August 2018

2020 CENSUS

Continued Management Attention Needed to Address Challenges and Risks with Developing, Testing, and Securing IT Systems

Why GAO Did This Study

One of the Bureau's most important functions is to conduct a complete and accurate decennial census of the U.S. population. The decennial census is mandated by the Constitution and provides vital data for the nation. The Bureau plans to significantly change the methods and technology it uses to count the population with the 2020 Census, such as by offering an option for households to respond to the survey via the Internet. In preparation for the 2020 Census, the Bureau is conducting a test of all key systems and operations (referred to as the 2018 End-to-End Test), which began in August 2017 and runs through April 2019.

GAO was asked to review the Bureau's IT readiness for the 2020 Census. This report (1) determines the Bureau's progress in developing and testing systems for the 2018 End-to-End Test and (2) describes the challenges and risks that the Bureau has faced in implementing and securing these systems. To do this, GAO reviewed key documentation, including plans for system development and testing, and outcomes of key IT milestone reviews and security assessments.

What GAO Recommends

Over the past decade, GAO has made 93 recommendations specific to the 2020 Census to address the issues raised in this and other products. As of August 2018, the Bureau had implemented 61 recommendations, and had taken initial steps—including developing action plans—to implement the other 32 recommendations. GAO is not making additional recommendations in this report.

View GAO-18-655. For more information, contact Nick Marinos at (202) 512-9342 or marinosn@gao.gov.

What GAO Found

The Census Bureau (Bureau) has continued to make progress in developing and testing information technology (IT) systems for the 2020 Census. Specifically, as of June 2018, the Bureau had completed all development activities for 36 of the 44 systems needed to support the 2018 End-to-End Test, and was in the process of completing these activities for the remaining 8 systems. In addition, the Bureau had completed all system and integration testing activities for 20 of the 44 systems, and was in the process of conducting these activities for the remaining 24 systems.

Nevertheless, the Bureau continues to face significant challenges and risks in its efforts to manage the schedules, contracts, costs, and cybersecurity of its 2020 Census systems.

- **Schedule management**: The Bureau's schedule for developing systems to support the 2018 End-to-End Test has experienced delays. These delays have compressed the time available for system and integration testing, and several systems experienced problems during the 2018 End-to-End Test. In addition, the Bureau is currently revising the system development and testing schedule for the 2020 Census as a result of challenges experienced and lessons learned while completing these activities during the 2018 End-to-End Test. Continued schedule management challenges may compress the time available for the remaining system and integration testing and increase the risk that systems will not function as intended.

- **Contractor oversight**: Among other challenges, the Bureau is still filling vacancies in the government program management office that is overseeing its key integration contractor. In June 2018, Bureau officials reported that 33 of the office's 58 federal employee positions were vacant. This adds risk that the office may not be able to provide adequate oversight of contractor cost, schedule, and performance.

- **IT cost growth**: The Bureau reported that its estimated IT costs had grown from $3.41 billion in October 2015 to $4.97 billion in December 2017—an increase of $1.56 billion. This increase was due, in large part, to the addition of technical integration services and updated costs for other major contracts (such as the contract for mobile devices). The amount of cost growth since the October 2015 estimate raises questions as to whether the Bureau has a complete understanding of the IT costs associated with the 2020 Census.

- **Cybersecurity**: The Bureau has made progress by completing the security assessments for 33 of the 44 systems needed to support the 2018 End-to-End Test. However, as of June 2018, the Bureau had identified nearly 3,100 security weaknesses that will need to be addressed in the coming months. Because the 2020 Census involves collecting personal information from over a hundred million households across the country, it will be important that the Bureau addresses system security weaknesses in a timely manner and ensures that risks are at an acceptable level before systems are deployed.

With the 2020 Census less than 2 years away, it is critical that the Bureau address these challenges and risks to ensure that its IT systems are developed, tested, and secured in time to support the count of the nation's population.

_____ **United States Government Accountability Office**