

Why GAO Did This Study

This is GAO's ninth annual assessment of Department of Defense (DOD) weapon system acquisitions, an area that is on GAO's high-risk list. The report is in response to the mandate in the joint explanatory statement to the DOD Appropriations Act, 2009. It includes observations on the performance of DOD's 2010 portfolio of 98 major defense acquisition programs; data on selected factors that can affect program outcomes; an assessment of the knowledge attained by key junctures in the acquisition process for a subset of 40 programs, which were selected because they were in development or early production; and observations on the implementation of acquisition reforms. To conduct this review, GAO analyzed cost, schedule, and quantity data from DOD's Selected Acquisition Reports and collected data from program offices on performance requirements and software development; technology, design, and manufacturing knowledge; and the implementation of DOD's acquisition policy and acquisition reforms. GAO also compiled one- or two-page assessments of 71 weapon programs. These programs were selected based on their cost, stage in the acquisition process, and congressional interest.

DOD disagreed with GAO's use of total program cost growth as a performance metric because it includes costs associated with capability upgrades and quantity increases. GAO believes it remains a meaningful metric and that the report explicitly accounts for the cost effect of quantity changes.

View [GAO-11-233SP](#) or key components. For more information, contact Michael J. Sullivan at (202) 512-4841 or sullivanm@gao.gov.

DEFENSE ACQUISITIONS

Assessments of Selected Weapon Programs

What GAO Found

Since 2008, DOD's portfolio of major defense acquisition programs has grown from 96 to 98 programs, and its investment in those programs has grown to \$1.68 trillion. The total acquisition cost of the programs in DOD's 2010 portfolio has increased by \$135 billion over the past 2 years, of which \$70 billion cannot be attributed to quantity changes. A small number of programs are driving most of this cost growth; however, half of DOD's major defense acquisition programs do not meet cost performance goals agreed to by DOD, the Office of Management and Budget, and GAO. Further, 80 percent of programs have experienced an increase in unit costs from initial estimates; thereby reducing DOD's buying power on these programs.

Changes in DOD's Fiscal Year 2010 Portfolio of Major Defense Acquisition Programs over the Past 2 Years (Fiscal Year 2011 Dollars in Billions)

| | Estimated portfolio cost in 2008 | Estimated portfolio cost in 2010 | Estimated portfolio cost growth since 2008 ^a | Percentage growth since 2008 ^a |
|--|----------------------------------|----------------------------------|---|---|
| Total estimated research and development costs | \$407 | \$428 | \$15 | 5% |
| Total estimated procurement costs | 1,089 | 1,219 | 121 | 11 |
| Total estimated acquisition cost | 1,531 | 1,680 | 135 | 9 |

Source: GAO analysis of DOD data.

^aThese columns do not include \$6 billion in research and development and \$9 billion in procurement cost changes for the Ballistic Missile Defense System. DOD does not consider these adjustments to represent cost growth because the program has been allowed to add 2 years of new funding with each biennial budget.

GAO continues to find that newer programs are demonstrating higher levels of knowledge at key decision points, but most are still not fully adhering to a knowledge-based acquisition approach, putting them at a higher risk for cost growth and schedule delays. For the programs GAO assessed in depth, GAO found that a lack of technology maturity, changes to requirements, increases in the scope of software development, and a lack of focus on reliability were all characteristics of programs that exhibited poorer performance outcomes.

Last year GAO reported that DOD had begun to incorporate acquisition reforms that require programs to invest more time and resources at the beginning of the acquisition process refining concepts through early systems engineering and building prototypes before beginning system development. Many, but not all, planned acquisition programs are adopting these practices. As GAO has previously recommended, more consistently applying a knowledge-based approach, as well as improving implementation of acquisition reforms, can help DOD achieve better outcomes for its portfolio of major weapon system programs.