

## Why GAO Did This Study

In 2010, as focal point for information technology management across the government, OMB's Federal Chief Information Officer launched the Federal Data Center Consolidation Initiative—an effort to consolidate the growing number of federal data centers. In July 2011, GAO evaluated 24 agencies' progress on this effort and reported that most agencies had not yet completed data center inventories or consolidation plans and recommended that they do so.

In this subsequent review, GAO was asked to (1) evaluate the extent to which the 24 agencies updated and verified their data center inventories and plans, (2) evaluate the extent to which selected agencies have adequately completed key elements of their consolidation plans, and (3) identify agencies' notable consolidation successes and challenges. To address these objectives, GAO assessed the completeness of agency inventories and plans, analyzed the schedule and cost estimates of 5 agencies previously reported to have completed one or both estimates, and interviewed officials from all 24 agencies about their consolidation successes and challenges.

## What GAO Recommends

OMB's Federal Chief Information Officer should ensure that agencies use a standardized cost model to improve consolidation planning, and the 5 selected agencies should implement recognized best practices when establishing schedules and cost estimates for their consolidation efforts. OMB and 3 agencies agreed with, and 2 did not agree or disagree with, GAO's recommendations.

View [GAO-12-742](#). For more information, contact David Powner at (202) 512-9286 or [pownerd@gao.gov](mailto:pownerd@gao.gov).

# DATA CENTER CONSOLIDATION

## Agencies Making Progress on Efforts, but Inventories and Plans Need to Be Completed

### What GAO Found

As of the most recent agency data submitted in September 2011, 24 agencies identified almost 2,900 total centers, established plans to close 1,186 of them by 2015, and estimated they would realize over \$2.4 billion in cost savings in doing so. However, while the Office of Management and Budget (OMB) required agencies to complete missing elements in their data center inventories and plans by the end of September 2011, only 3 agencies submitted complete inventories and only 1 agency submitted a complete plan. For example, in their inventories, 17 agencies do not provide full information on their information technology facilities and energy usage, and 8 provide only partial information on their servers. Further, in their consolidation plans, 13 agencies do not provide a full master program schedule and 21 agencies do not fully report their expected cost savings. Officials from several agencies reported that some of this information was unavailable at certain facilities or that the information was still being developed. In a prior report, GAO recommended that agencies complete the missing elements from their inventories and plans. Until these inventories and plans are complete, agencies will continue to be at risk of not realizing anticipated savings, improved infrastructure utilization, or energy efficiency.

OMB requires a master program schedule and a cost-benefit analysis (a type of cost estimate) as key requirements of agencies' consolidation plans, but none of the five agencies GAO reviewed had a schedule or cost estimate that was fully consistent with the four selected attributes of a properly sequenced schedule (such as having identified dependencies), or the four characteristics that form the basis of a reliable cost estimate (such as being comprehensive and well-documented). For example, the Departments of Interior and Transportation did not have schedules and the Department of Agriculture's schedule was consistent with three of four attributes. Additionally, cost estimates for the Departments of Homeland Security and Veterans Affairs were partially consistent with the four cost characteristics. In the absence of reliable schedules and estimates, these agencies are at risk of experiencing cost overruns, missed deadlines, and performance shortfalls. OMB has established a standardized cost model to aid agencies in their consolidation planning efforts, but use of the model is voluntary.

Many federal agencies reported consolidation successes. Notably, 20 agencies identified 34 areas of success, although only 3 of those areas were reported by more than 1 agency. The two most-reported successes were focusing on the benefits of key technologies and the benefits of working with other agencies and components to identify consolidation opportunities. However, agencies have continued to report a number of the same challenges that GAO first described in 2011, while other challenges are evolving. For example, 15 agencies reported continued issues with obtaining power usage information and 9 agencies reported that their organization continued to struggle with acquiring the funding required for consolidation. However, other challenges appear to be less prevalent, including challenges in identifying consolidation cost savings and meeting OMB's deadlines. Overall, 25 challenges that were reported in 2011 were no longer reported in 2012. In light of these successes and challenges, it is important for OMB to continue to provide leadership and guidance, such as—as GAO previously recommended—using the consolidation task force to monitor agencies' consolidation efforts.