

For Public Release

U.S. Department of Commerce  
Office of Inspector General

# 2010 Census: Quarterly Report to Congress, December 2009

Report OIG-19791-2





# Report In Brief

U.S. Department of Commerce Office of Inspector General



## Why We Did This Review

The Supplemental Appropriations Act of 2008 gave the Census Bureau an additional \$210 million to help cover spiraling 2010 decennial costs stemming from the bureau's problematic efforts to automate major field operations, major flaws in its cost-estimating methods, and other issues. The act's explanatory statement required the bureau to submit to Congress a detailed plan and timeline of decennial milestones and expenditures, as well as a quantitative assessment of associated program risks, within 30 days.

OIG must provide quarterly reports on the bureau's progress against this plan. This report's objective was to provide an update of activities and operations, identify budget and spending issues, and examine risks to the 2010 Census programs.

## Background

Since first conducted in 1790, the constitutionally mandated decennial census field activities have largely been administered via paper and pencil. The 2010 Census plan included significant expansion of automation, using handheld computers to verify addresses (address canvassing), conduct in-person surveys with households that did not return their questionnaires (nonresponse follow-up), and collect data from a nationwide sample to evaluate the accuracy of the decennial count (coverage measurement).

Nonresponse follow-up is the most expensive and labor-intensive operation of the decennial census. Increasing costs and automation problems prompted the bureau's decisions to abandon the handheld computers for nonresponse follow-up and coverage measurement operations, but to still use the handheld computers for address canvassing.

## 2010 Census: Quarterly Report to Congress December 2009 (OIG-19791-2)

### What We Found

Census is moving forward with important decennial operations and activities, including the completion of two major operations (address canvassing and group quarters validation). However, errors in the decennial scheduling system and potential delays continue to affect management of the 2010 Census. Census also must develop a paper-based operations control system (PBOCS) to manage field operations. Because this is being done on a compressed schedule, it represents a major risk to the decennial census. The results of system testing, planned for late December, should help the bureau understand whether this system will be capable of managing the 2010 Census operations.

For FY 2010, Census requested about \$674 million in contingency funds for key operations and activities, almost 9 percent of its total 2010 Census budget request. This fund—formulated with the advice of officials from the Department and Census—is based on the level of risk or uncertainty associated with key decennial activities.

Census was able to cover an \$88-million (nearly 25 percent) address canvassing overrun by utilizing several sources, including \$41 million from FY 2009 contingency funds and \$47 million in savings from other operations and activities.

The bureau's process for managing 2010 Census program risks represents a significant improvement over the previous census in 2000. However, because the majority of its time has been spent on contingency planning, the bureau's Risk Review Board (RRB) has not been able to review risk ratings in detail at weekly meetings, as required by Census's risk management plan. The RRB is working on a plan that should help Census management complete its contingency plans and actively monitor its risk management activities.

This report does not provide specific recommendations. However, we will continue to monitor specific 2010 Census operations and activities, such as:

- Given the importance of the PBOCS in managing the workloads of Census's fieldwork operations, and the short time frame available for system development, we will continue to monitor and report on PBOCS development and testing in subsequent quarterly reports.
- Because of the address canvassing cost overrun, Census is currently revising nonresponse followup (NRFU) cost assumptions, especially the projected mail response rate. We will evaluate NRFU planning efforts, operational effectiveness, and data quality.
- Census used Recovery Act funds to hire additional partnership positions in hard-to-count areas. While we recognize its relatively quick recruitment and hiring, we will monitor the adequacy of management and supervisory controls over the partnership workforce.



**UNITED STATES DEPARTMENT OF COMMERCE**  
**The Inspector General**  
Washington, D.C. 20230

December 18, 2009

The Honorable Alan B. Mollohan  
Chairman  
Subcommittee on Commerce, Justice,  
Science, and Related Agencies  
Committee on Appropriations  
U.S. House of Representatives  
Washington, DC 20515

The Honorable Frank R. Wolf  
Ranking Member  
Subcommittee on Commerce, Justice,  
Science, and Related Agencies  
Committee on Appropriations  
U.S. House of Representatives  
Washington, DC 20515

Dear Mr. Chairman and Mr. Wolf:

This report responds to the explanatory statement accompanying the Supplemental Appropriations Act of 2008. The statement requires the Office of Inspector General to report on a quarterly basis the status of Census's 2010 operations. Our first quarterly report, issued in August 2009, highlighted limitations in the Census Bureau's ability to oversee the systems and information for tracking its schedule, cost, and risk management activities during the 2010 Census. We subsequently issued a separate report to the bureau with recommendations to help improve the program management of both the current and 2020 Censuses.

This second quarterly report provides an update on the schedule, cost, and risk management activities, of the 2010 Census for the quarter ending September 30, 2009. Our review found that the Census Bureau has proceeded with several major operations, but is faced with a compressed schedule for developing a paper-based operations control system to manage its fieldwork. With respect to cost, we discuss the bureau's efforts to revise its cost assumptions for the nonresponse follow-up operation and its spending of funds from the American Recovery and Reinvestment Act of 2009. The final part of our report presents an update on the 2010 Census's program-level risks.

We have sent identical letters to the Chairman and the Ranking Member of the Senate Subcommittee on Commerce, Justice, Science and Related Agencies.

If you have any questions, or if we can be of further assistance, please do not hesitate to contact me at (202) 482-4661.

Sincerely,

A handwritten signature in black ink that reads "Todd J. Zinser".

Todd J. Zinser

Enclosure



cc: Representative Patrick J. Kennedy  
Representative Chaka Fattah  
Representative Adam Schiff  
Representative Michael Honda  
Representative C.A. "Dutch" Ruppertsberger  
Representative Peter J. Visclosky  
Representative Jose E. Serrano  
Representative David R. Obey, *Ex Officio*  
Representative John Abney Culberson  
Representative Robert B. Aderholt  
Representative Jo Bonner  
Representative Jerry Lewis, *Ex Officio*



**UNITED STATES DEPARTMENT OF COMMERCE**  
**The Inspector General**  
Washington, D.C. 20230

December 18, 2009

The Honorable Barbara A. Mikulski  
Chairwoman  
Subcommittee on Commerce, Justice,  
Science and Related Agencies  
Committee on Appropriations  
United States Senate  
Washington, D.C. 20510

The Honorable Richard C. Shelby  
Ranking Member  
Subcommittee on Commerce, Justice,  
Science and Related Agencies  
Committee on Appropriations  
United States Senate  
Washington, D.C. 20510

Dear Madam Chairwoman and Senator Shelby:

This report responds to the explanatory statement accompanying the Supplemental Appropriations Act of 2008. The statement requires the Office of Inspector General to report on a quarterly basis the status of Census's 2010 operations. Our first quarterly report, issued in August 2009, highlighted limitations in the Census Bureau's ability to oversee the systems and information for tracking its schedule, cost, and risk management activities during the 2010 census. We subsequently issued a separate report to the bureau with recommendations to help improve the program management of both the current and 2020 censuses.

This second quarterly report provides an update on the schedule, cost, and risk management activities, of the 2010 census for the quarter ending September 30, 2009. Our review found that the Census Bureau has proceeded with several major operations, but is faced with a compressed schedule for developing a paper-based operations control system to manage its fieldwork. With respect to cost, we discuss the bureau's efforts to revise its cost assumptions for the nonresponse follow-up operation and its spending of funds from the American Recovery and Reinvestment Act of 2009. The final part of our report presents an update on the 2010 census's program-level risks.

We have sent identical letters to the Chairman and the Ranking Member of the House Subcommittee on Commerce, Justice, Science and Related Agencies.

If you have any questions, or if we can be of further assistance, please do not hesitate to contact me at (202) 482-4661.

Sincerely,

Todd J. Zinser

Enclosure



cc: Senator Daniel Inouye  
Senator Patrick Leahy  
Senator Herb Kohl  
Senator Byron Dorgan  
Senator Dianne Feinstein  
Senator Jack Reed  
Senator Frank Lautenberg  
Senator Ben Nelson  
Senator Mark Pryor  
Senator Judd Gregg  
Senator Mitch McConnell  
Senator Kay Bailey Hutchison  
Senator Lamar Alexander  
Senator George Voinovich  
Senator Lisa Murkowski

**Contents**

Introduction..... 1

Chapter 1: Update on the 2010 Census Schedule ..... 2

*Census Is Moving Forward with Important Decennial Operations and Activities* ..... 2

*Errors in the Scheduling System and Potential Delays Continue to Affect 2010 Census Management*..... 3

*Census Faces a Compressed Development Schedule for Its Paper-Based Operations Control System* ..... 4

Chapter 2: Update on 2010 Census Costs..... 6

*Address Canvassing Was Completed Early, but Nearly 25 Percent over Budget*..... 6

*Census Is Revising Cost Assumptions for Nonresponse Follow-up*..... 10

*Census Has Budgeted Contingencies for Its FY 2010 Operations* ..... 10

*Census Is Using \$1 Billion from the Recovery Act to Enhance and Support 2010 Operations* 11

*Census Used Recovery Act Funds to Hire Additional Partnership Positions in Hard-to-Count Areas, but Employee Supervision Remains a Concern*..... 12

Chapter 3: Update to Census’s Risk Management Activities..... 14

*Census Has Not Changed Existing Risk Ratings* ..... 14

*Work on Contingency Plans Continues, but None Are Complete*..... 16

*Census Staff Is Developing Plans to Address the Risk of an H1N1 Influenza Outbreak*..... 16

Appendix A: Objectives, Scope, and Methodology..... 18

Appendix B: Fieldwork Operations Managed by the Paper-Based Operations Control System 19

Appendix C: Address Canvassing Field Budget by Regional Census Center ..... 20

## Introduction

The Supplemental Appropriations Act of 2008, enacted June 30, 2008, gave the U.S. Census Bureau an additional \$210 million to help cover spiraling 2010 Census costs. The act's explanatory statement required Census to formulate a detailed plan encompassing a timeline of decennial activities, cost estimates, and risk management activities. This information and subsequent updates of Census's progress are the measures we review in preparing our quarterly reports.

Our first quarterly report, issued in August 2009, highlighted limitations in the Census Bureau's ability to oversee the systems and information for tracking its schedule, cost, and risk management activities during the 2010 Census. We subsequently issued a separate report to Census with recommendations that we believe would help improve the program management of both the current and 2020 Censuses.<sup>1</sup>

This quarterly report references 2010 Census activities that occurred from June through September 2009 and includes more current information when available. The report has three areas of focus: *chapter 1*, which highlights major operations and activities performed by Census during this review period, issues affecting the decennial schedule, and Census's effort to develop a paper-based operations control system (PBOCS) to manage its fieldwork; *chapter 2*, which discusses cost overruns for the address canvassing operation, revisions to cost assumptions for the nonresponse follow-up (NRFU) operation, contingency funds for fiscal year (FY) 2010 operations, and spending of the American Recovery and Reinvestment Act of 2009 funds for the 2010 Census; and *chapter 3*, which presents an update on program-level risks to the decennial census. See appendix A for a complete outline of our objectives, scope, and methodology.

---

<sup>1</sup> For specific information on our findings and recommendations, see *2010 Census: First Quarterly Report to Congress*, OIG-19791-1, U.S. Department of Commerce, Office of Inspector General, August 2009; and *Recommendations from 2010 Census: First Quarterly Report to Congress*, OIG-19791-1. OIG reports are available on our Web site, [www.oig.doc.gov](http://www.oig.doc.gov).

## Chapter 1: Update on the 2010 Census Schedule

To manage the 44 major operations that make up the 2010 Census, the Census Bureau maintains a schedule of activities containing about 9,400 program and project-level activities. Project-level teams monitor their own activity schedules while Decennial Management Division staff manages the integration of all scheduled activities and operations, and any changes to those activities. The Census Integration Group (CIG), which has primary oversight of the 2010 Census, reviews at weekly meetings those activities deemed critical to the success of the 2010 Census.

During our review, operations appear to have proceeded on schedule. However, future decennial activities as tracked by CIG in its project management system continue to appear to be late due to incorrect information in the system and actual delays, both of which require corrective action by project teams. In addition, because the Field Data Collection Automation (FDCA) contract was modified late last year, the Census Bureau assumed responsibility for developing the PBOCS and faces a compressed development and testing schedule for the system. The PBOCS is critical for coordinating its operations in 2010; we and the bureau both view the tight schedule as a major risk to decennial operations. Without this system in place and fully functioning, Census may find it difficult to maintain its schedule and carry out its enumeration operations next year.

### *Census Is Moving Forward with Important Decennial Operations and Activities*

During this review period, Census completed two major fieldwork operations. It also proceeded with activities in support of 2010 operations. Address canvassing—Census’s major operation for updating its master address list of residential households nationwide—was completed 1 week ahead of schedule but over budget by nearly 25 percent (\$88 million). Census’s 4-week-long Group Quarters Validation operation, which lasted from late September to late October 2009, finished under budget by 41 percent—a savings of \$29 million. Finally, in mid-August Census began setting up local Census offices in support of the NRFU operation. This deployment appears to be on schedule.<sup>2</sup>

**Address Canvassing.** On July 10, 2009, the Census Bureau completed its address canvassing operation, which used specially made handheld computers to update its master address file. The operation began on March 30, 2009, and entailed about 140,000 temporary workers based out of 151 local Census offices canvassing the country in an attempt to locate all possible living quarters. Census will use this list to deliver questionnaires to households and other living quarters in early 2010. In February 2009, the address canvassing workload reached almost 145 million addresses—about 11 million more than Census’s original projections—because of updates to the address list from local governments and the U.S. Postal Service, among other reasons. By deleting nonexistent, duplicate, and nonresidential addresses and adding new ones

---

<sup>2</sup> NRFU is the most expensive and labor-intensive operation of the 2010 Census, requiring hundreds of thousands of temporary workers visiting millions of households that did not return their questionnaires, in order to collect the necessary census information.

---

---

## OIG Quarterly Report to Congress, December 2009

---

---

during the operation, the size of the decennial address list was reduced to about 134 million, which is the basis for subsequent enumeration operations.

The completion of address canvassing represents a major milestone for the 2010 Census. However, given our long-standing reservations about the operation's effectiveness and our observations during this operation, we are concerned about the reliability of the address list. Consequently, we have recently identified actions that Census should consider to assess and potentially improve the quality of its master address file.

***Group Quarters Validation.*** With address canvassing completed, Census embarked on its Group Quarters Validation operation, which aimed to verify information from each one of the estimated 2 million potential group quarters nationwide. The list of potential group quarters was derived from the address canvassing operation and from predefined sources, such as Census 2000 group quarters information, Internet searches, and address updates from local governments. Group quarters—facilities where individuals live in group arrangements, such as nursing homes, correctional facilities, and college residence halls—are counted separately from housing units (e.g., single-family homes and apartments). Fieldwork for this operation took place between September 28 and October 23, 2009, and involved about 25,000 temporary workers based out of the same local Census offices used for address canvassing. For this operation, Census spent over \$41 million out of a field budget of over \$70 million (about 59 percent). Out of the \$41 million, \$27.4 million was spent on fieldwork and \$13.6 million was spent on training. Based on this figure, it appears that Census successfully managed the costs for this operation. We are conducting a review of the bureau's activities to assess the quality of the operation.

***Infrastructure.*** In August 2009, Harris Corporation, Census's contractor for the FDCA contract, began deploying an additional 344 local Census offices in preparation for next year's NRFU operation. Census plans to bring the total number of offices required for NRFU to 494 by December 31, 2009.<sup>3</sup> This effort entails leasing office space, having the lessor make necessary office renovations and improvements (such as erecting and/or tearing down walls, installing security fixtures, and constructing wheelchair ramps), and having Census Bureau contractors install furniture and telecommunications equipment (such as computers, phones, facsimile machines, and printers). Harris (responsible for the equipment installation) planned to complete 26 offices each week through November and finish the last 19 in December. All offices were opened by December 8, 2009, which is 23 days ahead of schedule. Census and Harris opened all local Census offices needed for 2010 operations on time, in contrast to the deployment effort for address canvassing in late 2008 and early 2009.

### ***Errors in the Scheduling System and Potential Delays Continue to Affect 2010 Census Management***

Throughout our review period, two problems—errors in the 2010 Census scheduling system and potential delays—affected a number of activities on CIG's weekly critical alert report, which

---

<sup>3</sup> The early local Census office in Puerto Rico that was used for address canvassing is included in the number of additional offices requiring renovation for use during NRFU.

tracked an average of 63 activities. Scheduling system errors among dependent activities occur because activities have wrong start and finish dates, incorrect dependent relationships, or durations that are too long or short. Potential delays appear in the schedule when start and finish dates for activities that depend on the completion of a prior activity are misaligned. Weekly reports showed that a logic error or a delay affecting one activity can have a cascading effect on related activities that follow. Because Census did not thoroughly review the schedule after it was developed, it continues to encounter schedule errors that require staff to spend time and resources to resolve. These problems are identified weekly by project teams and are resolved through consultations among the teams and the implementation of schedule change requests, which often take several weeks. But because scheduling system errors and potential delays are likely to continue to affect management decisions for the remainder of the decennial, Census should ensure that both problems are resolved quickly so as not to affect actual operations, which occur in quick succession in 2010.

### ***Census Faces a Compressed Development Schedule for Its Paper-Based Operations Control System***

In April 2008, the Department and the Census Bureau announced significant changes to the 2010 Census design and FDCA contract. Among them was the decision to revert to a traditional paper-based NRFU from an automated one using handheld devices to collect household information. Following a contract modification in November 2008, the responsibility for developing a PBOCS to manage the workload for 2010 Census operations transferred from Harris Corporation to Census. Census personnel are developing and testing the system's software supported by programmers under a \$37-million contract awarded to a different company, ICS.

The PBOCS comprises 10 applications, each one managing a different operation occurring in 2010, including NRFU (see appendix B for a list of operations supported by the PBOCS). Because of the late contract change, the Census Bureau is faced with an aggressive development and testing schedule for the PBOCS, which, according to an independent assessment, has been compressed by two-thirds of what it would be under normal circumstances. Census has scheduled the first three PBOCS applications' release for January 15, 2010, to manage its Remote Alaska, Group Quarters Advance Visit, and Update/Leave operations. With respect to the NRFU application, testing is scheduled to end March 1, with deployment on March 22. This short period leaves little time for last-minute revisions, which must be finalized in order to allow time to train staff, beginning the following week, at all 494 field offices to use the system. The NRFU operation begins on May 1, 2010. To mitigate this risk, the Census Bureau is testing the system as it is being developed. In addition, many of the functionalities required for earlier operations such as Remote Alaska and Update Leave will continue to be used in subsequent operations, allowing the more expensive NRFU operations to benefit from testing and deployment in predecessor operations. Nevertheless, PBOCS development remains a high risk activity.

More importantly, Census's ability to effectively manage its enumeration operations and fulfill its mandate of counting the country's population hinges on its operations control system. Described by Census as the nerve center of its field offices, the PBOCS is needed to perform

---

---

## OIG Quarterly Report to Congress, December 2009

---

---

important tasks, such as defining enumerator assignments, providing current information on enumerator productivity, printing materials for the operation, and shipping completed questionnaires for processing. Without an effectively functioning PBOCS, hundreds of thousands of nonresponse follow-up enumerators may not be able to receive their assignments, and Census managers may not be able to monitor an operation's progress, jeopardizing its completion.

Recognizing the challenge with developing this system, Census in June 2009 created an independent assessment team composed of staff from Census and the Department of Commerce, as well as outside contractors, to conduct an in-depth review of the PBOCS development project. In August 2009, the assessment team provided a baseline of risks, findings, and recommendations that Census needed to address, as well as a timeline for completing key activities to guide the development team in its efforts to complete the project on schedule. The team deemed system integration and deployment the two activities at highest risk, requiring immediate attention. Activities at medium risk included system development, security, functionality, and performance. As a way to mitigate the impact of the compressed schedule, Census has embedded IT security specialists within the development team to ensure that it addresses security concerns as it creates the system. Census acknowledges that this activity in support of NRFU and other major decennial operations is a top priority, and plans to have the assessment group brief the director on a monthly basis. However, Census's most recent briefing to the director in early November covered the progress of PBOCS development for the months of September and October.

The bureau is including the PBOCS in the Decennial Applications Load Test in December 2009 as part of larger field tests of decennial operations. This will help staff assess the system's performance and identify problems that require corrective action. Also, Census plans for each release of PBOCS to undergo independent load testing. The results of PBOCS' ongoing testing as well as information gathered during the load test are intended to provide the bureau with an understanding of whether this system will be capable of managing the 2010 Census operations. Given the importance of the PBOCS in managing the workloads of Census's fieldwork operations and the short time frame available for system development, we will continue to monitor and report on PBOCS development and testing in subsequent quarterly reports.

**Chapter 2:  
Update on 2010 Census Costs**

The 2010 Census lifecycle cost estimate currently stands at \$14.7 billion, having increased \$3.2 billion over the last 2 years. The increase resulted in part from the decision to halt development, due to contract and development problems, of the handheld computers for use in Census operations beyond address canvassing. Revisions to budget assumptions made earlier in the decade also contributed to the overall increase. Finally, the Census Bureau received \$1 billion in Recovery Act funds to improve communications and outreach (\$250 million) and fund early operations (\$750 million).

Census completed address canvassing in July 2009 and used FY 2009 contingency funds and some of the remaining balances from other operational areas to fund a cost overrun of \$88 million. For FY 2010, Census requested a budget of approximately \$6.7 billion for the decennial census, which includes \$674 million for contingencies related to 10 major operations and activities (described later in this chapter). Census planned its contingencies with input from Department of Commerce.

***Address Canvassing Was Completed Early, but Nearly 25 Percent over Budget***

Census’s 3-month address canvassing operation was completed this past July, involving more than 140,000 temporary workers (called *listers*) from 151 local Census offices throughout 12 regions of the country, using handheld computers to update addresses and maps of living quarters. While this is an accomplishment worth noting given that this was Census 2010’s first major decennial field operation, Census’s budget estimate of about \$356 million was inadequate. The final cost of the operation was about \$444 million—nearly 25 percent over budget.

Census staff provided several reasons for the overrun (see table 1):

**Table 1. Cost Overruns During Address Canvassing (\$s in millions)**

<i>Reason</i>	<i>Overrun</i>
Increased initial address canvassing workload	\$41
Underestimated quality control workload	34
Fingerprinting*	6
Training additional staff	7
<b>Total</b>	<b>\$88</b>
*Fingerprinting costs were charged to the training budget instead of to a separate fingerprinting budget.	

Source: U.S. Census Bureau

---

---

## OIG Quarterly Report to Congress, December 2009

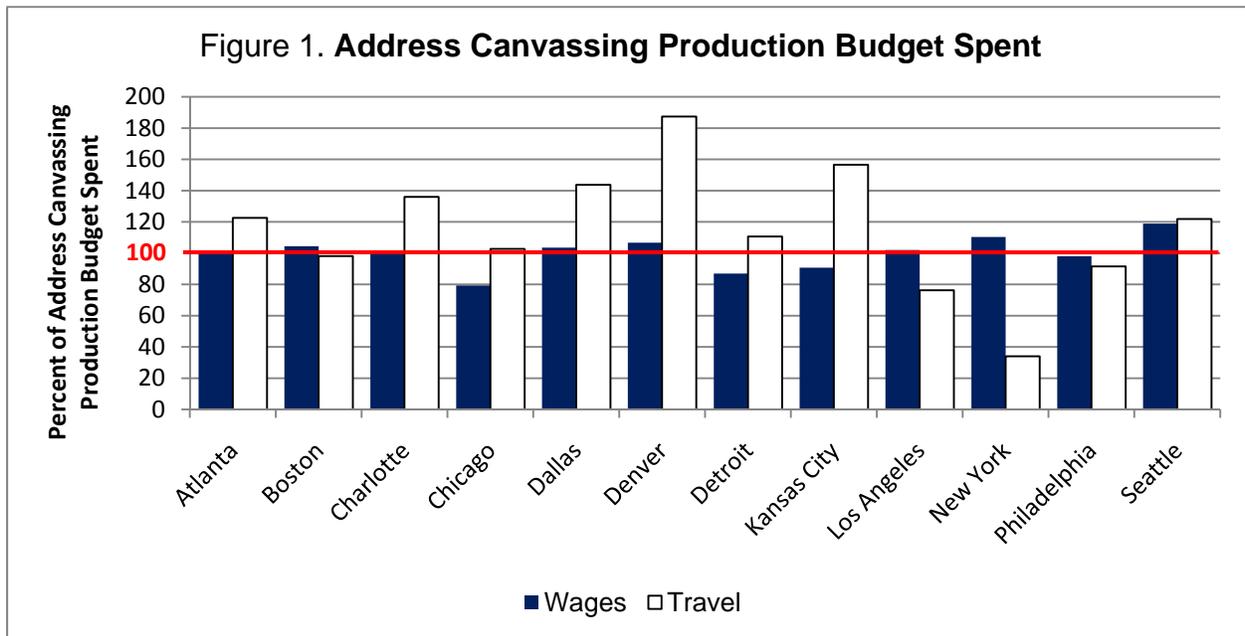
---

---

This \$88-million overrun is partially attributable to the fact that Census predicted a higher employee turnover rate than was actually experienced, due to the high rate of unemployment. Census was able to cover this \$88-million overrun from several sources, including \$41 million from FY 2009 contingency funds, \$7 million from its fingerprinting budget for address canvassing, \$4 million from its large block operation, and \$36 million in savings from other activities.

Census performed address canvassing fieldwork in two phases: production and quality control. Most workers were production listers who canvassed their assignment areas to update their addresses and maps. Once they completed those areas, quality control listers in the field conducted checks of address samples to ensure accuracy. Throughout the country, production and quality control listers used private vehicles to complete their assignments; Census reimbursed them at a rate of 55 cents per mile driven.

Cost and progress data showed that increased workloads for quality control as well as mileage reimbursement expenses for local travel during both stages of the operation resulted in cost overruns at varying levels throughout all Census regions. Figure 1 shows the cost overrun for production fieldwork, by regional Census office.<sup>4</sup>



Source: OIG analysis of U.S. Census Bureau data

Not all regions experienced the same budget fluctuations. For example, Charlotte, Chicago, Detroit, Kansas City, and Philadelphia all experienced lower than anticipated wages. Yet local travel costs were over budget for each of these regions except Philadelphia. Conversely, Boston,

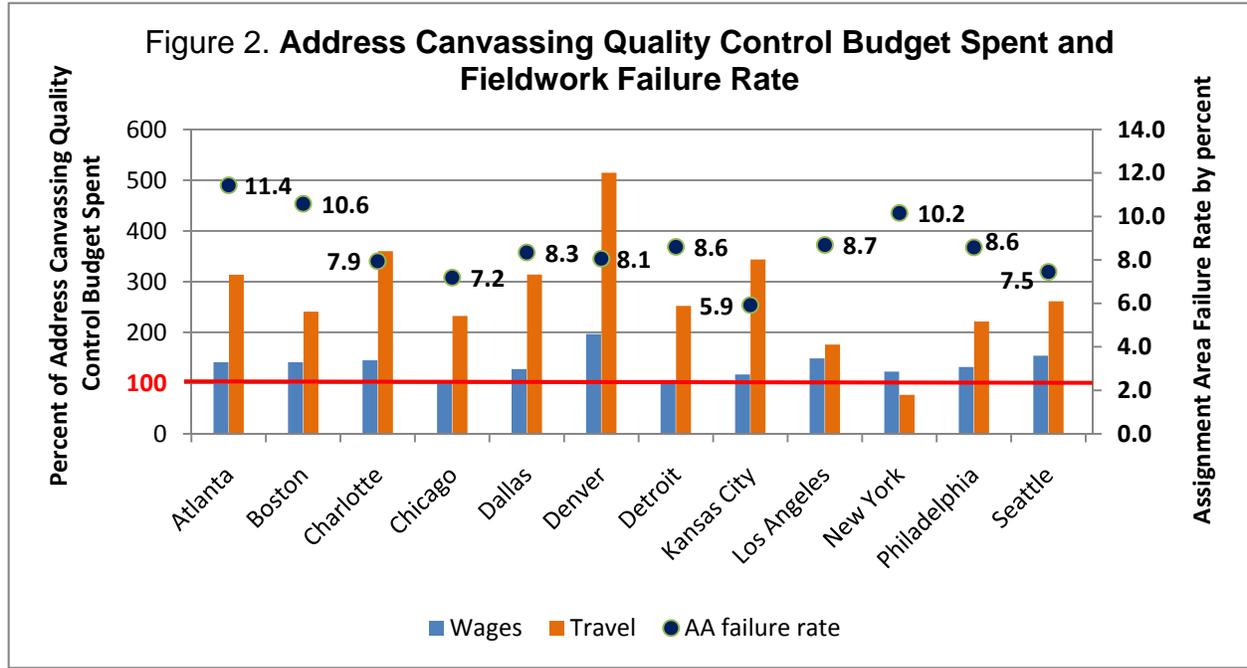
---

<sup>4</sup> See Appendix C for detailed data on production and quality control budgets versus actual costs. The category “Travel” in figures 2 and 3 denotes the cost of listers’ mileage reimbursement.

## OIG Quarterly Report to Congress, December 2009

Los Angeles, and New York each spent more for wages than budgeted, yet were under budget with respect to local travel costs.

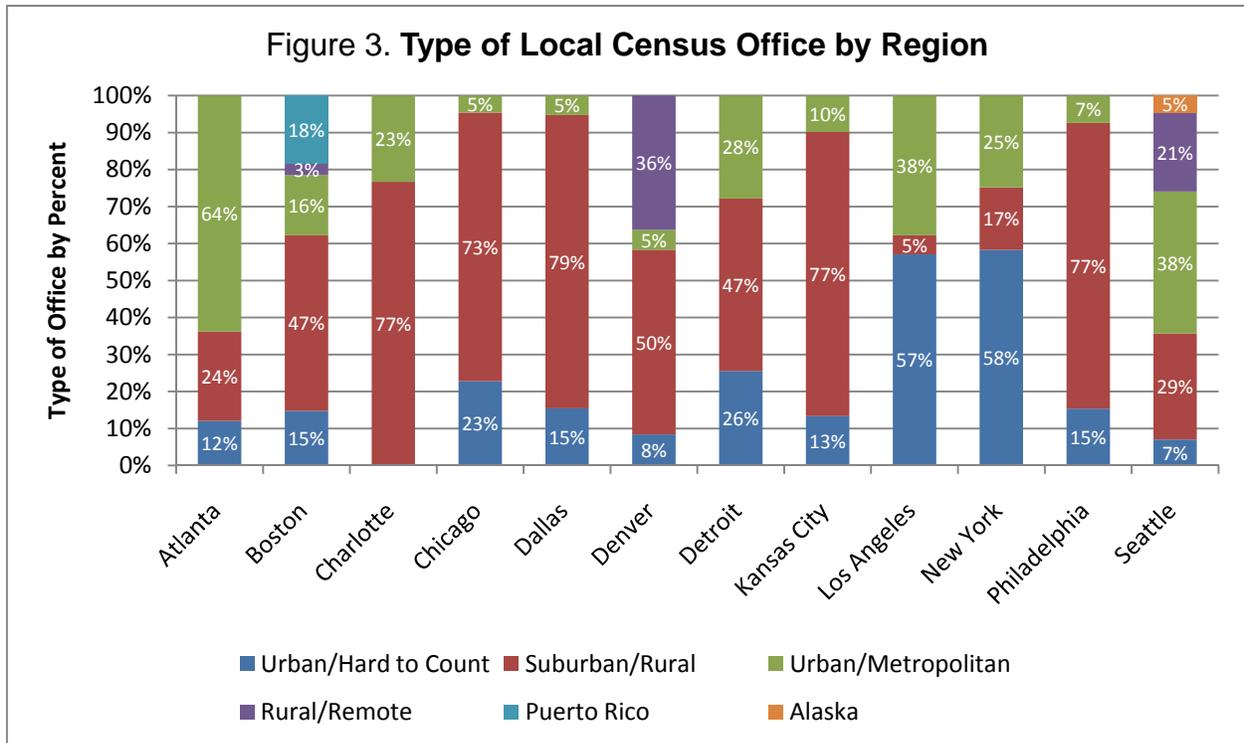
Figure 2 shows cost overruns by regional Census office of the address canvassing quality control task and the percentage of assignment areas performed by production staff that failed the verification phase of the operation.



Source: OIG analysis of U.S. Census Bureau data

Clearly, the quality control part of address canvassing finished significantly over budget. Each region overspent its budgets for wages and travel costs with the exception of New York, which spent only 77 percent of its travel budget. Although the rate at which assignment areas failed quality control might be offered as an explanation of why costs were over budget, it is difficult to conclude that. For example, New York had a failure rate of 10 percent, yet was 23 percent over budget on wages and 23 percent *under* budget on travel costs. In contrast, Denver's failure rate was 8 percent, yet its wages and travel budget overruns combined was the most of any region.

Another possible explanation of the cost overruns is the composition of the regions. The Census Bureau classifies each office by the predominant type of address within its boundaries. Figure 3 on the following page shows the breakdown of each region by the type of local Census office.



Source: OIG analysis of U.S. Census Bureau data

Similar to figures 1 and 2, it is also difficult to conclude that the type of local Census office, whether located in urban, suburban, or rural areas, determined the extent to which a region overspent its budget on wages or travel. For example, one might conclude that Denver’s more than 500 percent travel budget overrun for quality control could be explained by the fact that half its local Census offices were classified as suburban/rural. Yet 77 percent of the offices in the Philadelphia region were suburban/rural, and its quality control travel budget was 221 percent of budget.

Therefore, it is not clear from looking at the fieldwork failure rate and the makeup of each region why regions were over or under their aggregate budget. We analyzed different data sets from the address canvassing operation and could not establish a causal relationship between cost overruns and a region’s performance or office makeup. Such wide variations in budget overruns, which should be minimal, raises questions about the bureau’s original budget assumptions for and management of the operation. An in-depth analysis of cost estimates, expenditures from each local Census office, and workload data would be needed to better understand the budget variances. Census staff informed us that it was conducting an internal review of the address canvassing budget overruns but could not say when its work would be completed. Our office is conducting a review of address canvassing lister travel costs to assess whether budget variances resulted from flawed cost models or the inefficient allocation of resources that might inform NRFU cost estimates.

***Census Is Revising Cost Assumptions for Nonresponse Follow-up***

Census followed a detailed process to develop its NRFU cost estimate, currently at \$2.7 billion. However, because of its address canvassing cost overrun and changes in the economy, Census is in the process of revising its current NRFU cost assumptions, especially the projected mail response rate (currently 64 percent). According to Census, each percentage point increase in this rate equals \$80–90 million in savings. Conversely, each percentage point decrease would result in additional costs of a similar amount. Two additional significant items that Census is reviewing are (1) the impact of housing vacancies, which could be significant given the large number of recent foreclosures, and (2) the impact of replacement mailing (i.e., sending an additional questionnaire to households that have not returned their original ones). Census still needs final data from its address canvassing operations to complete revisions to its NRFU cost assumptions. Recognizing the uncertainty and risk in its NRFU projections, Census has requested a contingency fund of almost \$411 million for FY 2010 (see the following section). At the time of our review, a final estimate was anticipated by mid-November 2009.

***Census Has Budgeted Contingencies for Its FY 2010 Operations***

For FY 2010, Census requested about \$674 million in contingency funds for key operations and activities. This is equivalent to 8.9 percent of its \$6.7 billion request for the short form component of the 2010 Decennial Census program. This fund was formulated with the advice of officials from the Department, Census, and Office of Management and Budget, and is based on the level of risk or uncertainty associated with key decennial activities. Activities were assigned contingency amounts of about 5, 10, and 15 percent above the estimated cost of those activities. Under this methodology, NRFU was assigned an additional 15 percent in contingency funds, which is nearly \$411 million, based on the estimated \$2.7 billion cost for this operation. Table 2 shows each activity that was assigned a contingency amount for FY 2010. Projected spending for these activities combined represents nearly two-thirds of the budget request for this current fiscal year.

**Table 2. FY 2010 Obligations and Contingency Fund Amounts for the 2010 Census (\$ in Millions)<sup>a</sup>**

<b>Key Activity</b>	<b>FY 2010 Budget Request</b>	<b>Approximate Contingency Amount Percentage</b>	<b>FY 2010 Contingency Amount</b>
Local Census office space	\$183.4	10%	\$18.3
Coverage measurement field operations	56.4	15	8.5
Nonresponse follow-up operation	2,743.8	15	410.6
Vacant/Delete check operation	341.4	10	34.1
Update/Leave operation	116.1	10	11.6
National Processing Center operations	160.6	10	15.9

## OIG Quarterly Report to Congress, December 2009

Key Activity	FY 2010 Budget Request	Approximate Contingency Amount Percentage	FY 2010 Contingency Amount
Puerto Rico activities	54.3	10	5.4
Postage	257.2	5	12.9
FDCA de-scoped activities	32.6	15	4.9
Decennial Response Integration System contract and project management office	558.1	10	50.8
Fingerprinting	101.4	100	101.4
<b>Subtotal</b>	<b>\$4,605.4</b>	<b>14.6</b>	<b>\$674.4</b>
Other 2010 Census activities	\$2,963.0	0	\$0
<b>Total Obligations<sup>b</sup></b>	<b>\$7,568.4</b>	<b>8.9%</b>	<b>\$674.4</b>
<sup>a</sup> Figures have been rounded.			
<sup>b</sup> This figure includes the FY 2010 request of \$6.7 billion and an estimated \$897.9 million of Recovery Act funding.			

Source: U.S. Census Bureau

Census staff stated in September 2009 that they expected to spend roughly what they planned for FY 2009 and were not aware at the time of any costs that would run significantly under budget projections. According to Census, a total of \$17.1 million was carried over into FY 2010 for the short form program, which includes \$16.3 of the \$200 million contingency fund from FY 2009. With that carryover, the amount available for contingencies in FY 2010 would total \$690.7 million.

### ***Census Is Using \$1 Billion from the Recovery Act to Enhance and Support 2010 Operations***

The Census Bureau received \$1 billion in funds from the Recovery Act to improve communications and outreach, as well as to fund early operations for the 2010 Census. Census prepared spending plans for the allocation covering the following four areas: (1) field operations; (2) coverage follow-up; (3) advertising; and (4) a partnership program for the distribution of funds used to hire additional personnel, provide required training, increase targeted media purchases, and improve management of other operational and programmatic risks.

Table 3 shows the planned spending

breakdown of Census Recovery Act funds. The \$250 million allocated for communications and

**Table 3. Planned Spending of Recovery Act Funds (\$s in millions)**

Census Activities/Operations	Amount
Communications and Outreach	\$250
• Coverage follow-up enhancement	\$30
• Partnership program enhancement	\$120
• Public outreach	\$100
Early Census Operations	\$750
• Group Quarters operations	\$138
• Update/Leave operation	\$116
• Update/Enumerate operation	\$108
• Local Census office staffing operation	\$388

Source: U.S. Census Bureau

---

---

## OIG Quarterly Report to Congress, December 2009

---

---

outreach is a net increase to those budgets. In contrast, the remaining \$750 million for early census operations that take place in FY 2010 resulted in reduced budget requests for those activities.<sup>5</sup> According to Census, it spent \$100.4 million of Recovery Act funds in FY 2009 and will spend the remaining \$899.6 million in FY 2010.

### ***Census Used Recovery Act Funds to Hire Additional Partnership Positions in Hard-to-Count Areas, but Employee Supervision Remains a Concern***

The Census Bureau is using \$120 million to enhance the decennial partnership program, designed to raise awareness of and trust in the decennial census. It used part of the money to hire an additional 2,027 positions to increase partnerships in hard-to-count communities and expand efforts to reduce historical undercounts of communities least likely to be counted (see table 4). The majority of these new hires are partnership assistants, which are newly created positions reporting to the professional partnership staff. The staff, in turn, is composed primarily of partnership specialists located at the local Census offices. Figure 4 shows the distribution of partnership specialist and assistant positions by region following the infusion of Recovery Act funds.

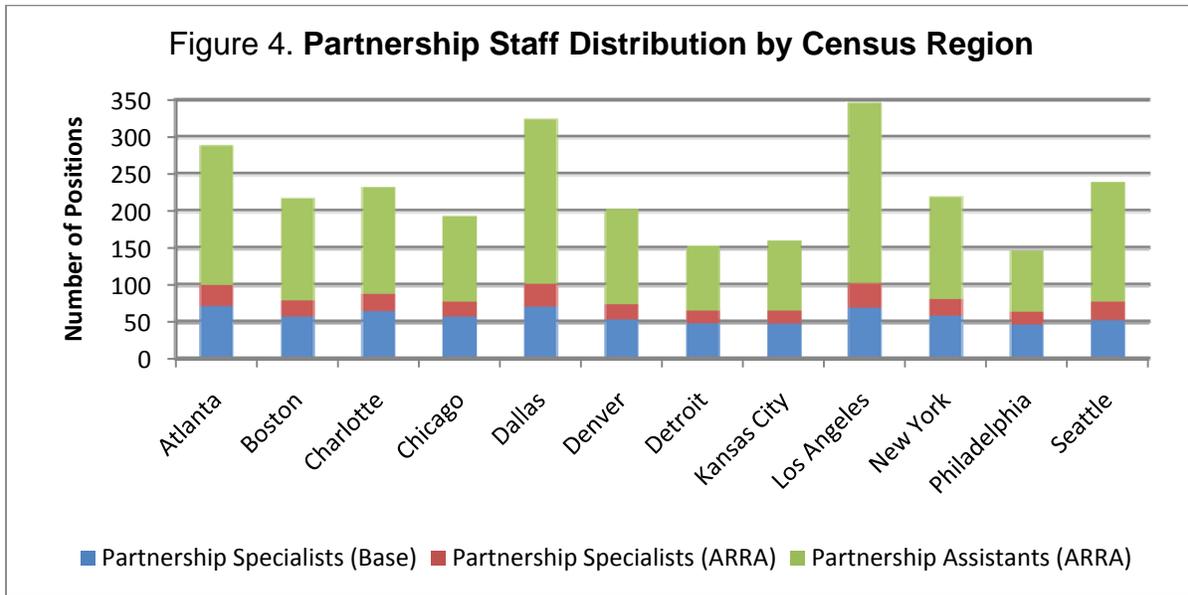
**Table 4. 2010 Census Partnership Positions**

<b>Funding</b>	<b>Professional Partnership Staff</b>	<b>Partnership Assistants</b>	<b>Total Staff</b>
Base	680	0	680
Recovery Act	277	1,750	2,027
<b>Total</b>	957	1,750	2,707

Source: U.S. Census Bureau

---

<sup>5</sup> *Census Bureau Submits to Congress Proposed Recovery Plan to Help Create Jobs and Conduct a Successful 2010 Census*, U.S. Census Bureau, April 10, 2009, [http://www.census.gov/Press-Release/www/releases/archives/2010\\_census/013536.html](http://www.census.gov/Press-Release/www/releases/archives/2010_census/013536.html).



Source: OIG analysis of U.S. Census Bureau data

Headquarters allocated the new positions based on hard-to-count areas and regional considerations, such as a multitude of languages spoken. Unlike with permanent staff, Census conducted recruitment and hiring through local Census offices, which allowed Census to fill all its partnership positions in about 3 months. Census believes that additional partnership staff results in more contacts with community organization leaders, greater presence at community events, and better follow-through with partner organizations.

While we recognize Census’s relatively quick recruitment and hiring, we are concerned about the ability of the partnership specialists to effectively supervise these new employees. Prior to the hiring of partnership assistants, Census never intended partnership specialists to have supervisory responsibilities, with a few exceptions. Recognizing this challenge, Census officials quickly organized initial supervisory training for the specialists, which we observed at one location, and will offer continuous supervisory training as needed. Because these partnership assistants are geographically dispersed and could be working far from their supervisors, we will monitor the partnership program and Census’s accountability of these employees’ performance.

### **Chapter 3: Update to Census's Risk Management Activities**

Census uses a risk register currently comprising 24 program-level risks<sup>6</sup> that describes (1) each risk; (2) its manager; (3) the likely impact on cost, schedule, technical performance, and meeting stakeholder expectations; (4) time frames; and (5) the probability of occurrence. The probability for each risk is rated high (likely), medium (somewhat likely), or low (unlikely)—colored red, yellow, or green, respectively, in the register. Each risk falls within one of six categories<sup>7</sup> (e.g., staffing and budget) and must have a plan that defines mitigation strategies and specific actions, time frames, and resources for their implementation.

The Risk Review Board (RRB)—a subgroup of the CIG—plays a key role in overseeing risk management activities, such as determining whether a risk requires a contingency plan if the issue is triggered by a missed date or event. The bureau's process for managing 2010 Census program risks represents a significant improvement over the previous census in 2000, which lacked a formal risk management process. As discussed in our first quarterly report this past August, Census reported 7 high, 14 medium, and 3 low-level risks. For the period June–September 2009, it did not make changes to risk ratings from the first quarterly report but did close one risk and added another.

#### ***Census Has Not Changed Existing Risk Ratings***

Census's register of 24 program-level risks presents a snapshot of high-level challenges facing the 2010 Census. Table 5 shows that risk ratings have remained constant since June 2009, with two exceptions. Due to the completion of the address canvassing operation in July 2009, the risk “Handheld Solution,” previously a medium risk, was removed from the register. That same month, the board added a new high risk entitled “Litigation that Threatens the Delivery of Apportionment and Redistricting Data” to mitigate the risk that the bureau might not deliver census data on schedule because of possible lawsuits from stakeholders disputing Census's data and contesting the bureau's procedures, methodology, or statistical adjustments. Such lawsuits have occurred during past decennial censuses and may happen again during the 2010 Census. By law, the bureau must deliver apportionment data to the President by December 31, 2010, and redistricting data to the states by April 1, 2011.<sup>8</sup> Because this is a new risk, Census is currently preparing a mitigation plan and assessing whether a contingency plan is necessary.

---

<sup>6</sup> Program-level risks are those that may affect overall program cost, schedule, and technical and compliance objectives.

<sup>7</sup> Census has not yet categorized the new risk entitled “Litigation that Threatens the Delivery of Apportionment and Redistricting Data.”

<sup>8</sup> 13 U.S.C. §§ 141(b) - (c) (2008).

# OIG Quarterly Report to Congress, December 2009

**Table 5. Changes in Program-Level Risk Ratings, June–September 2009**

Risk Grouping	Risk Name	June 2009	Sept. 2009
<b>Operations and Systems Risks</b>	Handheld solution <sup>a</sup>	Medium	
	Contract management issues	High	High
	Late design change	High	High
	Address Canvassing and Group Quarters Validation operational control system solutions	Medium	Medium
	2010 operational and system failures	High	High
	FDCA decentralization/reintegration	High	High
<b>Quality Risks</b>	Housing unit duplicates and misses	High	High
	Exception enumeration quality	Low	Low
	Inaccurate Puerto Rico address list	Medium	Medium
	Data quality	Medium	Medium
	Person over-coverage and under-coverage	Medium	Medium
<b>Public Cooperation Risks</b>	IT security breach	Medium	Medium
	Loss of confidential data	Medium	Medium
	Respondent cooperation	Medium	Medium
	Stakeholder support	Medium	Medium
	Immigration policy backlash	Medium	Medium
<b>Major Disasters Affecting Population</b>	Major disaster's effect on population	High	High
	Continued operations of critical infrastructure during disasters	Medium	Medium
<b>Staffing Risks</b>	Permanent staff retention	Low	Low
	Inability to recruit sufficient temporary workforce	Low	Low
<b>Budget Risks</b>	Uncertainty of assumptions in cost model	Medium	Medium
	Continuing resolution	Medium	Medium
	Insufficient funding	Medium	Medium
<b>Schedule</b>	Falling behind schedule on key milestones	High	High
	Litigation that threatens the delivery of apportionment and redistricting data <sup>b, c</sup>		High

<sup>a</sup>Handheld solution risk was closed in July 2009 with the completion of address canvassing.  
<sup>b</sup>Risk has yet to be categorized.  
<sup>c</sup>Risk had not yet been created.

Source: OIG analysis of U.S. Census Bureau data

With the majority of its time spent reviewing drafts of contingency plans, the RRB has not been able to review risk ratings in detail at its weekly meetings, as required by Census's risk management plan. The RRB is responsible for overseeing the risk ratings and verifying whether individual risk managers are correctly monitoring and assessing their respective risks through status updates to the RRB on each risk. Without this oversight, it is possible that the risk register may not reflect the current status of high-level risks to Census stakeholders. The RRB's role becomes increasingly important as major decennial operations scheduled for 2010 draw near, requiring close monitoring of activities so that mitigation and contingency plans can be implemented at the correct time. To address the issue of not regularly reviewing its risk ratings, the RRB has recently begun developing a template for assessing and documenting the status of all risks on a monthly basis. The RRB will use the new template to document and review all risks on the risk register during new monthly meetings until the contingency plans are finalized, consistent with the risk management plan's requirement. This arrangement, once implemented, should help Census management complete its contingency plans and actively monitor its risk management activities.

### ***Work on Contingency Plans Continues, but None Are Complete***

Census had previously decided that 11 of its 24 program-level risks required contingency plans. In our first quarterly report, we reported that all 24 mitigation plans had been approved but that none of the contingency plans had been. As of September 25, 2009, that still remained the case. The RRB continues to meet weekly and is preparing the contingency plans in two stages. The first stage, currently underway, includes identifying triggers that will activate the contingency plan and developing monitoring activities for each trigger. The second phase will determine whether contingency actions developed in the first stage are feasible and, if they are, identify the necessary resources to implement these actions. However, before the second phase begins, the RRB plans to discuss the monitoring of risk mitigation plans and preparing a schedule to complete the second phase of the contingency plans. Developing a contingency planning schedule earlier would have helped the RRB prioritize and complete its contingency plans. Although Census is making progress in its risk management activities, it is possible that contingency plans will not be ready in time for the start of the operations and events they cover.

### ***Census Staff Is Developing Plans to Address the Risk of an H1N1 Influenza Outbreak***

Recognizing Census's need to carry out its enumeration operations on schedule, the RRB has discussed the potential impact of the H1N1 influenza virus. These discussions have centered on the impact to staff at major facilities, such as Census headquarters in Suitland, Maryland, and the National Processing Center in Jeffersonville, Indiana, as well as the hundreds of local Census offices throughout the country: the data capture centers, call centers, regional census centers, and the computer facility in Bowie, Maryland. Besides potentially affecting the critical and expensive NRFU operation, an outbreak of the H1N1 influenza could disrupt smaller yet still important field operations, such as Remote Alaska enumeration (occurring January–April 2010), Update/Enumerate (March–May 2010), and Update/Leave (March 2010). According to Census officials, impacts could range from an increase in temporary employee turnover to lower

---

---

## OIG Quarterly Report to Congress, December 2009

---

---

productivity rates, which could have both schedule and cost implications. At its meeting on October 20, 2009, the RRB began reviewing draft mitigation plans for two risks regarding the H1N1 influenza—one involving its impact on staff and contractors at centralized operations, such as Census headquarters, and the other involving staff at its field offices across the country.

**Appendix A:  
Objectives, Scope, and Methodology**

To satisfy the requirement for our second quarterly report on the 2010 Census, we have provided an update on the status of 2010 Census activities with respect to schedule, cost, and risk management activities. This information covers activities that occurred June–September 2009 and plans for activities moving forward.

To accomplish our objectives, we conducted a review of documentation, including monthly status reports, activity schedules and associated change requests, program management reviews for 2010 Census contracts, updates to plans for Census-managed activities such as paper-based operations, financial management and status of funds reports, internal budget variance reports, risk registers, and mitigation and contingency plans for program-level risks. We also attended weekly schedule and risk management meetings and met with Census budget staff during this reporting period.

We conducted this review August–December 2009, under the authorities of the Inspector General Act of 1978, as amended, and Departmental Organization Order 10-13, dated August 31, 2006, as amended, and in accordance with the *Quality Standards for Inspections* (revised January 2005) issued by the President’s Council on Integrity and Efficiency.

**Appendix B:  
Fieldwork Operations Managed by the Paper-Based Operations  
Control System**

<b>Operation</b>	<b>Description of Activity</b>
Remote Alaska enumeration	Temporary workers canvass remote, hard-to-reach areas of Alaska to enumerate households, group quarters, and transitory locations.
Group Quarters Advance Visit	Enumerators visit group quarters to verify information such as addresses and number of residents and inform each location's point of contact of the upcoming group quarters enumeration field operation.
Update/Leave	Enumerators canvass certain areas of the country, update their address lists and Census maps, verify and delete duplicate addresses, and deliver Census questionnaires to each unit they find, which respondents mail back.
Enumeration of Transitory Locations	Temporary workers visit transitory locations, such as campgrounds and hotels, to interview and enumerate individuals lacking usual residences.
Remote Update/Enumerate	Enumerators canvass targeted communities in northwest Maine similar to the <i>update/enumerate</i> operation (see below).
Update/Enumerate	Enumerators canvass targeted communities that have special enumeration needs, such as housing units lacking conventional mailing addresses (i.e., house numbers and street names). The enumerators update the residential address list and Census Bureau maps, as well as complete a questionnaire for each housing unit. For Census 2000, these areas included selected American Indian reservations, <i>colonias</i> (small, usually rural Spanish-speaking communities), and resort areas with high concentrations of seasonally vacant living quarters.
Group Quarters Enumeration	Enumerators visit group quarters, list the names of the people living or staying there, and distribute questionnaires for each person or a staff member to complete, which are then collected a few days later.
Nonresponse Follow-up	Temporary workers visit households that did not return Census questionnaires to interview residents and complete questionnaires at each housing unit.
Vacant/Delete Check	Enumerators verify the status of addresses classified as vacant or nonexistent during nonresponse follow-up. Respondent information is also collected when an address presumed to be vacant is found to be occupied.
Field Verification	Temporary workers verify the existence of addresses of households that returned questionnaires but were not on Census's initial address lists.

Source: OIG analysis of U.S. Census Bureau information

**Appendix C:  
Address Canvassing Field Budget by Regional Census Center**

**Table C-1. Address Canvassing Production Regional Budgets vs. Actual Expenditures**

<b>Regional Census Center</b>	<b>Wages Budgeted (\$)</b>	<b>Wages Actual (\$)</b>	<b>Budget Spent<sup>a</sup> (%)</b>	<b>Mileage Costs Budgeted (\$)</b>	<b>Mileage Costs Actual (\$)</b>	<b>Budget Spent<sup>a</sup> (%)</b>
Atlanta	\$23,941,836	\$24,001,909	100	\$4,823,206	\$5,912,210	123
Boston	18,816,893	19,655,254	104	3,758,353	3,687,618	98
Charlotte	24,932,808	24,849,069	100	5,058,697	6,877,752	136
Chicago	17,415,752	13,821,095	79	3,414,249	3,508,480	103
Dallas	20,947,790	21,680,481	104	4,162,783	5,982,437	144
Denver	18,821,344	20,079,617	107	3,643,155	6,828,284	187
Detroit	16,895,119	14,688,948	87	3,356,440	3,715,146	111
Kansas City	17,208,028	15,616,488	91	3,450,340	5,401,095	157
Los Angeles	13,700,686	13,970,564	102	2,723,497	2,076,348	76
New York	10,284,282	11,344,092	110	1,973,770	670,574	34
Philadelphia	15,641,427	15,331,051	98	3,130,290	2,865,441	92
Seattle	16,411,554	19,518,204	119	3,194,089	3,891,602	122
<b>Total</b>	215,017,519	214,556,772	100	42,688,869	51,416,987	120

<sup>a</sup> Percentages have been rounded.

Source: OIG analysis of Address Canvassing Cost and Progress Reports (generated September 25, 2009), U.S. Census Bureau

---



---

OIG Quarterly Report to Congress, December 2009

---



---

**Table C-2. Address Canvassing Quality Control Regional Budgets vs. Actual Expenditures**

<b>Regional Census Center</b>	<b>Wages Budgeted (\$)</b>	<b>Wages Actual (\$)</b>	<b>Budget Spent (%)</b>	<b>Mileage Costs Budgeted (\$)</b>	<b>Mileage Costs Actual (\$)</b>	<b>Budget Spent (%)</b>
Atlanta	\$5,793,080	\$8,182,627	141	\$960,487	\$3,011,284	314
Boston	4,078,471	5,754,118	141	709,308	1,707,992	241
Charlotte	5,496,046	7,967,874	145	973,826	3,505,554	360
Chicago	4,025,730	4,137,267	103	666,855	1,550,346	232.
Dallas	4,905,670	6,266,512	128	817,952	2,569,153	314
Denver	4,052,356	7,967,186	197	691,799	3,561,751	515
Detroit	3,921,926	4,154,317	106	657,277	1,657,059	252
Kansas City	3,859,407	4,508,692	117	667,587	2,295,534	344
Los Angeles	3,491,316	5,185,083	149	553,042	973,173	176
New York	2,652,829	3,249,329	122	402,328	308,958	77
Philadelphia	3,697,611	4,870,192	132	617,653	1,368,103	222
Seattle	3,843,591	5,924,321	154	626,556	1,636,924	261
<b>Total</b>	<b>49,818,033</b>	<b>68,167,518</b>	<b>137</b>	<b>8,344,670</b>	<b>24,145,831</b>	<b>289</b>

Source: OIG analysis of Address Canvassing Cost and Progress Reports (generated September 25, 2009), U.S. Census Bureau