Report In Brief

U.S. Department of Commerce Office of Inspector General

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Why We Did This Review

At an estimated cost of $11.5 billion, the 2010 census will be the most expensive decennial census ever. The Census Bureau's reengineered plan for 2010 depends heavily on automating critical field operations, such as address canvassing. We evaluated the bureau's (1) efforts to automate address canvassing using handheld computers; (2) methods for correcting the address lists and maps; (3) quality control processes; (4) outreach activities; and (5) staff training, and other components of the management, administrative, and logistical support for the 2006 test.

Background

The 2006 test is one of two scheduled site tests of concepts, systems, and procedures being explored for the 2010 decennial census. Address canvassing, the first large-scale operation of the test, is intended to ensure that the bureau's address file and digital map database are current and complete. During this operation, temporary field staff verify, update, add, or remove addresses; add and delete streets to correct the maps; and annotate the location of addresses on the maps. The updated information is used in subsequent census operations to contact every household and has a direct bearing on the bureau's ability to accurately count the population.

U.S. Census Bureau

Valuable Learning Opportunities Were Missed in the 2006 Test of Address Canvassing (OIG-17524)

What We Found

We concluded that the bureau only partially achieved its objectives for the address canvassing operation and missed opportunities to learn valuable lessons to apply to the decennial. These are some of our primary findings:

~ **Unreliable handheld computers (HHCs).** Census had significant difficulties developing the HHC software. As in the 2004 test of nonresponse follow-up, the HHCs used for address canvassing suffered from frequent crashes, data loss, slow performance, and GPS problems. Last minute HHC fixes rendered some training materials out of date. And in the end, the test sites failed to reach production goals.

~ **Map errors and inadequate procedures.** The HHC maps contained nonexistent or misplaced roads. As a result, some staff spent excessive time trying to find their routes, did not fully canvass their assignment area, may have missed housing units, and failed to correct maps. Ambiguous and incomplete procedures as well as complex block configurations further compromised their ability to revise address lists.

~ **Improved quality check process.** Census implemented a new procedure to update the address list: quality control staff verified collected data as soon as an individual assignment area was canvassed, rather than waiting until the entire canvassing operation had concluded. But weaknesses in training and management reporting, as well as the bureau's failure to analyze quality control data during the operation, undercut the overall success of the quality control process.

We also noted weaknesses in the bureau's outreach efforts, policies for overtime and cell phone reimbursement, and staff training.

What We Recommended

We made 21 recommendations to improve the tested operations and associated administrative matters, including

1. enhance the reliability of automation by continuing to improve system development practices and using contractor support when warranted;

2. develop an adequate HHC capability for collecting address coordinates by determining the factors that affect GPS reliability and address coordinate accuracy, and instituting a plan for implementing and testing improvements;

3. ensure the Field Data Collection Automation contract appropriately addresses automation issues identified in the 2006 test;

4. determine why the TIGER map database contains nonexistent roads and eliminating such roads from the database by the 2010 census;

5. refine staff training to provide clear and effective instruction on when and how to correct maps and adjust routes; and

6. give production managers enough information about quality control failures so they can take timely action to improve their staff's work during address canvassing.