



Highlights of [GAO-10-522](#), a report to the Committee on Armed Services, U.S. Senate

Why GAO Did This Study

For several decades, Congress and the Department of Defense (DOD) have explored ways to improve the acquisition of major weapon systems, yet program outcomes and their underlying causes have proven resistant to change. Last year, we reported that the cumulative cost growth in DOD's portfolio of major programs was \$296 billion. The opportunity to achieve meaningful improvements may now be at hand with the recent introduction of major reforms to the acquisition process.

In response to a mandate from this Committee, GAO has issued several reports about DOD's budget and requirements processes to support weapon program stability. This follow-on report focuses on (1) identifying weapon programs that are achieving good outcomes, (2) the factors that enable some programs to succeed, and (3) lessons to be learned from these programs to guide implementation of recent reforms. GAO analyzed DOD's portfolio of major defense programs and conducted case study reviews of five programs.

What GAO Recommends

While no new recommendations are being made, previous GAO recommendations have been incorporated into recent reforms. In this report, we present lessons learned to help effectively implement these reforms. In written comments, DOD noted that it has recently instituted several major changes to acquisition policy that are aimed at starting programs right.

View [GAO-10-522](#) or [key components](#). For more information, contact Michael J. Sullivan at (202) 512-4841 or sullivanm@gao.gov.

DEFENSE ACQUISITIONS

Strong Leadership Is Key to Planning and Executing Stable Weapon Programs

What GAO Found

While GAO's work has revealed significant aggregate cost and schedule growth in DOD's portfolio of major defense acquisition programs, individual programs within the portfolio vary greatly in terms of cost growth and schedule delays. Our analysis of individual program performance found that 21 percent of programs in DOD's 2008 major defense acquisition portfolio appeared to be stable and on track with original cost and schedule goals. These programs tended to represent relatively smaller investments, with just under 9 percent of total dollars invested in these programs. Programs that appeared to be on track were markedly newer and had development cycles that were shorter than highly unstable programs.

The stable programs we studied were supported by senior leadership, run by disciplined program managers, and had solid business cases that were well-executed. These programs benefited from strong leadership support, in some cases because the programs were perceived as having an immediate need and, therefore, were viewed as a higher priority by senior leaders. Their program managers tended to share key attributes such as experience, leadership continuity, and communication skills that facilitated open and honest decision making. As a result, these programs established sound, knowledge-based business plans before starting development and then executed those plans using disciplined approaches. They pursued evolutionary or incremental acquisition strategies, leveraged mature technologies, and established realistic cost and schedule estimates that accounted for risk. They were able to invest in early planning and systems engineering, and made trade-offs to close gaps between customer needs and available resources to arrive at a set of requirements that could be developed within cost and schedule targets. After approval, the programs resisted new requirements and maintained stable funding. These practices are in contrast to prevailing pressures to force programs to compete for funds by exaggerating achievable capabilities, underestimating costs, and assuming optimistic delivery dates.

Congress and DOD have taken major steps toward reforming the defense acquisition system that may increase the likelihood weapon programs succeed in meeting their planned cost and schedule objectives. Many of these steps are consistent with key elements in our case study analysis. In particular, the new DOD policy and legislative provisions place greater emphasis on front-end planning and establishing sound business cases for starting programs. For example, the provisions strengthen systems engineering and cost estimating, and require early milestone reviews, prototyping, and preliminary designs. They are intended to enable programs to refine a weapon system concept and make cost, schedule, and performance trade-offs before significant commitments are made. Fundamentally, the provisions should help programs replace risk with knowledge, and set up more executable programs. If reform is to succeed, however, programs that present realistic strategies and resource estimates must succeed in winning approval and funding.