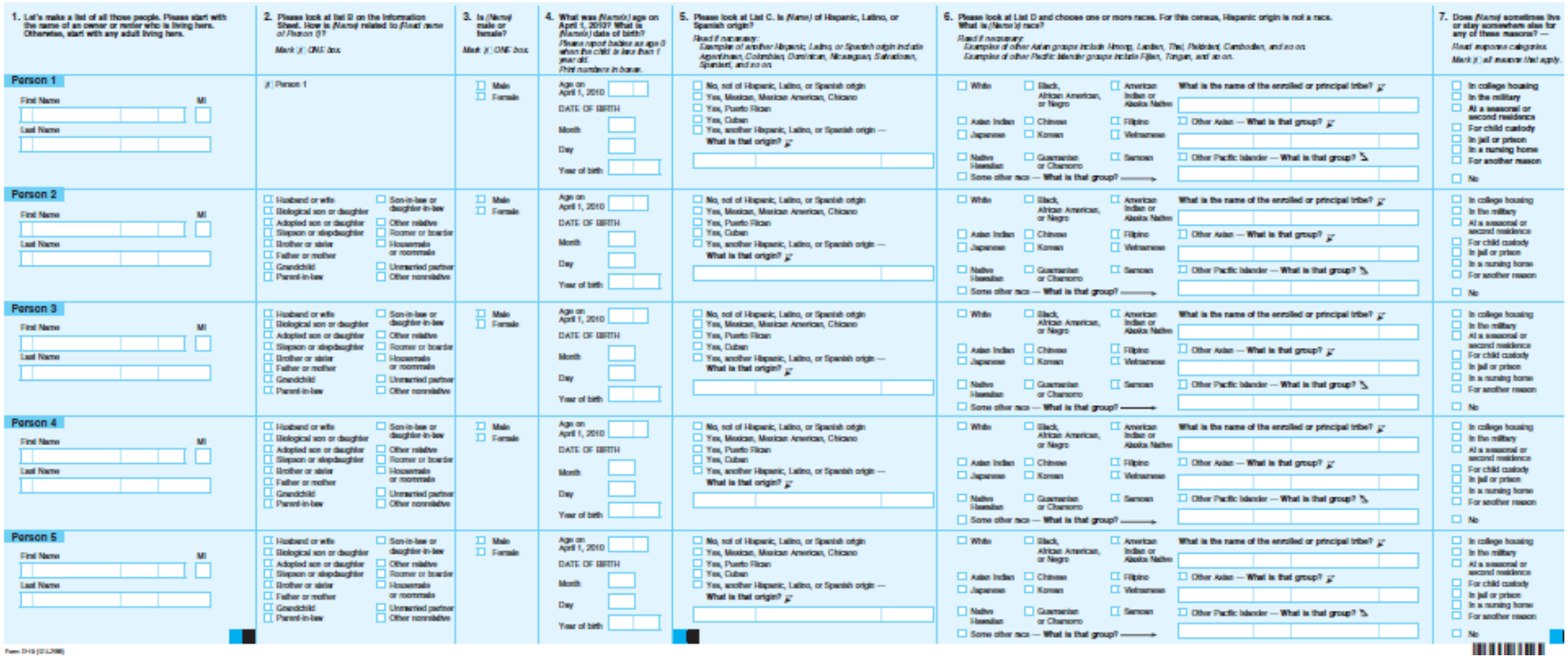
Form D-15

(Inside the EQ)



(Back)

NOTES

RECORD OF CONTACT

Type ☐ Personal | Month | Day | Time : ☐ a.m. ☐ p.m. | Outcome

OUTCOME CODES: CI=Conducted interview

RESPONDENT INFORMATION

R1. *(Ask or verify)* **What is your name?**

First Name | MI

Last Name

Address of proxy

R2. What is your phone number and best time to call? We may call if we don't understand an answer.

Area Code | Number – –

☐ Day ☐ Evening ☐ Either

R3. Respondent Type –

☐ Household member

☐ Neighbor or other proxy

INTERVIEW SUMMARY

A. Unit Status:

01 = Occupied

0 1

B. Number of people listed on form(s)

01 - 40

C. What language was the majority of the interview conducted in?

☐ English

☐ Spanish

☐ Other – *Specify language number from flashcard* →

D. JIC1

E. JIC2

CERTIFICATION

I certify that the entries I have made on this questionnaire are true and correct to the best of my knowledge.

Enumerator's signature | Employee ID

Month | Day

Crew Leader's Initials

CLD number

Month | Day

Appendix I: Transitory Units Added and Not Added into the MTdb

Transitory Units Added and Not Added into the MTdb

State	Total Adds Processed	Total Merges to Existing Units	Total TUs Added to the MTdb	Total TUs Rejected	Reject A (Illegal or Missing Values)	Reject B (Illegal Block Code)
Alabama	1,139	171	968	11	1	10
Alaska	881	127	754	9	0	9
Arizona	4,271	1,097	3,174	80	13	67
Arkansas	818	66	752	2	1	1
California	23,740	7,388	16,352	78	11	67
Colorado	2,181	398	1,783	7	1	6
Connecticut	491	56	435	5	0	5
Delaware	377	138	239	3	0	3
District of Columbia	36	1	35	2	0	2
Florida	9,324	2,424	6,900	92	3	89
Georgia	3,122	412	2,710	18	8	10
Hawaii	443	44	399	2	0	2
Idaho	998	255	743	3	0	3
Illinois	3,557	707	2,850	8	2	6
Indiana	1,018	167	851	3	0	3
Iowa	674	165	509	6	2	4
Kansas	494	80	414	20	1	19
Kentucky	867	65	802	1	0	1
Louisiana	1,389	201	1,188	10	1	9
Maine	636	134	502	4	0	4
Maryland	842	137	705	1	0	1
Massachusetts	2,135	471	1,664	1	0	1
Michigan	1,667	379	1,288	3	0	3
Minnesota	826	127	699	4	0	4
Mississippi	643	78	565	6	0	6
Missouri	1,694	243	1,451	13	0	13
Montana	755	121	634	3	0	3
Nebraska	381	87	294	8	2	6
Nevada	4,023	1,476	2,547	9	0	9
New Hampshire	837	139	698	6	0	6
New Jersey	3,294	691	2,603	5	1	4
New Mexico	1,174	133	1,041	78	68	10
New York	5,061	1,968	3,093	6	0	6
North Carolina	2,163	154	2,009	57	55	2
North Dakota	240	31	209	3	0	3
Ohio	1,713	290	1,423	1	0	1

State	Total Adds Processed	Total Merges to Existing Units	Total TUs Added to the MTdb	Total TUs Rejected	Reject A (Illegal or Missing Values)	Reject B (Illegal Block Code)
Oklahoma	1,051	130	921	9	1	8
Oregon	5,419	1,792	3,627	15	1	14
Pennsylvania	3,139	573	2,566	9	1	8
Puerto Rico	140	0	140	1	0	1
Rhode Island	105	4	101	12	0	12
South Carolina	1,461	163	1,298	42	6	36
South Dakota	563	67	496	10	0	10
Tennessee	2,234	248	1,986	8	0	8
Texas	11,102	1,899	9,203	72	20	52
Utah	1,243	174	1,069	13	6	7
Vermont	230	6	224	5	0	5
Virginia	1,307	143	1,164	2	0	2
Washington	5,756	931	4,825	37	10	27
West Virginia	142	18	124	1	0	1
Wisconsin	1,444	348	1,096	4	1	3
Wyoming	772	114	658	14	3	11
Other	0	0	0	456	416	40
Totals	**120,012**	**27,231**	**92,781**	**1,278**	**635**	**643**

Source: ETL Tally and Assessment file

Appendix J: Number of Data-Defined Persons in the ETL Household

The table shows the distribution of the number of DDPs in the ETL household, by state. The rows which are unshaded show the frequency, whereas the shaded rows directly below indicate the percentages for that state with that number of DDPs in the ETL household.

Number of Data Defined Persons in the ETL Household, by State

	Number of Data-Defined Persons in the ETL Household					
State	0	1	2	3	4	5
Alabama	1	545	441	80	43	29
	0.09	47.85	38.72	7.02	3.78	2.55
Alaska	6	497	225	66	30	34
	0.7	57.93	26.22	7.69	3.5	3.96
Arizona	33	1997	1803	208	121	109
	0.77	46.76	42.21	4.87	2.83	2.55
Arkansas	7	399	282	59	47	24
	0.86	48.78	34.47	7.21	5.75	2.93
California	1370	13489	6309	1190	809	573
	5.77	56.82	26.58	5.01	3.41	2.41
Colorado	37	1235	616	142	91	60
	1.7	56.63	28.24	6.51	4.17	2.75
Connecticut	22	323	93	22	17	14
	4.48	65.78	18.94	4.48	3.46	2.85
Delaware	11	268	72	11	5	10
	2.92	71.09	19.1	2.92	1.33	2.65
District of Columbia	0	17	14	2	3	0
	0	47.22	38.89	5.56	8.33	0
Florida	21	4407	3998	491	261	143
	0.23	47.28	42.89	5.27	2.8	1.53
Georgia	83	1693	933	198	119	96
	2.66	54.23	29.88	6.34	3.81	3.07
Hawaii	6	225	130	38	23	21
	1.35	50.79	29.35	8.58	5.19	4.74
Idaho	4	558	329	54	32	21
	0.4	55.91	32.97	5.41	3.21	2.1
Illinois	47	2828	467	104	57	54
	1.32	79.51	13.13	2.92	1.6	1.52
Indiana	22	641	228	53	48	26
	2.16	62.97	22.4	5.21	4.72	2.55
Iowa	0	421	178	38	22	15
	0	62.46	26.41	5.64	3.26	2.23
Kansas	10	282	149	23	17	13
	2.02	57.09	30.16	4.66	3.44	2.63

State	Number of Data-Defined Persons in the ETL Household					
	0	1	2	3	4	5
Kentucky	11	525	227	53	32	19
	1.27	60.55	26.18	6.11	3.69	2.19
Louisiana	4	712	437	114	78	44
	0.29	51.26	31.46	8.21	5.62	3.17
Maine	1	404	150	43	24	14
	0.16	63.52	23.58	6.76	3.77	2.2
Maryland	28	474	242	44	33	21
	3.33	56.29	28.74	5.23	3.92	2.49
Massachusetts	16	1330	483	201	77	28
	0.75	62.3	22.62	9.41	3.61	1.31
Michigan	135	942	363	93	65	69
	8.1	56.51	21.78	5.58	3.9	4.14
Minnesota	4	536	176	57	28	25
	0.48	64.89	21.31	6.9	3.39	3.03
Mississippi	4	307	233	51	34	14
	0.62	47.74	36.24	7.93	5.29	2.18
Missouri	1	1025	452	109	65	42
	0.06	60.51	26.68	6.43	3.84	2.48
Montana	48	395	210	51	37	14
	6.36	52.32	27.81	6.75	4.9	1.85
Nebraska	2	258	76	29	10	6
	0.52	67.72	19.95	7.61	2.62	1.57
Nevada	15	2420	1233	211	90	54
	0.37	60.15	30.65	5.24	2.24	1.34
New Hampshire	1	626	138	44	20	8
	0.12	74.79	16.49	5.26	2.39	0.96
New Jersey	14	2552	482	119	83	44
	0.43	77.47	14.63	3.61	2.52	1.34
New Mexico	3	642	409	61	40	20
	0.26	54.64	34.81	5.19	3.4	1.7
New York	157	3894	696	169	83	62
	3.1	76.94	13.75	3.34	1.64	1.23
North Carolina	40	1158	700	141	70	54
	1.85	53.54	32.36	6.52	3.24	2.5
North Dakota	4	159	52	14	6	5
	1.67	66.25	21.67	5.83	2.5	2.08
Ohio	233	954	361	91	51	23
	13.6	55.69	21.07	5.31	2.98	1.34
Oklahoma	5	547	321	79	53	46
	0.48	52.05	30.54	7.52	5.04	4.38

State	Number of Data-Defined Persons in the ETL Household					
	0	1	2	3	4	5
Oregon	19	2772	2143	263	142	80
	0.35	51.15	39.55	4.85	2.62	1.48
Pennsylvania	40	2433	476	88	55	47
	1.27	77.51	15.16	2.8	1.75	1.5
Rhode Island	3	60	32	4	5	1
	2.86	57.14	30.48	3.81	4.76	0.95
South Carolina	10	774	491	90	62	34
	0.68	52.98	33.61	6.16	4.24	2.33
South Dakota	5	369	123	32	21	13
	0.89	65.54	21.85	5.68	3.73	2.31
Tennessee	16	1137	753	177	85	66
	0.72	50.9	33.71	7.92	3.8	2.95
Texas	107	5667	3896	699	409	324
	0.96	51.04	35.09	6.3	3.68	2.92
Utah	77	617	376	90	46	37
	6.19	49.64	30.25	7.24	3.7	2.98
Vermont	0	106	80	23	16	5
	0	46.09	34.78	10	6.96	2.17
Virginia	33	664	392	104	66	48
	2.52	50.8	29.99	7.96	5.05	3.67
Washington	79	3228	1983	255	134	77
	1.37	56.08	34.45	4.43	2.33	1.34
West Virginia	0	76	49	3	8	6
	0	53.52	34.51	2.11	5.63	4.23
Wisconsin	40	957	290	66	57	34
	2.77	66.27	20.08	4.57	3.95	2.35
Wyoming	4	478	204	47	22	17
	0.52	61.92	26.42	6.09	2.85	2.2
Puerto Rico	0	94	34	4	3	5
	0	67.14	24.29	2.86	2.14	3.57

Source: DRF

Note: Percents may not total 100.00 percent due to rounding.

Appendix K: Language Flashcard

If an enumerator encountered a language barrier when addressing a respondent, they were to use the Language Identification Flashcard to determine which language the respondent spoke. There were 51 languages identified on the Language Identification Flashcard (including Traditional Chinese and Simplified Chinese).

United States® Census 2010

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU

LANGUAGE IDENTIFICATION FLASHCARD

Hello, I'm from the U.S. Census Bureau. Is someone here now who speaks English and can help us? If not, please write your phone number and someone will contact you in English.	01. English
Buenos días (Buenas tardes), soy de la Oficina del Censo de los Estados Unidos. ¿Se encuentra alguien que hable inglés y pueda ayudarnos? Si no, por favor, anote su número de teléfono y alguien se comunicará con usted en español.	02. Español/ Spanish
Përshëndetje, unë vij nga Zyra e Regjistrimit të Popullsisë së Sh.B.A-së. A ndodhet dikush tani këtu që flet anglisht dhe mund të na ndihmojë? Nëse jo, ju lutemi shkruani numrin e telefonit tuaj dhe dikush do t'ju kontaktojë në gjuhën shqipe.	03. Shqip/ Albanian
እንደምን ፡ ከአሜሪካን የሕዝብ ቆጠራ ቢሮ ነኝ :: አሁን እንግሊዝኛ ቋንቋ የሚናገር እና ሊረዳን የሚችል ሰው አለ? ከሌለ እባክትን የስልክ ቁጥርን ይፃፉልንና በአማርኛ የሚያናግርት ይናራል::	04. አማርኛ/ Amharic
مرحبًا، أنا من مكتب الإحصاء الأمريكي. هل يوجد هنا الآن شخص يتحدث الإنجليزية ويمكنه مساعدتنا؟ إذا آلن لا يوجد، فلارجاء آتابة رقم هاتفكم وسيتصل بكم أحد الأشخاص بلالغة العربية.	05. العربية/ Arabic
Բարև Ձեզ, Ես ԱՄՆ-ի Մարդահամարի Բյուրոյից եմ: Ներկա՞ է արդյոք մեկը, որը խոսում է Անգլերեն և կարող է մեզ օգնել: Եթե ոչ, մնրեք Ձեր հեռախոսի համարը և Ձեզ հետ կկապնվեն Հայերենով:.	06. Հայերեն/ Armenian
হ্যালো, আমি ইউ.এস. সেন্সাস ব্যুরো থেকে এসেছি। এখানে এখন এমন কেউ আছেন কি যিনি ইংরেজি বলতে পারেন এবং আমাদের সাহায্য করতে পারেন যদি তেমন কেউ না থাকে, আপনার ফোন নম্বর লিখে দিন এবং আপনার সঙ্গে একজন বাংলায় যোগাযোগ করবেন।	07. বাংলা/ Bengali
Разрешете да ви се представя, аз съм служител на Бюрото по преброяване на населението на САЩ. Има ли тук някой, който говори английски и би могъл да ни помогне? Ако няма, моля, напишете своя телефонен номер, за да може някой от нашите служители да ви се обади на български.	08. български/ Bulgarian

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[illegible]	09. မြန်မာ/ Burmese
[illegible]	10. ភាសាខ្មែរ/ Cambodian
您好。我是为美国人口普查局工作的。您这里有没有会说英语的人可以帮助我们？如果没有，请写下您的电话号码，然后将有人用中文与您联系。	11. 中文/ Chinese (Simplified)
您好。我是为美國人口普查局工作的。請問您這里有沒有會說英语的人可以幫助我們？如果沒有，請寫下您的電話號碼，之後將有人使用中文與您聯絡。	12. 中文/ Chinese (Traditional)
Dobar dan, ja sam iz Američkog biroa za cenzus. Ima li ovdje nekoga tko govori engleski i može nam pomoći? Ako nema, molim Vas da napišete svoj broj telefona, pa ćemo stupiti s Vama u kontakt na hrvatskom jeziku.	13. hrvatski/ Croatian
Dobrý den, jsem z Amerického úřadu pro sčítání lidu (U.S. Census Bureau). Je zde někdo, kdo hovoří anglický a může nám pomoci? Pokud ne, napište prosím své telefonní číslo a někdo Vás bude kontaktovat v češtině.	14. čeština/ Czech
سلام، من در دفتر نفوس شماری، در ایالات متحده امریکا ایفای وظیفه مینمایم. آیا همراه شما، همین لحظه کسی است که با لسان انگلسی آشنایی داشته باشد و ما را کمک کرده بتواند؟ اگر نیست، پس لطفاً نمبرتیلیفون تانرا بدهید تا به لسان دری با شما در تماس شویم.	15. دری/ Dari
Kudual, ɣɛn ýɛ raan de maktam de kuɛ̈n de kɔc de Amerika. Nɔŋ raan ýɛ jam ë thoŋ de Liŋglith lëu bë wok koný ë kë looiku? Na liu, ke ýï gɔ̈ɔ̈r telepundu ku anɔŋ raan bë ýïïn cɔl ë thuɔŋjäŋ.	16. Thuɔŋjäŋ/ Dinka
Hallo, ik ben van het Amerikaanse Census Bureau. Is er iemand hier die Engels spreekt en ons kan helpen? Als dat niet zo is, wilt u dan uw telefoonnummer opschrijven? Dan zal iemand telefonisch contact met u opnemen in het Nederlands.	17. Nederlands/ Dutch

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Page 2

سلام. من یک کارمند اداره سرشماری ایالات متحده هستم. آیا کسی حالا اینجا هست که به زبان انگلیسی صحبت میکند و میتواند به ما کمک کند؟ اگر کسی نیست، لطفا شماره تلفنتان را بنویسید، و یک نفر به زبان فارسی با شما تماس خواهد گرفت.	18. فارسی/ Farsi
Bonjour, je travaille pour le Bureau de Recensement des États-Unis. Y a-t-il quelqu'un ici qui parle anglais et puisse nous aider ? Sinon, notez votre numéro de téléphone pour que quelqu'un puisse vous contacter en Français.	19. Français/ French
Guten Tag, ich komme im Auftrag des Bundesbüro zu Durchfuhrung von Volkszählungen. Kann ich mit jemandem sprechen, der Englisch spricht und der uns helfen kann? Wenn nicht, schreiben Sie bitte Ihre Telefonnummer auf und es wird sich jemand in deutscher Sprache mit Ihnen in Verbindung setzen.	20. Deutsch/ German
Γεια σας, Είμαστε από την Υπηρεσία Απογραφής των ΗΠΑ. Είναι κανείς εδώ αυτή τη στιγμή που μιλάει Αγγλικά να μας εξυπηρετήσει; Αν όχι, παρακαλώ σημειώστε το τηλέφωνό σας και θα επικοινωνήσει κάποιος μαζί σας στα ΕΛΛΗΝΙΚΑ.	21. Ελληνικά/ Greek
Bonjou, mwen se anpwlaye biwo resansman ameriken. Èske m ka pale ak yon moun nan kay la ki konn pale anglè ? Si pa gen moun nan kay la ki pale anglè, tanpri ekri nimewo telefòn ou pou yon moun ki pale kreyòl ayisyen rele w.	22. kreyòl ayisyen/ Haitian Creole
שלום, אני ממשרד מפקד האוכלוסין של ארצות הברית. האם יש כאן מישהו ברגע זה שמדבר אנגלית ויכול לעזור לנו? במידה ולא, אנא כתבו את מספר הטלפון שלכם ומישהו ייצור קשר אתכם בשפה העברית.	23. עברית/ Hebrew
हैलो, मैं यूएस जनगणना ब्यूरो से हूँ। क्या अभी यहाँ ऐसा कोई व्यक्ति है जो अंग्रेजी बोलता हो और हमारी मदद कर सकता हो? यदि नहीं, तो कृपया अपना फोन नंबर लिखें और कोई व्यक्ति आपसे हिन्दी में संपर्क करेगा।	24. हिन्दी/ Hindi
Nyob zoo. Kuv tuaj hauv Teb Chaws Asmeskas Chaw Suav Pej Xeem tuaj. Puas muaj leej twg nyob hauv tsev uas txawj lus Asklv thiab pab tau peb? Yog tsis muaj, thov sau koj tus xov tooj tseg, mam li muaj ib tug neeg hais lus Hmoob hu tuaj rau koj.	25. Hmoob/ Hmong
Jó napot kívánok, az Egyesült Államok Népszámlálási Hivatalától vagyok. Van a közelben valaki, aki beszél angolul, és segíteni tud nekünk? Ha nem, kérem, írja le a telefonszámát, és kapcsolatba fogunk lépni Önnel magyarul.	26. Magyar/ Hungarian

Hello, taga Census Bureau ako ng U.S. Adda kadi kadakayo nga makapagsarita ti English ken mabalin nga tumulong kaniami? Nu awan paki surat yo iti numero iti telepono yo ta adda iti tumawag kaniayo nga ag Ilocano.	27. Ilocano/ Ilocano
Salve, chiamo da parte del Census Bureau degli Stati Uniti. C'è qualcuno che parla inglese ed è in grado di aiutarci? In caso negativo, scriva il numero di telefono e sarà contattato da qualcuno che parla Italiano.	28. Italiano/ Italian
こんにちは。私は米国勢調査局の係員です。こちらには英語を理解できこの調査にご協力いただける方がいらっしゃいますか？もしいない場合は、あなたのお電話番号をお書きいただければ、日本語を話す係員が連絡をいたします。	29. 日本語/ Japanese
안녕하세요. 저는 미국 인구조사국에서 일하고 있습니다. 영어를 사용하시는 분 중에 저희를 도와 주실 수 있는 분이 여기 계십니까? 없으신 경우, 전화번호를 적어주시면 한국어를 할 수 있는 직원이 연락을 드릴 것입니다.	30. 한국어/ Korean
ສະບາຍດີ, ຂ້າພະເຈົ້າ ມາຈາກສຳນັກງານສຳຫຼວດພົນລະເມືອງ ແຫ່ງສະຫະລັດອາເມລິກາ. ມີໃຜຢູ່ທີ່ນີ້ ສາມາດເວົ້າພາສາອັງກິດ ແລະ ຊ່ວຍເຫຼືອພວກເຮົາໄດ້ບໍ່? ຖ້າບໍ່ມີ, ກະລຸນາຂຽນເລກ ໂທລະສັບຂອງທ່ານ ແລະ ພວກເຮົາ ຈະຕິດຕໍ່ທ່ານ ເປັນພາສາລາວ.	31. ພາສາລາວ/ Laotian
Sveiki, aš esu iš JAV Gyventojų surašymo biuro. Ar čia dabar yra kas nors, kas kalba angliškai ir galėtų mums padėti? Jei ne, prašome užrašyti savo telefono numerį ir su jumis susisieks lietuvių kalba.	32. Lietuvių/ Lithuanian
ഹലോ, ഞാൻ യു എസ് സെൻസസ് ബ്യൂറോയിൽ നിന്നാണ്. ഇംഗ്ലീഷ് സംസാരിക്കുന്ന ആരെങ്കിലും ഇപ്പോൾ ഇവിടെയുണ്ടോ ഞങ്ങളെ സഹായിക്കാൻ? ഇല്ലെങ്കിൽ, നിങ്ങളുടെ ടെലിഫോൺ നമ്പർ എഴുതി നൽകുക. മലയാളത്തിൽ സംസാരിക്കുന്ന ആരെങ്കിലും താങ്കളെ ബന്ധപ്പെടും.	33. മലയാളം/ Malayalam
Yá'át'ééh, Neeznáá nináháháágo Bila'ashdla'ii náóltah bił haz'ą́ bá naashnish. Háidaaísh kǫ́ǫ́ Bilagáanaa bizaad yee yálti'ígíí hólǫ́? 'Ádingo 'éí nibéésh bee hane'é nihá 'ádíílííł dóó t'áá háida t'áá Diné Bizaad yee yálti'ígíí nich'į' náhodoolnih.	34. Diné Bizaad/ Navajo
नमस्ते, म अमेरिकाको जनगनना अफिसबाट आएको । यहाँ अंग्रेजी बोल्न जान्ने अन्त हामीलाई मदत गर्नसक्ने कोहि मान्छे छन ? नभा, तपाईको फोन नम्बर लेखिदिनु अनि कसैले तपाईसित नेपाली भाषामा कुरा गर्नेछन् ।	35. नेपाली/ Nepali

ਹੇਲੋ, ਮੈਂ ਯੂ.ਐੱਸ. ਜਨਗਣਨਾ ਬਿਊਰੋ ਵਲੋਂ ਆਇਆ/ਆਈ ਹਾਂ। ਕੀ ਇਥੇ ਕੋਈ ਅੰਗਰੇਜ਼ੀ ਬੋਲ ਸਕਦਾ ਹੈ ਅਤੇ ਸਾਡੀ ਮਦਦ ਕਰ ਸਕਦਾ ਹੈ ? ਜੇ ਨਹੀਂ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਆਪਣਾ ਟੈਲੀਫ਼ੋਨ ਨੰਬਰ ਲਿਖ ਦਿਉ ਅਤੇ ਕੋਈ ਦੁਹਾਨੂੰ ਪੰਜਾਬੀ ਵਿੱਚ ਸੰਪਰਕ ਕਰੇਗਾ।	36. ਪੰਜਾਬੀ/ Panjabi
Dzien dobry. Jestem z Amerykanskiego Biura Spisu Ludnosci. Czy ktos tutaj mowi po angielsku i mogłby nam pomóc? Jeżeli nie, proszę napisać swój numer telefonu, a ktoś skontaktuje się z Państwem po polsku.	37. Polski/ Polish
Olá, sou do Serviço de censo dos Estados Unidos. Alguém aqui fala inglês e pode nos ajudar? Caso contrário, escreva seu telefone e alguém vai entrar em contato com você em português.	38. Português/ Portuguese
Bună ziua, sunt de la Biroul de Recensământ al S.U.A. Este cineva aici, în acest moment, care vorbeşte engleză şi ne poate ajuta? Dacă nu, vă rog scrieţi-vă numărul de telefon şi cineva vă va contacta telefonic în română.	39. Română/ Romanian
Здравствуйте! Я представляю Бюро переписи населения Соединенных Штатов. Присутствует здесь кто-нибудь, кто говорит по-английски и мог бы помочь нам? Если нет, то, пожалуйста, напишите свой телефонный номер, чтобы наши сотрудники могли побеседовать с вами по-русски.	40. русский/ Russian
Добар дан, ја сам из Америчког бироа за попис становништва. Да ли овде има некога ко говори енглески и може да нам помогне? Ако нема, молим Вас да напишете свој број телефона, па ћемо контактирати с Вама на српском језику.	41. српски/ Serbian
Hallo, Waxaan anigu ka tirsanahay Xafiiska Tirakoobka Mareykanka. Halkan ciddi ma Joogta hadda oo ku hadasha Ingiriisiga oo na caawin karta? Haddii kalese, fadlan qor lambarka talafoonkaaga markaasna qof ayaa kugulasoo xidhiidhi doona adiga Soomaalliga.	42. Soomaali/ Somali
Halo, nimetoka Shirika la Sensa la Merika Je, kuna mtu hapa sasa anayezungumza Kiingereza na anaweza kutusaidia? Iliwa haluna, tafadhali andika nambari yako ya simu na mtu atawasiliana na wewe kwa Kiswahili.	43. Kiswahili/ Swahili
Hello, Ako'y galing sa U.S. Census Bureau. Mayroon ba ditong marunong magsalita ng Ingles at makakatulong sa amin ngayon? Kung wala, pakisulat ang telepono ninyo at may tatawag sa inyo sa Tagalog.	44. Tagalog/ Tagalog

สวัสดีครับ/ค่ะ ผม/ดิฉันเป็นเจ้าหน้าที่จากสำนักงานสัมมะโนประชากรสหรัฐ มีใครพอจะพูดภาษาอังกฤษเพื่อช่วยแปลได้บ้างหรือเปล่า ครับ/ค่ะ ถ้าไม่มีช่วยแจ้งเบอร์โทรศัพท์เพื่อที่เราจะสามารถติดต่อกลับมาใหม่ได้เป็นภาษาไทย	45. ไทย/ Thai
ሃሎው፡ ካብ ቤት ጽሕፈት ምቑጻር ሕዝቢ ኣሜሪካ እየ ኣነ። ሕጂ እንግሊዝኛ ዝዛረብን ክሕግዘና ዝኽእልን ሰብ ኣሎ ዶ? እንተዘይኮይኑ፡ ብኽብረትኩም ቁጽሪ ቴሌፎንኩም ጽሓፉም ሓደስብ ብትግርኛ ክዛረበኩም እዩ።	46. ትግርኛ/ Tigrinya
Merhaba, A.B.D. İstatistik Bürosu'ndanım. Orada İngilizce konuşan ve bize yardım edebilecek birisi var mı? Yoksa, lütfen telefon numaranızı yazın, sizinle Türkçe dilinde temasa geçilecek.	47. TÜRKÇE/ Turkish
Привіт, Ми з США. Сенсес Бюро. Тут є хтось, хто володіє англійською мовою і може допомогти нам? Якщо ні, будь ласка, запишіть ваш телефонний номер і з вами зв'яжуться на українській мові.	48. українська мова/ Ukrainian
ہیلو، میں امریکی مردم شماری بیورو سے ہو ں۔ کیا یہاں کوئی ایسا شخص ہے جو انگریزی بولتا ہو اور ہماری مدد کرسکتا ہو؟ اگر نہیں، تو براہ کرم اپنا فون نمبر لکھوائیں اور کوئی شخص آپ سے اردو زبان میں رابطہ کرے گا۔	49. اردو/ Urdu
Xin chào, tôi là nhân viên của Cục Thống Kê Dân Số Hoa Kỳ. Ở đây hiện có ai biết nói tiếng Anh và có thể giúp chúng tôi không? Nếu không, xin vui lòng ghi lại số điện thoại của quý vị. Chúng tôi sẽ liên lạc lại với quý vị bằng tiếng Việt.	50. Tiếng Việt/ Vietnamese
האלאו, איך בין פון די יונייטעד סטעיטס צענזוס ביורא. איז פאראן דא איינער וואס רעדט ענגליש און קען אונז העלפן? אויב נישט, ביטע שרייבט אראפ אייער טעלעפאן נומער און איינער וועט זיך פארשטענדיגן מיט אייך אויף אידיש.	51. אידיש/ Yiddish

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Appendix L: Complete Language Tables

The following table presents all languages that were reported to have been used to conduct interviews during the ETL operations. A subset of these was presented in Section 5.

Languages in which ETL Interviews were Conducted

Language	Total Number of Interviews	Percent
English	115,403	96.18
Spanish	1,734	1.45
Chinese	129	0.11
Korean	25	0.02
Russian	11	0.01
Hindi	10	0.01
Japanese	4	<0.01
Arabic	3	<0.01
Italian	3	<0.01
French	2	<0.01
Malayalam	2	<0.01
Nepali	2	<0.01
Vietnamese	2	<0.01
Dari	1	<0.01
Dutch	1	<0.01
Farsi	1	<0.01
Haitian	1	<0.01
Panjabi	1	<0.01
Tagalog	1	<0.01
Contradictory	46	0.04
Unknown	2,605	2.17
Total Housing units	**119,987**	**100.00%**

Source: DRF and AUX

Note: Percents may not total 100.00 percent due to rounding.

Appendix M: Standard Assessment Demographic Table for ETL Interviews

The following table presents the standard assessment demographic data that were reported during the ETL interviews.

Standard Assessment Demographic Table for ETL Interviews

Demographic Item	Number	Percent
Age	**187,331**	**100.00%**
Under 5 years	5,047	2.69
5 to 9 years	4,095	2.19
10 to 14 years	4,178	2.23
15 to 19 years	5,432	2.90
20 to 24 years	7,591	4.05
25 to 29 years	7,858	4.19
30 to 34 years	7,477	3.99
35 to 39 years	8,323	4.44
40 to 44 years	11,087	5.92
45 to 49 years	15,073	8.05
50 to 54 years	16,579	8.85
55 to 59 years	15,791	8.43
60 to 64 years	14,253	7.61
65 years and over	26,592	14.20
Missing	37,955	20.26

Demographic Item	Number	Percent
Hispanic Origin	**187,331**	**100.00%**
Not Hispanic or Latino checkbox only	156,350	83.46
Mexican checkbox only	10,904	5.82
Puerto Rican checkbox only	2,116	1.13
Cuban checkbox only	354	0.19
Another Hispanic checkbox only	747	0.40
Multiple checkboxes	142	0.08
Both Checkbox and Write-in	3,948	2.11
Write-in Only	144	0.08
Missing	12,626	6.74

Demographic Item	Number	Percent
Race	**187,331**	**100.00%**
White checkbox alone	128,250	68.46
Black or African American checkbox alone	17,245	9.21
American Indian and Alaska Native checkbox alone	728	0.39
Asian Indian checkbox alone	6,597	3.52
Chinese checkbox alone	982	0.52
Filipino checkbox alone	676	0.36
Japanese checkbox alone	320	0.17
Korean checkbox alone	504	0.27
Vietnamese checkbox alone	155	0.08
Other Asian checkbox alone	18	0.01
Native Hawaiian checkbox alone	140	0.07
Guamanian or Chamorro checkbox alone	58	0.03
Samoan checkbox alone	93	0.05
Other Pacific Islander checkbox alone	18	0.01
Some Other Race checkbox alone	424	0.23
Multiple checkboxes	1,978	1.06
Both Checkbox and Write-in	17,559	9.37
Write-in Only	356	0.19
Missing	11,230	5.99

Demographic Item	Number	Percent
Relationship to Person 1	**187,331**	**100.00%**
Householder	117,043	62.48
Husband or Wife of Householder	27,480	14.67
Biological Son or Daughter of Householder	20,166	10.76
Adopted Son or Daughter of Householder	389	0.21
Stepson or Stepdaughter of Householder	1,022	0.55
Brother or Sister of Householder	1,274	0.68
Father or Mother of Householder	1,673	0.89
Grandchild of Householder	1,125	0.60
Parent-in-law of Householder	170	0.09
Son-in-law or Daughter-in-law of Householder	222	0.12
Other Relative	943	0.50
Roomer or Boarder	421	0.22
Housemate or Roommate	2,970	1.59
Unmarried Partner	7,341	3.92
Other Non-relative	2,655	1.42
Two or more relationships	61	0.03
Missing	2,376	1.27

Demographic Item	Number	Percent
Sex	**187,331**	**100.00%**
Male	112,525	60.07
Female	73,544	39.26
Both	18	0.01
Missing	1,244	0.66

Demographic Item	Number	Percent
Tenure	**119,987**	**100.00%**
Owned with a mortgage or a loan	10,866	9.06
Owned without a mortgage or a loan	29,210	24.34
Rented	64,777	53.99
Occupied without payment of rent	7,782	6.49
Multiple	131	0.11
Missing	7,221	6.02

Source: DRF
Note: Percents may not total 100.00 percent due to rounding.

Appendix N: Response/Non-Response for the Cover Page Characteristics of Interest, by TL Type

Table N1: Response/Non-Response for Number of Spaces/Units at the TL, by TL Type

Transitory Location Type	Transitory Location Count			Transitory Location Percent	
	With No Response	With Response	TLs	With No Response	With Response
Marinas	359	1,766	**2,125**	16.89	83.11
RV Park	780	5,620	**6,400**	12.19	87.81
Combination Marina and RV Park	9	127	**136**	6.62	93.38
Hotel/Motel	1,507	12,779	**14,286**	10.55	89.45
Campground	2,812	6,090	**8,902**	31.59	68.41
Carnival	21	48	**69**	30.43	69.57
Racetracks	12	94	**106**	11.32	88.68
Other	2,591	5,871	**8,462**	30.62	69.38
Bed & Breakfast	374	1,565	**1,939**	19.29	80.71
Boarding House	24	384	**408**	5.88	94.12
Business / Not Lodging	20	59	**79**	25.32	74.68
Cabins	82	202	**284**	28.87	71.13
Camp	485	737	**1,222**	39.69	60.31
Mobile Homes Only	57	171	**228**	25.00	75.00
Organization	24	78	**102**	23.53	76.47
Park / Forest Service / Nature	303	352	**655**	46.26	53.74
Private / Housing Unit	45	212	**257**	17.51	82.49
Resort / Vacation Rental / Condos / Lodge	392	822	**1,214**	32.29	67.71
Special Housing	36	163	**199**	18.09	81.91
Sporting	138	422	**560**	24.64	75.36
Not Otherwise Specified Above	611	704	**1,315**	46.46	53.54
Blank / N/A	64	71	**135**	47.41	52.59
Total	**8,155**	**32,466**	**40,621**	**20.08%**	**79.92%**

Source: NPC ETL Cover Page Data

Table N2: Response/Non-Response for Number of Mobile Homes at the TL, by TL Type

Transitory Location Type	Transitory Location Count			Transitory Location Percent	
	With No Response	With Response		With No Response	With Response
Marinas	357	1,768	**2,125**	16.80	83.20
RV Park	820	5,580	**6,400**	12.81	87.19
Combination Marina and RV Park	9	127	**136**	6.62	93.38
Hotel/Motel	1,617	12,669	**14,286**	11.32	88.68
Campground	2,711	6,191	**8,902**	30.45	69.55
Carnival	22	47	**69**	31.88	68.12
Racetracks	12	94	**106**	11.32	88.68
Other	2,590	5,872	**8,462**	30.61	69.39
Bed & Breakfast	374	1,565	**1,939**	19.29	80.71
Boarding House	30	378	**408**	7.35	92.65
Business / Not Lodging	21	58	**79**	26.58	73.42
Cabins	77	207	**284**	27.11	72.89
Camp	465	757	**1,222**	38.05	61.95
Mobile Homes Only	59	169	**228**	25.88	74.12
Organization	27	75	**102**	26.47	73.53
Park / Forest Service / Nature	298	357	**655**	45.50	54.50
Private / Housing Unit	51	206	**257**	19.84	80.16
Resort / Vacation Rental / Condos / Lodge	386	828	**1,214**	31.80	68.20
Special Housing	37	162	**199**	18.59	81.41
Sporting	149	411	**560**	26.61	73.39
Not Otherwise Specified Above	616	699	**1,315**	46.84	53.16
Blank / N/A	71	64	**135**	52.59	47.41
Total	**8,209**	**32,412**	**40,621**	**20.21%**	**79.79%**

Source: NPC ETL Cover Page Data

Table N3: Response/Non-Response for Number of Occupied Spaces/Units at the TL, by TL Type

Transitory Location Type	Transitory Location Count			Transitory Location Percent	
	With No Response	With Response		With No Response	With Response
Marinas	360	1,765	**2,125**	16.94	83.06
RV Park	762	5,638	**6,400**	11.91	88.09
Combination Marina and RV Park	8	128	**136**	5.88	94.12
Hotel/Motel	1,409	12,877	**14,286**	9.86	90.14
Campground	2,591	6,311	**8,902**	29.11	70.89
Carnival	21	48	**69**	30.43	69.57
Racetracks	10	96	**106**	9.43	90.57
Other	2,500	5,962	**8,462**	29.54	70.46
Bed & Breakfast	342	1,597	**1,939**	17.64	82.36
Boarding House	24	384	**408**	5.88	94.12
Business / Not Lodging	21	58	**79**	26.58	73.42
Cabins	72	212	**284**	25.35	74.65
Camp	451	771	**1,222**	36.91	63.09
Mobile Homes Only	57	171	**228**	25.00	75.00
Organization	31	71	**102**	30.39	69.61
Park / Forest Service / Nature	294	361	**655**	44.89	55.11
Private / Housing Unit	52	205	**257**	20.23	79.77
Resort / Vacation Rental / Condos / Lodge	371	843	**1,214**	30.56	69.44
Special Housing	36	163	**199**	18.09	81.91
Sporting	143	417	**560**	25.54	74.46
Not Otherwise Specified Above	606	709	**1,315**	46.08	53.92
Blank / N/A	70	65	**135**	51.85	48.15
Total	**7,731**	**32,890**	**40,621**	**19.03%**	**80.97%**

Source: NPC ETL Cover Page Data

Table N4: Response/Non-Response for Number of Spaces/Units with Another Residence, by TL Type

Transitory Location Type	Transitory Location Count			Transitory Location Percent	
	With No Response	With Response		With No Response	With Response
Marinas	385	1,740	**2,125**	18.12	81.88
RV Park	847	5,553	**6,400**	13.23	86.77
Combination Marina and RV Park	9	127	**136**	6.62	93.38
Hotel/Motel	1,709	12,577	**14,286**	11.96	88.04
Campground	2,773	6,129	**8,902**	31.15	68.85
Carnival	22	47	**69**	31.88	68.12
Racetracks	11	95	**106**	10.38	89.62
Other	2,671	5,791	**8,462**	31.56	68.44
Bed & Breakfast	388	1,551	**1,939**	20.01	79.99
Boarding House	30	378	**408**	7.35	92.65
Business / Not Lodging	23	56	**79**	29.11	70.89
Cabins	85	198	**284**	29.93	70.07
Camp	476	746	**1,222**	38.62	61.05
Mobile Homes Only	62	166	**228**	27.19	72.81
Organization	31	71	**102**	30.39	69.61
Park / Forest Service / Nature	302	353	**655**	46.11	53.89
Private / Housing Unit	56	201	**257**	21.79	78.21
Resort / Vacation Rental / Condos / Lodge	394	820	**1,214**	32.45	67.55
Special Housing	39	160	**199**	19.60	80.40
Sporting	152	408	**560**	27.14	72.86
Not Otherwise Specified Above	633	682	**1,315**	48.14	51.86
Blank / N/A	71	64	**135**	52.59	47.41
Total	**8,498**	**32,123**	**40,621**	**20.92%**	**79.08%**

Source: NPC ETL Cover Page Data

Table N5: Response/Non-Response for Number of Refusals at the TL, by TL Type

Transitory Location Type	Transitory Location Count			Transitory Location Percent	
	With No Response	With Response		With No Response	With Response
Marinas	377	1,748	**2,125**	17.74	82.26
RV Park	831	5,569	**6,400**	12.98	87.02
Combination Marina and RV Park	9	127	**136**	6.62	93.38
Hotel/Motel	1,633	12,653	**14,286**	11.43	88.57
Campground	2,756	6,146	**8,902**	30.96	69.04
Carnival	22	47	**69**	31.88	68.12
Racetracks	10	96	**106**	9.43	90.57
Other	2,639	5,823	**8,462**	31.19	68.81
Bed & Breakfast	371	1,568	**1,939**	19.13	80.87
Boarding House	28	380	**408**	6.86	93.14
Business / Not Lodging	21	58	**79**	26.58	73.42
Cabins	86	198	**284**	30.28	69.72
Camp	474	748	**1,222**	38.79	61.21
Mobile Homes Only	64	164	**228**	28.07	71.93
Organization	31	71	**102**	30.39	69.61
Park / Forest Service / Nature	303	352	**655**	46.26	53.74
Private / Housing Unit	56	201	**257**	21.79	78.21
Resort / Vacation Rental / Condos / Lodge	399	815	**1,214**	32.87	67.13
Special Housing	38	161	**199**	19.10	80.90
Sporting	146	414	**560**	26.07	73.93
Not Otherwise Specified Above	622	693	**1,315**	47.30	52.70
Blank / N/A	71	64	**135**	52.59	47.41
Total	**8,348**	**32,273**	**40,621**	**20.55%**	**79.45%**

Source: NPC ETL Cover Page Data

Table N6: Response/Non-Response for Number of First No-Contacts at the TL, by TL Type

Transitory Location Type	Transitory Location Count			Transitory Location Percent	
	With No Response	With Response		With No Response	With Response
Marinas	372	1,753	**2,125**	17.51	82.49
RV Park	801	5,599	**6,400**	12.52	87.48
Combination Marina and RV Park	9	127	**136**	6.62	93.38
Hotel/Motel	1,636	12,650	**14,286**	11.45	88.55
Campground	2,739	6,163	**8,902**	30.77	69.23
Carnival	22	47	**69**	31.88	68.12
Racetracks	10	96	**106**	9.43	90.57
Other	2,632	5,830	**8,462**	31.10	68.90
Bed & Breakfast	370	1,569	**1,939**	19.08	80.92
Boarding House	27	381	**408**	6.62	93.38
Business / Not Lodging	21	58	**79**	26.58	73.42
Cabins	87	197	**284**	30.63	69.37
Camp	471	751	**1,222**	38.54	61.46
Mobile Homes Only	65	163	**228**	28.51	71.49
Organization	31	71	**102**	30.39	69.61
Park / Forest Service / Nature	302	353	**655**	46.11	53.89
Private / Housing Unit	54	203	**257**	21.01	78.99
Resort / Vacation Rental / Condos / Lodge	396	816	**1,214**	32.78	67.22
Special Housing	38	161	**199**	19.10	80.90
Sporting	147	413	**560**	26.25	73.75
Not Otherwise Specified Above	621	694	**1,315**	47.22	52.78
Blank / N/A	70	65	**135**	51.85	48.15
Total	**8,291**	**32,330**	**40,621**	**20.41%**	**79.59%**

Source: NPC ETL Cover Page Data

Table N7: Response/Non-Response for Number of Second No-Contacts at the TL, by TL Type

Transitory Location Type	Transitory Location Count			Transitory Location Percent	
	With No Response	With Response		With No Response	With Response
Marinas	377	1,748	**2,125**	17.74	82.26
RV Park	832	5,568	**6,400**	13.00	87.00
Combination Marina and RV Park	10	126	**136**	7.35	92.65
Hotel/Motel	1,672	12,614	**14,286**	11.70	88.30
Campground	2,771	6,131	**8,902**	31.13	68.87
Carnival	23	46	**69**	33.33	66.67
Racetracks	11	95	**106**	10.38	89.62
Other	2,646	5,816	**8,462**	31.27	68.73
Bed & Breakfast	372	1,567	**1,939**	19.19	80.81
Boarding House	28	380	**408**	6.86	93.14
Business / Not Lodging	21	58	**79**	26.58	73.42
Cabins	86	198	**284**	30.28	69.72
Camp	476	746	**1,222**	38.95	61.05
Mobile Homes Only	66	162	**228**	28.95	71.05
Organization	32	70	**102**	31.37	68.63
Park / Forest Service / Nature	302	353	**655**	46.11	53.89
Private / Housing Unit	54	203	**257**	21.01	78.99
Resort / Vacation Rental / Condos / Lodge	404	810	**1,214**	33.28	66.72
Special Housing	38	161	**199**	19.10	80.90
Sporting	147	413	**560**	26.25	73.75
Not Otherwise Specified Above	620	695	**1,315**	47.15	52.85
Blank / N/A	69	66	**135**	51.11	48.89
Total	**8,411**	**32,210**	**40,621**	**20.71%**	**79.29%**

Source: NPC ETL Cover Page Data

Table N8: Response/Non-Response for Number of Completed TL Questionnaires, by TL Type

Transitory Location Type	Transitory Location Count			Transitory Location Percent	
	With No Response	With Response		With No Response	With Response
Marinas	258	1,867	**2,125**	12.14	87.86
RV Park	604	5,796	**6,400**	9.44	90.56
Combination Marina and RV Park	6	130	**136**	4.41	95.59
Hotel/Motel	978	13,308	**14,286**	6.85	93.15
Campground	1,770	7,132	**8,902**	19.88	80.12
Carnival	13	56	**69**	18.84	81.16
Racetracks	4	102	**106**	3.77	96.23
Other	1,786	6,676	**8,462**	21.11	78.89
Bed & Breakfast	258	1,681	**1,939**	13.31	86.69
Boarding House	17	391	**408**	4.17	95.83
Business / Not Lodging	13	66	**79**	16.46	83.54
Cabins	47	237	**284**	16.55	83.45
Camp	296	926	**1,222**	24.22	75.78
Mobile Homes Only	47	181	**228**	20.61	79.39
Organization	18	84	**102**	17.65	82.35
Park / Forest Service / Nature	202	453	**655**	30.84	69.16
Private / Housing Unit	37	220	**257**	14.40	85.60
Resort / Vacation Rental / Condos / Lodge	270	944	**1,214**	22.24	77.76
Special Housing	28	171	**199**	14.07	85.93
Sporting	103	457	**560**	18.39	81.61
Not Otherwise Specified Above	450	865	**1,315**	34.22	65.78
Blank / N/A	57	78	**135**	42.22	57.78
Total	**5,476**	**35,145**	**40,621**	**13.48%**	**86.52%**

Source: NPC ETL Cover Page Data

Appendix O: Distribution for the Cover Page Characteristics of Interest, by TL Type

Table O1: Distribution of Number of Spaces/Units at the TL, by TL Type

Transitory Location Type	Count with Response	Mean	Total	Minimum	First Quartile	Median	Third Quartile	95th Percentile	Maximum
Marinas	1,766	117.50	207,499	0	11.0	58.5	150.0	423.0	2,127
RV Park	5,620	62.87	353,351	0	13.0	31.0	71.0	206.5	3,245
Combination Marina and RV Park	127	81.94	10,407	0	13.0	45.0	90.0	309.0	675
Hotel/Motel	12,779	41.32	528,053	0	7.0	21.0	52.0	136.0	1,608
Campground	6,090	61.37	373,726	0	3.0	25.0	73.0	229.0	6,301
Carnival	48	29.96	1,438	0	0.0	8.0	31.0	148.0	218
Racetracks	94	31.87	2,996	0	6.0	8.0	24.0	162.0	457
Other	5,871	22.50	132,093	0	1.0	5.0	16.0	99.0	2,004
Bed & Breakfast	1,565	6.85	10,721	0	1.0	4.0	7.0	19.0	327
Boarding House	384	16.84	6,468	0	5.0	10.0	17.0	61.0	250
Business / Not Lodging	59	13.54	799	0	0.0	1.0	8.0	66.0	314
Cabins	202	7.98	1,612	0	1.0	5.5	10.0	27.0	54
Camp	737	26.32	19,398	0	0.0	4.0	19.0	120.0	800
Mobile Homes Only	171	33.61	5,748	0	1.0	16.0	35.0	115.0	592
Organization	78	47.26	3,686	0	1.0	5.0	47.0	204.0	1,150
Park / Forest Service / Nature	352	46.30	16,296	0	0.0	8.0	50.5	174.0	2,004
Private / Housing Unit	212	17.66	3,744	0	1.0	6.0	15.0	66.0	463
Resort / Vacation Rental / Condos / Lodge	822	47.99	39,445	0	2.0	14.0	48.0	227.0	1,213
Special Housing	163	19.14	3,120	0	1.0	9.0	22.0	79.0	170
Sporting	422	9.70	4,092	0	0.0	1.0	9.0	45.0	322
Not Otherwise Specified Above	704	24.10	16,964	0	0.0	4.0	18.0	94.0	1,096
Blank / N/A	71	4.14	294	0	0.0	0.0	5.0	22.0	53
Total	**32,466**	**49.59**	**1,609,857**	**0**	**5.0**	**20.0**	**57.0**	**185.0**	**6,301**

Source: NPC ETL Cover Page Data

Table O2: Distribution of Number of Mobile Homes at the TL, by TL Type

Transitory Location Type	Count with Response	Mean	Total	Minimum	First Quartile	Median	Third Quartile	95th Percentile	Maximum
Marinas	1,768	0.81	1,435	0	0	0	0	0	651
RV Park	5,580	8.06	44,994	0	0	0	1	36	2,800
Combination Marina and RV Park	127	4.75	603	0	0	0	1	18	310
Hotel/Motel	12,669	0.09	1,082	0	0	0	0	0	133
Campground	6,191	3.21	19,856	0	0	0	0	13	536
Carnival	47	0.89	42	0	0	0	0	55	15
Racetracks	94	0.05	5	0	0	0	0	0	2
Other	5,872	1.24	7,309	0	0	0	0	1	963
Bed & Breakfast	1,565	0.00	5	0	0	0	0	0	2
Boarding House	378	0.01	2	0	0	0	0	0	2
Business / Not Lodging	58	0.45	26	0	0	0	0	3	15
Cabins	207	0.20	42	0	0	0	0	1	10
Camp	757	0.17	126	0	0	0	0	0	19
Mobile Homes Only	169	12.60	2,130	0	0	1	10	55	393
Organization	75	0.53	40	0	0	0	0	2	20
Park / Forest Service / Nature	357	0.42	151	0	0	0	0	1	48
Private / Housing Unit	206	0.32	66	0	0	0	0	0	29
Resort / Vacation Rental / Condos / Lodge	828	3.25	2,689	0	0	0	0	5	963
Special Housing	162	0.25	40	0	0	0	0	0	40
Sporting	411	0.87	357	0	0	0	0	4	72
Not Otherwise Specified Above	699	2.34	1,635	0	0	0	0	4	500
Blank / N/A	64	0.13	8	0	0	0	0	0	6
Total	**32,412**	**2.32**	**75,334**	**0**	**0**	**0**	**0**	**5**	**2,800**

Source: NPC ETL Cover Page Data

Table O3: Distribution of Number of Occupied Spaces/Units at the TL, by TL Type

Transitory Location Type	Count with Response	Mean	Total	Minimum	First Quartile	Median	Third Quartile	95th Percentile	Maximum
Marinas	1,765	50.88	89,802	0	0	7.0	52	222	1,541
RV Park	5,638	29.80	168,035	0	2	11.0	31	112	2,836
Combination Marina and RV Park	128	37.94	4,856	0	1	12.5	43	185	390
Hotel/Motel	12,877	8.84	113,782	0	1	2.0	8	40	392
Campground	6,311	16.18	102,141	0	0	1.0	10	72	2,730
Carnival	48	10.83	520	0	0	1.0	15	62	86
Racetracks	96	20.93	2,009	0	1	8.0	11	86	380
Other	5,962	7.17	42,726	0	0	1.0	4	31	963
Bed & Breakfast	1,597	1.56	2,489	0	0	1.0	1	5	229
Boarding House	384	12.71	4,879	0	3	8.0	14	51	146
Business / Not Lodging	58	4.90	284	0	0	1.0	2	35	75
Cabins	212	3.60	764	0	0	1.0	3	19	54
Camp	771	3.96	3,053	0	0	0.0	2	19	196
Mobile Homes Only	171	17.65	3,018	0	0	4.0	19	65	418
Organization	71	7.10	504	0	0	1.0	6	39	60
Park / Forest Service / Nature	361	10.07	3,634	0	0	0.0	3	51	826
Private / Housing Unit	205	11.40	2,336	0	0	2.0	10	36	433
Resort / Vacation Rental / Condos / Lodge	843	15.00	12,644	0	0	1.0	9	63	963
Special Housing	163	10.17	1,658	0	0	1.0	11	46	128
Sporting	417	4.20	1,751	0	0	0.0	2	22	143
Not Otherwise Specified Above	709	8.06	5,712	0	0	1.0	5	38	305
Blank / N/A	65	2.57	167	0	0	0.0	2	14	23
Total	**32,890**	**15.93**	**524,038**	**0**	**0**	**2.0**	**12**	**70**	**2,836**

Source: NPC ETL Cover Page Data

Table O4: Distribution of Number of Spaces/Units with Another Residence, by TL Type

Transitory Location Type	Count with Response	Mean	Total	Minimum	First Quartile	Median	Third Quartile	95th Percentile	Maximum
Marinas	1,740	16.98	29,543	0	0	0	6.0	105	750
RV Park	5,553	10.6	59,179	0	0	1	8.0	48	2,800
Combination Marina and RV Park	127	16.17	2,054	0	0	2	15.0	72	240
Hotel/Motel	12,577	3.15	39,643	0	0	0	1.0	12	450
Campground	6,129	7.13	43,709	0	0	0	2.0	31	1,313
Carnival	47	2.23	105	0	0	0	1.0	11	33
Racetracks	95	5.91	561	0	0	0	1.0	43	232
Other	5,791	2.45	14,182	0	0	0	0.0	9	480
Bed & Breakfast	1,551	0.58	900	0	0	0	0.0	3	99
Boarding House	378	0.46	175	0	0	0	0.0	2	31
Business / Not Lodging	56	1.88	105	0	0	0	0.5	6	55
Cabins	198	1.18	234	0	0	0	1.0	8	35
Camp	746	1.34	1,001	0	0	0	0.0	6	79
Mobile Homes Only	166	5.23	869	0	0	0	1.0	19	177
Organization	71	1.90	135	0	0	0	0.0	13	56
Park / Forest Service / Nature	353	6.59	2,328	0	0	0	1.0	38	331
Private / Housing Unit	201	1.04	210	0	0	0	0.0	5	36
Resort / Vacation Rental / Condos / Lodge	820	5.87	4,814	0	0	0	1.0	28	480
Special Housing	160	1.38	220	0	0	0	0.0	9	49
Sporting	408	2.17	887	0	0	0	0.0	12	143
Not Otherwise Specified Above	682	3.38	2,304	0	0	0	0.0	10	305
Blank / N/A	64	0.70	45	0	0	0	0.0	2	25
Total	**32,123**	**5.88**	**189,021**	**0**	**0**	**0**	**1.0**	**27**	**2,800**

Source: NPC ETL Cover Page Data

Table O5: Distribution of Number of Refusals at the TL, by TL Type

Transitory Location Type	Count with Response	Mean	Total	Minimum	First Quartile	Median	Third Quartile	95th Percentile	Maximum
Marinas	1,748	0.26	461	0	0	0	0	1	54
RV Park	5,569	0.77	4,301	0	0	0	0	3	172
Combination Marina and RV Park	127	0.39	49	0	0	0	0	3	8
Hotel/Motel	12,653	0.54	6,821	0	0	0	0	3	151
Campground	6,146	0.21	1,263	0	0	0	0	1	134
Carnival	47	0.68	32	0	0	0	0	5	8
Racetracks	96	0.11	11	0	0	0	0	1	6
Other	5,823	0.24	1,377	0	0	0	0	1	154
Bed & Breakfast	1,568	0.09	146	0	0	0	0	0	47
Boarding House	380	0.64	245	0	0	0	0	4	14
Business / Not Lodging	58	0.03	2	0	0	0	0	0	2
Cabins	198	0.09	17	0	0	0	0	1	6
Camp	748	0.06	43	0	0	0	0	0	13
Mobile Homes Only	164	0.42	69	0	0	0	0	2	11
Organization	71	0.15	11	0	0	0	0	0	5
Park / Forest Service / Nature	352	0.10	34	0	0	0	0	1	6
Private / Housing Unit	201	1.11	224	0	0	0	0	2	154
Resort / Vacation Rental / Condos / Lodge	815	0.38	311	0	0	0	0	1	120
Special Housing	161	0.42	68	0	0	0	0	2	23
Sporting	414	0.02	8	0	0	0	0	0	2
Not Otherwise Specified Above	693	0.29	199	0	0	0	0	1	46
Blank / N/A	64	0.02	1	0	0	0	0	0	1
Total	**32,273**	**0.44**	**14,316**	**0**	**0**	**0**	**0**	**2**	**172**

Source: NPC ETL Cover Page Data

Table O6: Distribution of Number of First No-Contacts at the TL, by TL Type

Transitory Location Type	Count with Response	Mean	Total	Minimum	First Quartile	Median	Third Quartile	95th Percentile	Maximum
Marinas	1,753	39.04	68,432	0	0	1	26.0	191	1,466
RV Park	5,599	15.79	88,397	0	0	4	16.0	65	2,471
Combination Marina and RV Park	127	25.13	3,191	0	0	4	25.0	159	271
Hotel/Motel	12,650	3.85	48,682	0	0	0	2.0	18	390
Campground	6,163	11.30	69,655	0	0	0	4.0	49	2,699
Carnival	47	2.96	139	0	0	0	0.0	23	36
Racetracks	96	9.66	927	0	0	6	9.5	28	176
Other	5,830	3.72	21,674	0	0	0	1.0	17	762
Bed & Breakfast	1,569	0.46	726	0	0	0	0.0	1	119
Boarding House	381	4.40	1,678	0	0	0	5.0	19	89
Business / Not Lodging	58	1.93	112	0	0	0	0.0	17	33
Cabins	197	1.89	373	0	0	0	1.0	11	52
Camp	751	2.60	1,955	0	0	0	0.0	12	220
Mobile Homes Only	163	11.26	1,836	0	0	1	12.0	38	276
Organization	71	2.77	197	0	0	0	2.0	23	36
Park / Forest Service / Nature	353	6.44	2,274	0	0	0	1.0	26	762
Private / Housing Unit	203	5.40	1,096	0	0	0	4.0	21	276
Resort / Vacation Rental / Condos / Lodge	816	8.52	6,952	0	0	0	2.0	34	594
Special Housing	161	3.32	534	0	0	0	0.0	22	67
Sporting	413	2.78	1,150	0	0	0	1.0	17	92
Not Otherwise Specified Above	694	4.02	2,791	0	0	0	1.0	19	271
Blank / N/A	65	1.43	93	0	0	0	0.0	8	11
Total	**32,330**	**9.32**	**301,190**	**0**	**0**	**0**	**4.0**	**40**	**2,699**

Source: NPC ETL Cover Page Data

Table O7: Distribution of Number of Second No-Contacts at the TL, by TL Type

Transitory Location Type	Count with Response	Mean	Total	Minimum	First Quartile	Median	Third Quartile	95th Percentile	Maximum
Marinas	377	34.04	59,494	0	0	0.0	22	172.0	1,461
RV Park	832	13.25	73,757	0	0	3.0	13	54.0	2,466
Combination Marina and RV Park	10	19.21	2,420	0	0	1.0	17	90.0	252
Hotel/Motel	1,672	3.01	37,914	0	0	0.0	1	15.0	310
Campground	2,771	10.05	61,606	0	0	0.0	3	45.0	2,647
Carnival	23	2.20	101	0	0	0.0	0	9.0	28
Racetracks	11	6.91	656	0	0	5.0	8	14.0	168
Other	5,816	3.19	18,579	0	0	0.0	0	14.0	661
Bed & Breakfast	372	0.32	508	0	0	0.0	0	1.0	83
Boarding House	28	2.95	1,121	0	0	0.0	4	13.5	54
Business / Not Lodging	21	1.38	80	0	0	0.0	0	15.0	33
Cabins	86	1.52	300	0	0	0.0	0	10.0	52
Camp	476	2.52	1,881	0	0	0.0	0	11.0	220
Mobile Homes Only	66	9.69	1,570	0	0	0.5	7	37.0	263
Organization	32	2.11	148	0	0	0.0	1	14.0	30
Park / Forest Service / Nature	302	5.07	1,789	0	0	0.0	0	21.0	661
Private / Housing Unit	54	4.16	845	0	0	0.0	3	17.0	218
Resort / Vacation Rental / Condos / Lodge	404	7.70	6,240	0	0	0.0	1	31.0	549
Special Housing	38	2.89	465	0	0	0.0	0	20.0	57
Sporting	147	2.68	1,105	0	0	0.0	1	16.0	92
Not Otherwise Specified Above	620	3.64	2,527	0	0	0.0	1	17.0	270
Blank / N/A	69	1.29	85	0	0	0.0	1	8.0	11
Total	**32,210**	**7.90**	**254,612**	**0**	**0**	**0.0**	**3**	**34.0**	**2,647**

Source: NPC ETL Cover Page Data

Table O8: Distribution of Number of Completed TL Questionnaires, by TL Type

Transitory Location Type	Count with Response	Mean	Total	Minimum	First Quartile	Median	Third Quartile	95th Percentile	Maximum
Marinas	1,867	3.16	5,900	0	0	0	3	16	134
RV Park	5,796	5.48	31,750	0	0	1	6	24	292
Combination Marina and RV Park	130	4.17	542	0	0	1	4	19	53
Hotel/Motel	13,308	4.15	55,216	0	0	1	4	18	224
Campground	7,132	1.19	8,512	0	0	0	1	7	64
Carnival	56	7.20	403	0	0	0	5	55	89
Racetracks	102	9.71	990	0	0	0	1	44	380
Other	6,676	2.03	13,535	0	0	0	1.0	10	297
Bed & Breakfast	1,681	0.96	1,611	0	0	1	1	2	126
Boarding House	391	9.65	3,773	0	1	5	11	39	102
Business / Not Lodging	66	2.11	139	0	0	0	1	6	63
Cabins	237	0.82	195	0	0	0	1	4	11
Camp	926	0.83	768	0	0	0	1	4	31
Mobile Homes Only	181	2.40	434	0	0	0	3	12	21
Organization	84	2.61	219	0	0	0	3	15	31
Park / Forest Service / Nature	453	0.83	377	0	0	0	0	3	110
Private / Housing Unit	220	6.85	1,507	0	0	1	5	21	297
Resort / Vacation Rental / Condos / Lodge	944	2.01	1,901	0	0	0	1	10	106
Special Housing	171	5.84	998	0	0	1	5	29	90
Sporting	457	0.48	218	0	0	0	0	2	45
Not Otherwise Specified Above	865	1.61	1,395	0	0	0	1	10	80
Blank / N/A	78	0.90	70	0	0	0	0	8	14
Total	**35,145**	**3.33**	**116,918**	**0**	**0**	**1**	**3**	**16**	**380**

Source: NPC ETL Cover Page Data

Appendix P: Blocks at the Start of the Operation and Blocks which Contain Housing Units after ETL Address Updated, by State

Blocks at the Start of the Operation and Blocks which Contain Housing Units after ETL Address Updates, by State

State	Number of Blocks with Transitory Locations	Percent	Blocks Containing Housing Units after Address Updates	Percent
Alabama	350	1.17	205	1.22
Alaska	360	1.20	175	1.04
Arizona	783	2.61	628	3.73
Arkansas	476	1.59	207	1.23
California	2,911	9.71	2,233	13.27
Colorado	650	2.17	399	2.37
Connecticut	211	0.70	113	0.67
Delaware	60	0.20	36	0.21
District of Columbia	18	0.06	9	0.05
Florida	1,690	5.64	1,439	8.55
Georgia	551	1.84	354	2.10
Hawaii	95	0.32	73	0.43
Idaho	477	1.59	159	0.94
Illinois	630	2.10	338	2.01
Indiana	506	1.69	213	1.27
Iowa	438	1.46	143	0.85
Kansas	328	1.09	137	0.81
Kentucky	325	1.08	168	1.00
Louisiana	484	1.61	263	1.56
Maine	438	1.46	142	0.84
Maryland	312	1.04	163	0.97
Massachusetts	478	1.59	269	1.60
Michigan	1,066	3.56	405	2.41
Minnesota	679	2.26	243	1.44
Mississippi	295	0.98	124	0.74
Missouri	701	2.34	305	1.81
Montana	407	1.36	166	0.99
Nebraska	284	0.95	94	0.56
Nevada	247	0.82	217	1.29
New Hampshire	344	1.15	114	0.68
New Jersey	523	1.74	376	2.23
New Mexico	379	1.26	236	1.40
New York	1,188	3.96	580	3.45
North Carolina	676	2.25	418	2.48

State	Number of Blocks with Transitory Locations	Percent	Blocks Containing Housing Units after Address Updates	Percent
North Dakota	209	0.70	45	0.27
Ohio	650	2.17	299	1.78
Oklahoma	576	1.92	253	1.50
Oregon	870	2.90	563	3.35
Pennsylvania	1,021	3.41	526	3.13
Puerto Rico	86	0.29	45	0.27
Rhode Island	117	0.39	34	0.20
South Carolina	388	1.29	279	1.66
South Dakota	285	0.95	76	0.45
Tennessee	670	2.23	420	2.50
Texas	1,893	6.31	1,451	8.62
Utah	441	1.47	160	0.95
Vermont	245	0.82	92	0.55
Virginia	477	1.59	278	1.65
Washington	1,076	3.59	666	3.96
West Virginia	244	0.81	52	0.31
Wisconsin	730	2.43	296	1.76
Wyoming	283	0.94	149	0.89
Total	**29,981**	**100.00**	**16,828**	**100.00**

Source: ETL Tally and Assessment File
Note: Percents may not total 100.00 percent due to rounding.