



Highlights of [GAO-09-262](#), a report to congressional requesters

## INFORMATION TECHNOLOGY

# Census Bureau Testing of 2010 Decennial Systems Can Be Strengthened

### Why GAO Did This Study

The Decennial Census is mandated by the U.S. Constitution and provides vital data that are used, among other things, to reapportion and redistrict congressional seats. In March 2008, GAO designated the 2010 Decennial Census a high-risk area, citing a number of long-standing and emerging challenges, including weaknesses in the Census Bureau's (Bureau) management of its information technology (IT) systems and operations. In conducting the 2010 census, the Bureau is relying on both the acquisition of new IT systems and the enhancement of existing systems. Thoroughly testing these systems before their actual use is critical to the success of the census. GAO was asked to determine the status of and plans for testing key decennial systems. To do this, GAO analyzed testing documentation, interviewed Bureau officials and contractors, and compared the Bureau's efforts with recognized best practices.

### What GAO Recommends

GAO is recommending that the Secretary of Commerce direct the Bureau to complete key system testing activities, develop and maintain plans for integration testing, and improve the oversight of and guidance for systems testing. In comments on a draft of this report, the department agreed with GAO's recommendations.

### What GAO Found

Although the Bureau has made progress in testing key decennial systems, critical testing activities remain to be performed before systems will be ready to support the 2010 census. Bureau program offices have completed some testing of individual systems, but significant work still remains to be done, and many plans have not yet been developed (see table below). In its testing of system integration, the Bureau has not completed critical activities; it also lacks a master list of interfaces between systems; has not set priorities for the testing of interfaces based on criticality; and has not developed testing plans and schedules. Although the Bureau had originally planned what it refers to as a Dress Rehearsal, starting in 2006, to serve as a comprehensive end-to-end test of key operations and systems, significant problems were identified during testing. As a result, several key operations were removed from the Dress Rehearsal and did not undergo end-to-end testing. The Bureau has neither developed testing plans for these key operations, nor has it determined when such plans will be completed.

Weaknesses in the Bureau's testing progress and plans can be attributed, in part, to a lack of sufficient executive-level oversight and guidance. Bureau management does provide oversight of system testing activities, but the oversight activities are not sufficient. For example, Bureau reports do not provide comprehensive status information on progress in testing key systems and interfaces, and assessments of the overall status of testing for key operations are not based on quantitative metrics. Specifically, key operations that do not yet have plans developed are marked as making acceptable progress based solely on management judgment. Further, although the Bureau has issued general testing guidance, it is neither mandatory nor specific enough to ensure consistency in conducting system testing. Without adequate oversight and more comprehensive guidance, the Bureau cannot ensure that it is thoroughly testing its systems and properly prioritizing testing activities before the 2010 Decennial Census, posing the risk that these systems may not perform as planned.

Status and Plans of 2010 System Testing

System	Testing status	Testing plan completed	Testing schedule completed
Headquarters processing	In progress	Partial	Partial
Master address and geographic information	In progress	Partial	Partial
Decennial response integration	In progress	Partial	Partial
Field data collection automation	In progress	Partial	Partial
Paper-based operations	In progress	No	Partial
Data access and dissemination	In progress	Partial	Partial

Source: GAO analysis of Bureau data.

To view the full product, including the scope and methodology, click on [GAO-09-262](#). For more information, contact David Powner at (202) 512-9286 or [pownerd@gao.gov](mailto:pownerd@gao.gov).