Rural and Remote Area Operations: Update Leave and Update Enumerate

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Presentation Topics

- 2010 Update Leave
 - Operation Overview
 - Operation Design and Characteristics
 - Results and Recommendations
- 2020 Update Leave
 - Operation Overview
 - Redesign
 - Operation Design and Characteristics
 - COVID Impacts



Presentation Topics (cont.)

- 2010 Update Enumerate
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Operation Overview

- The objectives of the 2010 Census U/L operation were to update address information and census maps and to hand-deliver 2010 Census questionnaires to households in designated areas.
- The operation was designed to support the enumeration of areas where the Census Bureau had concerns about accurate mail delivery and to determine the Census block location of each housing unit (HU). The operation was conducted in areas where HUs:
 - Did not receive mail at the residence for the majority of HUs in the block.
 - Received mail at a Post Office (P.O.) Box.
 - Had a city-style address but the mail delivery shared a mail drop-off point with other HUs.
- Some areas affected by natural disasters were also included in this operation.



Operation Design and Characteristics

- Worked about 12.5 million housing units.
- Managed by 304 of the 494 Local Census Offices (LCOs) in all 12 Regional Census Centers.
- Conducted between March 1, 2010, through April 2, 2010, by over 65,000 field staff (including QC).
- The address updates were collected on paper address lists and paper block maps.
- Staff delivered questionnaire packets with a pre-addressed questionnaire. If no one was at home, the questionnaire for that housing unit (HU) was placed in a bag and left at the front door.
- Dependent Quality Control (DQC) reviewed a sample of addresses in every assignment area to determine if the work was done correctly. If the sample failed, the assignment area was recanvassed. Office clerks reviewed each AA Binder for legibility, completeness, and consistency.
- If the Census Bureau did not receive enumeration response data for an HU, the nonresponding address was sent to:
 - Nonresponse Followup (NRFU) operation for enumeration of the original 2010 universe of addresses.
 - The Vacant Delete Check (VDC) operation for enumeration of newly added addresses.



Results

- The operation was completed on time and under budget.
- Operational stakeholders overcame challenges and developed and implemented contingency solutions for issues that arose during the operation and post processing.

Key Recommendations

- Automate the U/L operation in 2020. There was a tremendous amount of writing and transcription of numbers and automation would eliminate the time-consuming keying and digitizing operations involved with paper operations.
- Use a bar coded system to record the processing ID on the questionnaire for HUs added during U/L. This will increase efficiency and reduce transcription error of long codes that uniquely identify and track added HUs.
- Research how to process, collect, and update all field actions using automated methods.



Operation Overview

The objectives of the 2020 UL operation were to update the address and feature data for the area assigned, and to link and leave a 2020 Census Internet Choice Questionnaire Package at every HU.

UL occurred in geographic areas that:

- Do not have city-style addresses.
- Receive mail at post office boxes or at drop points.
- Have been affected by major or natural disasters.
- Have high concentrations of seasonally vacant housing.

HUs in Update Leave that did not self-respond were sent to the NRFU operation for follow-up.



Addition to the 2020 Program

Update Leave was not an operation planned in the original 2020 program. The vision was to conduct an automated Update Enumerate in areas not within the Self-Response TEA. That would allow:

- · Updating the address list and feature data
- Attempting enumeration on the visit
- Leaving a notice of visit, linked to the address, for the HU to respond online

Due to competing development priorities, a decision was in May 2017 to add the 2020 Update Leave operation to the program. Despite its late addition, the operation included several enhancements and implemented some 2010 recommendations:

- Automated the address list and feature data
 - Used the LiMA software and device that was used for 2020 Address Canvassing. Procedures and training to update the address list were the same as Address Canvassing; new GQs and TLs or converted HUs to GQs and TLs were delivered to the GQE and ETL operations to work.
- Expanded the questionnaire packet to include all modes of self-response: online, by phone, or by questionnaire.
- Automated the linking process of a questionnaire to a HU
 - Questionnaires contained a generic ID and barcode that represented the HU's response once linked to the address during the update process
 - Allowed for field staff to be assigned or re-assigned any basic collection unit (BCU), reduced coordination of field materials for specific assignment areas to field staff



Design and characteristics

- Initial workload of 6.8 million housing units.
- Conducted in 169 Area Census Offices (ACOs) in all 6 Regional Census Centers, including all of Puerto Rico.
- Original operation dates: March 15, 2020 through April 17, 2020.
- Listing QC was performed on over 23,000 basic collection units (BCUs) and about 585,000 addresses.
 - QC work was selected based on the complexity of the addresses in a BCU. The more complex, the more likely to be selected.
 - If the QC sample failed, the entire BCU was reworked.
- There were two reminder mailings- first a letter, mailed on or around April 1, with the associated ID for the address to respond online; second a postcard, mailed on or around July 17, to any households from the first mailing that had not responded.



COVID Response

- The operation was suspended starting on March 16th in Puerto Rico and on March 18th nationwide.
- ACOs began to resume work on a flow starting the week of May 4, 2020 (see table).
- Operation finished on August 13, 2020, to allow some areas where access was delayed to be worked.
- Operation Procedure Changes:
 - Use Personal Protective Equipment (mask, gloves, and hand sanitizer)
 - Update the address by observation only

Production Date	Number of ACOs
5/4/2020	21
5/11/2020	49
5/18/2020	27
5/25/2020	38
6/1/2020	28
6/8/2020	5
6/11/2020	1



COVID Response

Field staff participated in refresher trainings.

Those who had completed training:

- Read Refresher and Best Practices and Talking Points
- Complete refresher online training plan, including LiMA knowledge checks and a safety module

Those who had not completed training (QC staff):

- Completed the replacement training
- Capstone Day included conference call with the CFS and field exercise "at home"



Update Enumerate and Remote Alaska



Operation Overview

- The objectives of the 2010 Census UE operations were to interview and verify the status of HUs in areas that did not receive a mail back 2010 Census questionnaire.
- The operations included:
 - Update Enumerate
 - Remote Update Enumerate
 - Remote Alaska
- The methodology was essentially the same across the operations; however, the implementation of each operation differed according to the climate, cultural characteristics, and remoteness of the geographical areas in which the communities or housing units were located.
- The operations were conducted in communities where:
 - Housing units do not have traditional mailing addresses (for example, no house number or street name).
 - The geography is very remote or rural.
 - There are high concentrations of seasonally vacant housing units.
 - Select American Indian reservations.
 - Communities along the Mexican-American border.



Operation Design and Characteristics

- Worked almost 2 million housing units.
- Conducted in 88 of the 494 Local Census Offices (LCOs).
- Conducted between March 22, 2010, and the end of June 2010, by almost 17,000 field staff.
- The address updates were collected on paper address lists and paper maps.
- Staff conducted interviews on each HU's designated paper questionnaire.
- A sample of each enumerator's completed UE cases was selected for UE Reinterview. Also, Dependent Quality Control occurred during production, canvassing small areas of an assignment to make sure procedures were followed. Finally, Delete Verification was performed on all addresses marked as 'delete' during production.
- If the Census Bureau did not receive enumeration response data for an HU, the enumerator would attempt to enumerate the HU up to five additional times.



Results

- Partnership efforts with Tribal Leaders improved the 2010 Census counts. In the 2010 Census, of the 565 federally recognized tribes, 99 percent participated in the census enumeration.
- Communication between HQ and the RCCs and the RCCs to LCOs for UEOs was effective. Video teleconferencing with the regions and e-mailing operational logs with updates to procedures were also successful.
- The paper-based operation control system (PBOCS) collected status information about each case during the Enhanced Questionnaire Check-in process, allowing numbers and percentages to be shared in real time and allowing field managers to take action to correct any situations.
- Even with late changes to the kit specifications, UEO kits at NPC were delivered to the LCOs on schedule. There were no major problems encountered during the UE kit assembly operations.



Key Recommendations

- Review criteria for updating addresses in Update Enumerate areas. Update Enumerate was included in the Address Canvassing operation. Results data show that 80 percent of UE addresses were verified and 88 percent were complete City-Style addresses. Consider if certain areas of Update Enumerate can be included in the Nonresponse Followup Operation and not include an address update.
- Automate the questionnaire, operational forms such as payroll and Info-comm forms, and all related sources of paradata. This will reduce the amount of paper to be handled and reduce enumerator error.
- Improve communication about the enumeration method for Update Enumerate Operations' areas. Many residents were expecting questionnaires in the mail, due to the nationwide media campaign.
- Test all operational forms and questionnaires to ensure their usability by field staff.
- Fully integrate systems and provide consistent real time reporting to stakeholders.



Operation Overview

- The objectives of the 2010 Census Remote Alaska (RA) operation were the same as 2010 UE.
- The 2010 Census in Alaska primarily focused on address updating and enumeration of American Indian and Alaska Native villages. RA enumeration has unique challenges associated with the accessibility to the communities in Alaska's most remote areas, where the population ranges from several hundred people to just a few people.
- RA was not included in either the initial Local Update of Census Addresses program or the Address Canvassing operation to update the 2010 Census Master Address File due to the area's remote nature.



Operation Design and Characteristics

- Worked over 33,000 units.
- Managed by the Anchorage LCO with almost 500 field staff.
- Began in Noorvik, Alaska on January 25, 2010, and marked the kickoff of the 2010 Census enumeration nationwide. Operation ended on April 30, 2010.
- The address updates were collected on paper address lists and paper maps.
- Staff conducted interviews on each HU's designated paper questionnaire.
- Crew leaders conducted a personal verification of the housing units classified as vacant or delete by production enumerators. The sworn-in tribal leader/representative conducted the Address List Validation of the final housing count before field staff departed the village.
- If the Census Bureau did not receive enumeration response data for an HU on the first visit, the Enumerator made up to five additional attempts to enumerate.



Results

- Including the Field Operation Supervisors (FOS) in the preliminary visits to the Alaskan villages was a successful change from Census 2000. The RA FOSs focused on obtaining operational information while the partnership specialist focused on promoting village cooperation and participation.
- The Seattle RCC received convenience checks and traveler's checks in 2000 and in 2010 for use in purchasing vendor services to remote locations. These methods of payment were effective for vendors in Alaska that did not accept credit cards.
- The kickoff of the 2010 Census conducted in Noorvik, Alaska was successful in promoting the 2010 Census and achieving news coverage.

Key Recommendations

- Develop specific verbatim training for RA Enumerators and include classroom training in addition to OJT.
- Have a dedicated GQ supervisor for RA to handle unique group quarters (one remote, and one regular) to handle areas
 outside of the Alaskan Native villages. This person will have knowledge of enumeration in group quarters in addition to
 housing units.
- Consider an additional travel section for the LCO in Alaska to monitor and handle the heavy volume and extensive RA travel arrangements and work closely with the travel agency/contractor.



Operation Overview

The Update Enumerate (UE) operation was designated to occur in areas where the initial visit requires enumeration while updating the address frame. Most of the operation occurred in remote geographic areas that have unique challenges associated with accessibility.

The primary functions of UE include:

- Verifying and updating the address list and feature data for tabulation of the 2020 Census.
- Determining the type and address characteristics for each living quarter (LQ).
- Enumerating respondents at housing units (HUs) within the UE geographic areas.

UE occurred in the following geographic areas:

- Remote Alaska.
- Areas that were a part of the 2010 Remote Update Enumerate operation, such as northern parts of Maine and southeast Alaska.
- Select tribal areas that request to be enumerated in person during the initial visit.



Redesign

The vision for the 2020 Census was to conduct Update Enumerate in areas not within the Self-Response TEA. The design included:

- Updating the address list and feature data seamlessly on an automated, single device.
- Attempting enumeration on the first visit.
- Leaving a notice of visit that was linked to the address for the HU to respond online.

However, due to competing development priorities, a decision was made in May 2017 to add the Update Leave operation to the 2020 program and move most of the addresses in the UE TEA to the UL TEA. The remaining addresses for UE contained similar areas worked in the 2010 Remote Update Enumerate operation, as well as five American Indian Areas that had requested to be enumerated in person.



Redesign (cont.)

The UE operation was redesigned to mimic the 2010 operational design which was to update the address list and maps on paper and enumerate HUs on paper questionnaires. This aligned the operation to the design for 2020 Remote Alaska.

An alternative QC approach was planned given the small workload, largely for cost effectiveness. Enumerators were to travel in pairs to mitigate enumeration falsification, and there was a QA checklist in the address register for first the Census Field Supervisors and then later the ACO clerk to go through and to ensure all address lists, maps, and questionnaires were complete.



Design and characteristics

- Initial workload of about 6,600 housing units.
- Conducted in 3 Area Census Offices (ACOs) in 3 Regional Census Centers.
- Original operational dates: March 16, 2020, through April 30, 2020.
 - Operation started on time and finished on August 31, 2020, when all address registers, maps, and paper questionnaires had been successfully received at the National Processing Center.



COVID Response

- The operation was suspended starting on March 18th nationwide.
- ACOs began to resume production on June 14, 2020.

Activity	Start	Finish
Call Field Staff for Refresher Training	06/09/2020	06/12/2020
Distribute Enumeration Materials & PPE	06/10/2020	06/13/2020
Conduct Update Enumerate		
Resume in Southeastern Alaska	06/14/2020	08/28/2020
Resume in Northern Maine	06/22/2020	07/29/2020



COVID Response

- Operation Procedure Changes
 - Used Personal Protective Equipment (mask, gloves, and hand sanitizer).
 - Maintained a distance of at least six feet during enumeration.
 - Enumerating in pairs became optional.
- Universe change
 - The four AIAs in the Chicago Region asked to move to Self-Response just prior to the operation beginning on March 16, 2020. Due to the timing of the request and the mailability and accessibility of the AIAs, the four AIAs were added to the Self-Response operation and reduced the UE workload from about 8,500 to approximately 6,600.



Operation Overview

- The objectives of the 2020 Census Remote Alaska (RA) operation were the same as 2020 UE.
- The operation primarily focused on address updating and enumeration of Alaska Native villages.
- 2020 Remote Alaska also conducted Advance Contact and enumeration of the GQs and TLs within the Remote Alaska area.



Design and characteristics

- Initial workload of over 28,000 living quarters.
- Managed in the Anchorage, AK ACO.
- Original operational dates: January 21, 2020 through April 30, 2020.
 - Operation started on time and finished on August 28, 2020 when all address registers, maps, and paper questionnaires had been successfully received at the National Processing Center.
 - GQ and TL Advance Contact was conducted from January 13, 2020 to January 27, 2020.
- QA included a checklist in the address register for first the Census Field Supervisors and then later for the ACO clerk to go through and to ensure all address lists, maps, and questionnaires were complete. Also, the count of living quarters was reviewed by the tribal leader/representative before field staff departed the village.



COVID Response

- The operation was suspended starting on March 18th nationwide.
- Self Enumeration method was introduced to the villages starting April 2nd; about 1/3 of the villages participated in this enumeration method.
 - POC in the village collected address and person data on a spreadsheet similar to what's used for paper listing in GQE.
 - CFS working on that village received the spreadsheet and transcribed address and enumeration data onto the Census field materials for processing and data capturing.
- The ACO began to resume production on April 13, 2020. Field staff worked with each village to determine if or when a return visit could occur.
 - Staff were provided with Personal Protective Equipment (mask, gloves, and hand sanitizer).
 - Enumerators maintained a distance of at least six feet during enumeration.



Any Questions?

