

## Why GAO Did This Study

This is GAO's annual assessment of DOD weapon system acquisitions, an area that has been on GAO's high-risk list for more than 20 years. The report responds to the mandate in the joint explanatory statement to the DOD Appropriations Act, 2009. It includes observations on (1) the cost and schedule performance of DOD's 2012 portfolio of 86 major defense acquisition programs, including the Missile Defense Agency's Ballistic Missile Defense System; (2) the knowledge attained at key junctures in the acquisition process for 40 major defense acquisition programs that were selected because they were in development or early production; and (3) key acquisition reform initiatives and program concurrency. Major defense acquisition programs are DOD's costliest weapon system development and procurement programs.

To develop the observations, GAO analyzed cost, schedule, and quantity data from DOD's Selected Acquisition Reports and collected data from program offices on technology, design, and manufacturing knowledge; the use of knowledge-based acquisition practices; and the implementation of DOD's acquisition policy and acquisition reforms.

In commenting on a draft of this report, DOD agreed that the cost reductions in its portfolio over the past year were largely due to exiting programs and reductions in procurement quantities. However, DOD stated that the metrics used did not adequately address program performance or answer the questions of when, why, and how changes occurred. GAO believes the report addresses these concerns.

View [GAO-13-294SP](#). For more information contact Michael J. Sullivan at (202) 512-4841 or [sullivanm@gao.gov](mailto:sullivanm@gao.gov).

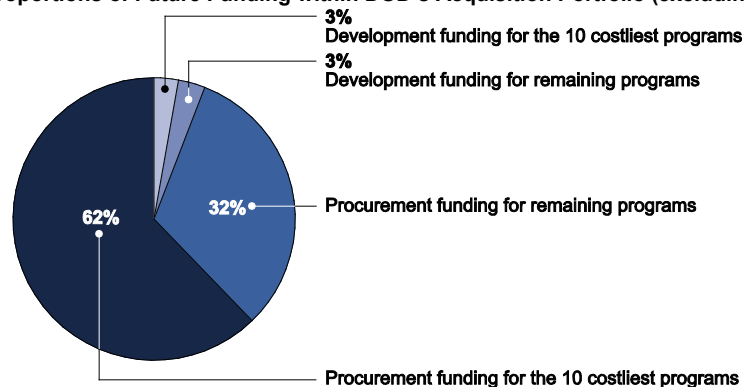
## DEFENSE ACQUISITIONS

### Assessments of Selected Weapon Programs

## What GAO Found

The Department of Defense (DOD) 2012 portfolio of 86 major defense acquisition programs is estimated to cost a total of \$1.6 trillion, reflecting decreases in both size and cost from the 2011 portfolio. Those decreases are largely the result of more programs exiting than entering the portfolio, as well as reductions in procurement quantities due to program cancellations and restructurings. Notably a majority of programs in the portfolio gained buying power in the last year as their acquisition unit costs decreased. DOD's 10 costliest programs, excluding the Missile Defense Agency's Ballistic Missile Defense System (BMDS), drive most of the portfolio's cost performance and funding needs. The majority (65 percent) of the funding that DOD estimates it will need to complete its current programs is associated with those 10 programs, and almost all of that funding is for procurement (see figure).

Proportions of Future Funding within DOD's Acquisition Portfolio (excluding BMDS)



Source: GAO analysis of DOD data.

Continuing a positive trend over the past 4 years, newer acquisition programs are demonstrating higher levels of knowledge at key decision points, although many programs are still not fully adhering to a knowledge-based acquisition approach. Of the 32 programs that provided GAO with technology maturity, 5 reached full maturity while another 14 were near maturity when they began development. Four of the 5 programs with fully mature technologies started in the last 5 years. Less than one-third of the programs providing design data achieved design stability at their critical design review. Many of the programs are capturing critical manufacturing knowledge prior to production, but their methods vary.

Implementation of key selected acquisition initiatives varies among the programs GAO assessed, and programs continue to accept risks associated with concurrently conducting developmental testing and production. Many of the programs reported that they had established affordability requirements and noted that they were meeting those requirements. Most programs in this year's assessment have also conducted "should cost" analyses, and have identified cost savings as a result. Most programs GAO assessed reported that they had completed or planned to complete development testing while in production, a approach that risks costly retrofits of systems already built and fielded.