



## Fact Sheet

# Chronology of Warnings about the Census Bureau's Field Data Collection Automation System

Rep. Henry A. Waxman

Chairman, Committee on Oversight and Government Reform

In April 2006, the Census Bureau entered into a contract with the Harris Corporation to develop a Field Data Collection Automation (FDCA) system. Under the contract, Harris was supposed to build handheld computers for data collection in two phases — address canvassing prior to the census and non-response follow-up as part of the census process — as well as provide support for the field operations. The contract was a cost-plus contract with an initial estimated value of \$600 million.

Even before the contract was awarded, the Government Accountability Office (GAO) and the Inspector General of the Department of Commerce identified serious concerns with the approach selected by the Census Bureau. In total, GAO and the Inspector General have written at least nine reports since 2004 that raised questions about the efforts of the Census Bureau to automate census operations on a short timeline and manage the contractors hired to do most of the work. Their concerns fell into four general categories:

- The Census Bureau needed to define specific measurable performance requirements for the handheld mobile computing device;
- The Census Bureau needed to develop an integrated and comprehensive plan to control its costs and manage operations;
- The Census Bureau needed to maintain diligent oversight of its contractors; and
- The Census Bureau needed to strengthen its systems testing and risk management activities.

The Census Bureau and the Department of Commerce did not respond to these concerns with urgency and leadership until late in 2007, when a private consultant warned that the program was in serious trouble and members of the House Oversight Committee began to ask questions. In early 2008, Census Director Murdock established a special task force to evaluate options for conducting the 2010 Census given the failures of the FDCA contract.

The mismanagement of the contract has jeopardized the 2010 Census and will result in major cost increases to be borne by the taxpayer. In testimony last week, Commerce Secretary Gutierrez announced that the Census Bureau would revert back to paper and pencil to conduct non-response follow-up, rather than using the handhelds designed by Harris. He estimated that the life-cycle cost of the 2010 Decennial Census will increase by between \$2.2 and \$3 billion, due in large part to the mismanagement of the FDCA contract. This will bring the total lifecycle cost of the 2010 Census to between \$13.7 and \$14.5 billion.

## Chronology

### 2004

In 2004, GAO raised concerns about the Census Bureau's progress in developing a plan for how it will implement the 2010 Census, oversee the contractors responsible for much of its components, and manage risks:

[W]e recommend that the Secretary of Commerce direct the Bureau to improve the rigor of its planning process by developing an operational plan that consolidates budget, methodological, and other relevant information about the 2010 Census into a single, comprehensive project plan that would be updated as needed.<sup>1</sup>

Similarly, the Inspector General noted challenges to automating the non-response follow-up (NRFU) operation and the importance of sound contract management:

Transmission problems and inadequate help desk support were the main reasons for the serious disruption of the NRFU operation and will require the design of alternative approaches for future tests and the 2010 Census. ... Census needs to plan contingencies for essential NRFU components, like transmissions, whose failure would jeopardize field operations. ...

Although contracting can help bring the necessary system and software development expertise and management discipline, Census still faces tremendous challenges in capturing lessons learned from the 2004 and subsequent tests; defining complete and verifiable system requirements; preparing the solicitation; selecting a competent contractor; and overseeing the contract so that systems are fully developed, tested, and finalized before operations begin.<sup>2</sup>

## 2005

In 2005, GAO noted in two separate reports that the Census Bureau was not prepared to manage the major information technology contracts needed to automate the 2010 Decennial Census and suggested that the Census Bureau turn its attention to the performance requirements for the handheld computers (HHCs), which had been field tested for the first time in 2004:

- "Bureau officials have acknowledged that for the 2004 test they had no predefined indicators of success or failure other than if there was a complete breakdown the test would be halted. This is a very low standard. Now that the Bureau has demonstrated the basic functionality of the computers, it should next focus on determining the specific performance requirements for the HHCs and assess whether the devices are capable of meeting them."<sup>3</sup>
- "[The Census Bureau] is at increased risk of not adequately managing major IT investments and is therefore more likely to experience the cost and schedule overruns and performance shortfalls that plague other major IT investments and acquisitions."<sup>4</sup>

---

<sup>1</sup> Government Accountability Office, *2010 Census: Cost and Design Issues Need to Be Addressed Soon* (Jan. 2004) (GAO-04-37).

<sup>2</sup> Department of Commerce, Office of Inspector General, U.S. Census Bureau — *Improving our Measure of America: What the 2004 Census Test Can Teach Us in Planning for the 2010 Decennial Census* (Sept. 2004) (OIG-16949).

<sup>3</sup> Government Accountability Office, *2010 Census: Basic Design Has Potential, but Remaining Challenges Need Prompt Resolution* (Jan. 2005) (GAO-05-9).

<sup>4</sup> Government Accountability Office, *Information Technology Management: Census Bureau Has Implemented Many Key Practices, but Additional Actions Are Needed* (June 2005) (GAO-05-661).

The Inspector General also noted in an August report that the Census Bureau's focus on issuing an RFP for the FDCA contract had further delayed the project planning it had encouraged in 2004:

Because of the need to award the integration contract as soon as possible to meet decennial deadlines, the bureau's focus has been on developing the acquisition strategy and solicitation at the expense of overall project planning. ... Census should now develop a sound project management plan to ensure that pre- and post-contract award activities are properly formulated, executed, monitored, and controlled.<sup>5</sup>

## 2006

In early 2006, before the Census Bureau awarded the FDCA contract to Harris Corporation, GAO and the Inspector General flagged the risks inherent to relying too heavily on contractors without providing them explicit requirements. In particular, GAO noted in March testimony before Congress that the Census Bureau had not finalized baseline operational requirements for the census only a month before it awarded the FDCA contract:

[The bureau] has not yet validated and approved a baseline set of operational requirements or ensured traceability between its operational requirements and the FDCA request for proposal. Until the bureau finalizes its operational requirements for the census and ensures that the FDCA request for proposal is consistent with the baseline requirements, the project will be at risk of having changes to the requirements, potentially affecting its ambitious development and implementation schedule. ...

Bureau officials also stated that they intend to rely on the DRIS and FDCA contractors to help refine requirements, project plans, and performance measures. However, our experience in reviewing major system acquisitions in recent years has shown that there are risks associated with relying too heavily on contractors to perform key management and oversight activities.<sup>6</sup>

The Inspector General raised similar concerns in a March report, urging the Census Bureau to communicate lessons learned from field tests to the new FDCA contractor as soon as possible:

The bureau needs to reexamine its evaluation schedules to make sure it can identify refined [Non-Response Follow-Up] requirements and incorporate them into the FDCA contract early enough to avoid rework and enhance the likelihood that dress rehearsal systems meet Census's needs.<sup>7</sup>

After the Census Bureau awarded the FDCA contract to Harris Corporation to build handheld computers for use in the field, GAO raised its ongoing concerns in a June report about whether

---

<sup>5</sup> Department of Commerce, Office of Inspector General, U.S. Census Bureau: FDCA Program for 2010 Census Is Progressing, but Key Management and Acquisition Activities Need to Be Completed (Aug. 2005) (OSE-17368).

<sup>6</sup> Subcommittee on Federalism and the Census, House Committee on Government Reform, Testimony of David A. Powner, Director, Information Technology Management Issues, Government Accountability Office, *Census Bureau: Important Activities for Improving Management of Key 2010 Decennial Acquisitions Remain to be Done* (Mar. 2006) (GAO-06-444T).

<sup>7</sup> Department of Commerce, Office of Inspector General, U.S. Census Bureau: Valuable Learning Opportunities Were Missed in the 2006 Test of Address Canvassing (Mar. 2006) (OSE-17524).

the Census Bureau and its contractor could deliver reliable and thoroughly tested technology in time for the census dress rehearsal and the decennial census.

The Bureau's ability to collect and transmit address and mapping data using the [Mobile Computing Device] is not known. The performance of these devices is crucial to the accurate, timely, and cost-effective completion of address listing, non-response follow-up, and coverage measurement activities. ...

However, because the 2008 Dress Rehearsal will be the first time this new MCD will be tested under census-like conditions, it is uncertain how effective that MCD will be, and if problems do emerge, little time will be left for the contractor to develop and test any refinements. Further, if after the dress rehearsal the MCD is found not to be reliable, the Bureau could be faced with the remote, but daunting, possibility of having to revert to a costly paper-based census used in 2000.<sup>8</sup>

In addition to its specific concerns about the handheld technology, in July testimony before Congress, GAO also reiterated concerns about the Census Bureau's overall lack of a comprehensive project plan for the decennial, which it had first raised as a problem in January 2004:

Despite its emphasis on cost containment, the Bureau does not have a comprehensive, integrated project plan that details milestones and itemized costs for completing key activities for the 2010 Census.<sup>9</sup>

## 2007

GAO continued its warnings about the state of the FDCA project in April 2007 testimony before Congress, cautioning that inadequate contract management could lead to cost-overruns and inadequate performance of the handheld computers:

[T]he Bureau's ability to collect and transmit data using the MCD is not fully tested and, at this point, constitutes a risk to the cost-effective implementation of the 2010 Census. ...

Although the greater use of automation offers the prospect of greater efficiency and effectiveness, these actions also introduce new risks. The automation of key census processes involves an extensive reliance on contractors. Consequently, contract oversight and management becomes a key challenge to a successful census.<sup>10</sup>

---

<sup>8</sup> Government Accountability Office, 2010 Census: Census Bureau Needs to Take Prompt Actions to Resolve Long-standing and Emerging Address and Mapping Challenges (June 2006) (GAO-06-272).

<sup>9</sup> Subcommittee on Science, the Departments of State, Justice, and Commerce, and Related Agencies, House Committee on Appropriations, Testimony of Brenda S. Farrell Acting Director, Strategic Issues, Government Accountability Office, *2010 Census: Redesigned Approach Holds Promise, but Census Bureau Needs to Annually Develop and Provide a Comprehensive Project Plan to Monitor Costs* (July 2006) (GAO-06-1009T).

<sup>10</sup> Subcommittee on Information Policy, Census, and National Archives, House Committee on Oversight and Government Reform, Testimony of Mathew J. Scirè, Director, Strategic Issues, Government Accountability Office, *2010 Census: Design Shows Progress, but Managing Technology Acquisitions, Temporary Field Staff, and Gulf Region Enumeration Require Attention* (Apr. 2007) (GAO-07-779T).

Around the same time, the Census Bureau asked a private consultant, the MITRE Corporation, to assess the FDCA program and Harris Corporation's progress in meeting the contract's goals. MITRE delivered its report to the Census Bureau in June 2007, underscoring GAO's findings that the FDCA contract was off track:

FDCA is at significant risk of cost and schedule overruns, omission of essential requirements, and increased oversight unless major changes are made quickly.<sup>11</sup>

In July testimony before Congress, GAO again flagged that the Census Bureau had yet to complete a comprehensive project plan and raised concerns about the growing number of system requirements for the handheld computers:

In January 2004, we recommended that the Bureau develop a comprehensive integrated project plan. ... In May 2007, we met with Bureau officials to discuss the status of the 2010 project plan. At that time officials indicated that they planned to finalize the project plan over the next several months. ...

However, the FDCA project is projected to experience cost overruns by the 2008 Dress Rehearsal. ... According to the contractor, the overrun is occurring primarily due to the increase in system requirements. We are concerned that this is an indication of additional cost increases that are forthcoming, given requirements growth associated with FDCA.<sup>12</sup>

In an October report, GAO raised new concerns about the Census Bureau's ability to recognize and manage the significant risks posed by the FDCA contract, such as the growing number of system requirements for the handhelds and continued problems with the handheld technology:

Until the project teams implement key risk management activities, they face an increased probability that decennial systems will not be delivered on schedule and within budget or perform as expected. ...

The FDCA project had not identified any significant risks related to the handheld mobile computing devices, for the project office to monitor and track, despite problems arising during the recent address canvassing component of the Dress Rehearsal. However, it did identify significant risks for the contractor to manage; these risks were associated with using the handheld mobile computing devices including usability and failure rates. Responsibility for mitigating these risks was transferred to the contractor. ...

The FDCA project team had developed mitigation plans for the most significant risks, but the plans did not always identify milestones for implementing mitigation activities. Moreover, the plans did not identify any commitment of resources, several did not establish a period of performance, and the team did not always update the plans with the latest information on the status of the risk. In addition, the FDCA project team did not

---

<sup>11</sup> The MITRE Corporation, FDCA Red Team Assessment for Deputy Director (June 6, 2007).

<sup>12</sup> Subcommittee on Federal Financial Management, Government Information, Federal Services, and International Security, Senate Committee on Homeland Security and Governmental Affairs, Testimony of Mathew J. Scirè, Director, Strategic Issues, and David A. Powner, Director, Information Technology, Government Accountability Office, *2010 Census: Preparations for the 2010 Census Underway, but Continued Oversight and Risk Management Are Critical* (July 2007) (GAO-07-1106T).

provide evidence of developing mitigation plans to handle the other significant risks as described in their risk mitigation strategy.<sup>13</sup>

In November 2007, the Census Bureau requested meetings with MITRE and other stakeholders to discuss the state of FDCA. MITRE met with the Deputy Director on November 29 and left behind a memorandum describing major areas of risk around schedule, requirements, testing and acceptance, and cost. According to this memo:

FDCA is in serious trouble. It is not clear that the system will meet Census' operational needs and quality goals. The final cost is unpredictable. Immediate, significant changes are required to rescue the program. However, the risks are so large considering the available time that we recommend immediate development of contingency plans to revert to paper operations.<sup>14</sup>

In December 2007 testimony, GAO reiterated what it had been saying now for several years, again raising concerns about the viability of the handheld technology and the Census Bureau's ability to manage the risks threatening the FDCA project:

At this stage, we are particularly concerned about managing the risks associated with the handheld mobile computing devices, the numerous systems interfaces, and the remaining systems testing. Regarding the handheld mobile computing devices, it is critical that performance of these devices is clearly specified, measured, and that deficiencies in performance is effectively addressed. Until the project teams and the Decennial Management Division implement appropriate risk management activities, they face an increased probability that decennial systems will not be delivered on schedule and within budget or perform as expected.<sup>15</sup>

## 2008

In March 2008, GAO designated the 2010 Census as a high-risk area that warrants immediate attention as a result of the Census Bureau's failure to strengthen its systems testing and risk management activities, define performance requirements for the handheld computers, and develop a comprehensive plan to control its costs and manage operations. According to GAO, the Census Bureau's actions "raise serious questions about the Bureau's preparations for conducting the 2010 Census. ... GAO has recommended numerous corrective actions to address the risks associated with the 2010 Census, but many of them have not been implemented."<sup>16</sup>

---

<sup>13</sup> Government Accountability Office, *Information Technology: Census Bureau Needs to Improve Its Risk Management of Decennial Systems* (Oct. 2007) (GAO-08-79).

<sup>14</sup> The MITRE Corporation, *Talking points for meeting with Jay Waite* (Nov. 2007).

<sup>15</sup> Subcommittee on Information Policy, Census, and National Archives, House Committee on Oversight and Government Reform, *Testimony of Mathew J. Scirè, Director, Strategic Issues, and David A. Powner, Director, Information Technology, Government Accountability Office, Information Technology: Census Bureau Needs to Improve Its Risk Management of Decennial Systems* (Dec. 2007) (GAO-08-259T).

<sup>16</sup> Government Accountability Office, *2010 Census: Automation Problems and Uncertain Costs and Plans May Jeopardize the Success of the Decennial and Warrant Immediate Attention* (Mar. 2008).