

Highlights of [GAO-12-629](#), a report to the Ranking Member, Committee on Homeland Security and Governmental Affairs, U.S. Senate

Why GAO Did This Study

The federal government plans to spend at least \$75 billion on information technology (IT) investments in fiscal year 2012. The size of this investment highlights the importance of reliably estimating the costs of IT acquisitions. A reliable cost estimate is critical to the success of any IT program, providing the basis for informed decision making and realistic budget formation. Without the ability to generate such estimates, programs risk missing their cost, schedule, and performance targets.

GAO was asked to (1) assess selected federal agencies' implementation of cost-estimating policies and procedures, and (2) evaluate whether selected IT investments at these agencies have reliable cost estimates to support budget and program decisions. To do so, GAO compared policies and procedures to best practices at eight agencies. GAO also reviewed documentation supporting cost estimates for 16 major investments at these eight agencies—representing about \$51.5 billion of the planned IT spending for fiscal year 2012.

What GAO Recommends

GAO is recommending that the selected agencies modify cost-estimating policies to be consistent with best practices and update future cost estimates of the selected acquisition programs to address identified weaknesses. The seven agencies that commented on a draft of this report generally agreed with GAO's results and recommendations, although the Environmental Protection Agency disagreed with the assessment of one of its investments. However, GAO stands by its assessment.

View [GAO-12-629](#). For more information, contact Valerie C. Melvin at (202) 512-6304 or melvinv@gao.gov.

INFORMATION TECHNOLOGY COST ESTIMATION

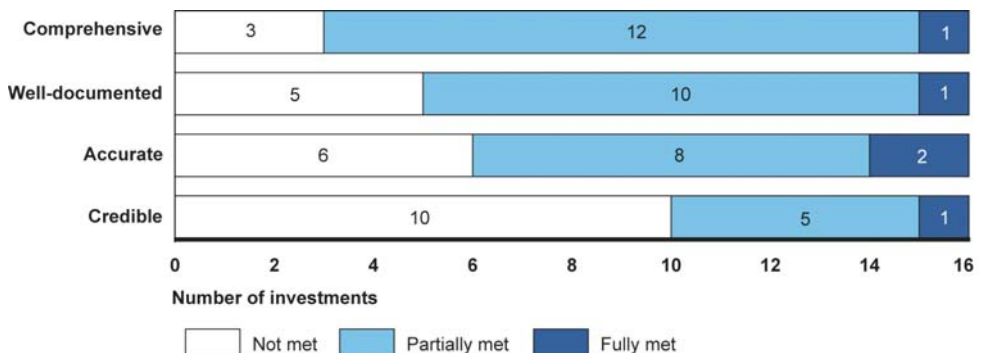
Agencies Need to Address Significant Weaknesses in Policies and Practices

What GAO Found

While the eight agencies GAO reviewed—the Departments of Agriculture, Commerce, Defense, Homeland Security, Justice, Labor, and Veterans Affairs, and the Environmental Protection Agency—varied in the extent to which their cost-estimating policies and procedures addressed best practices, most had significant weaknesses. For example, six of the eight agencies had established a clear requirement for programs to develop life-cycle cost estimates. However, most of the eight agencies' policies lacked requirements for cost-estimating training, a standard structure for defining work products, and a central, independent cost-estimating team, among other things. The weaknesses in agencies' policies were due, in part, to the lack of a priority for establishing or enhancing department or agency-level cost-estimating functions. Until agencies address weaknesses in their policies, it will be difficult for them to make effective use of program cost estimates for informed decision making, realistic budget formation, and meaningful progress measurement.

The 16 major acquisition programs had developed cost estimates and were using them, in part, to support program and budget decisions. However, all but 1 of the estimates were not fully reliable—meaning that they did not fully reflect all four characteristics of a reliable cost estimate identified in the GAO cost-estimating guide: comprehensive, well-documented, accurate, and credible (see figure). For example, the estimates for many of these investments did not include all life-cycle costs, such as costs for operating and maintaining the system; did not adequately document the source data and methodologies used to develop the estimate; were not regularly updated so that they accurately reflected current status; and lacked credibility because they were not properly adjusted to account for risks and uncertainty. The inadequate implementation of cost-estimating best practices was largely due to weaknesses in agencies' policies. Until cost-estimating best practices are fully implemented, these programs face an increased risk that managers will not be able to effectively use their cost estimates as a sound basis for informed program and budget decision making.

Assessment of Cost-Estimating Practices for Case Study Programs



Source: GAO analysis of agency data.