

GAO Highlights

Highlights of GAO-15-320SP, a report to congressional committees

Why GAO Did This Study

In 2014, GAO reported that NASA's major projects continued a general positive trend of limiting cost and schedule growth, maturing technologies, and stabilizing designs, but that NASA faced several challenges that could affect its ability to effectively manage its portfolio, such as completing a series of complex and expensive projects within constrained budgets and competing priorities.

In 2009, GAO was mandated to prepare status reports on selected large-scale NASA programs, projects or activities. Since then, GAO has reported annually on NASA's major projects. This report is GAO's 2015 assessment and it provides a snapshot of how well NASA is planning and executing its major acquisitions. This report assesses (1) the current performance of NASA's portfolio of major projects, (2) NASA's progress in developing and maturing critical technologies and stabilizing design, and (3) NASA's initiatives to reduce acquisition risk and work that remains to strengthen management of the agency's largest, most complex projects. GAO also reviewed NASA's 16 major projects, all with an estimated life-cycle cost of over \$250 million. GAO assessed 2014 and 2015 cost, schedule, technology maturity, design stability, and other data; analyzed monthly project status reports; and interviewed NASA officials.

What GAO Recommends

GAO is not making recommendations in this report, but its findings provide evidence to support the importance of continuing to take action on prior recommendations. NASA generally agreed with GAO's findings.

View GAO-15-320SP. For more information, contact Cristina Chaplain at (202) 512-4841 or chaplainc@gao.gov.

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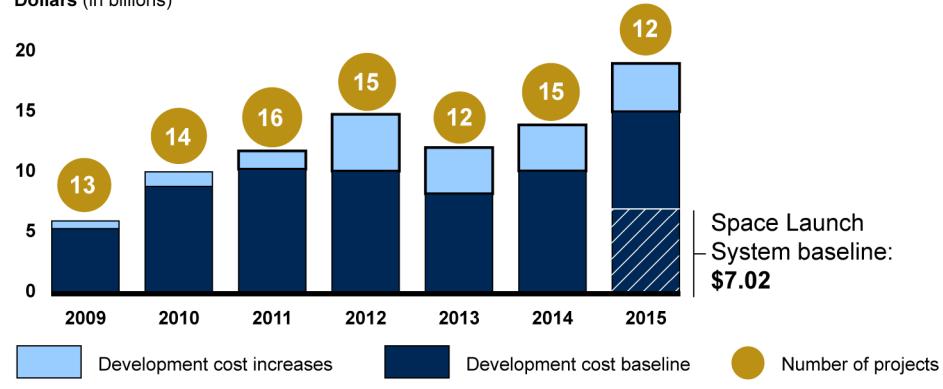
NASA

Assessments of Selected Large-Scale Projects

What GAO Found

The National Aeronautics and Space Administration's (NASA) portfolio of major projects experienced cost and schedule growth in 2015, although that growth remains relatively low compared to historical levels. Cumulative cost growth was 2.4 percent and average schedule growth was 3 months. The growth within the past year is attributable to only a few projects. However, five projects, including the Space Launch System (SLS)—the largest program in NASA's portfolio—only recently established cost and schedule baselines, and as expected, has not yet experienced any cost growth in 2015, which masks growth of several smaller projects in the portfolio. The 2015 portfolio is among the smallest assessed to date, yet for the 12 projects with established baselines, it has the largest amount of total costs, largely due to SLS, as shown below.

Total Number and Development Cost Growth of Selected NASA Major Projects with Established Cost Baselines
Dollars (in billions)



Source: GAO analysis of NASA data. | GAO-15-320SP

NASA continues to make progress in meeting best practices for maturing technology and stabilizing design. Of the 13 projects in this assessment that have held a preliminary design review, 77 percent have met the best practices standards for technology maturity, a significant improvement over prior years.

In 2015, five of NASA's largest, most complex projects, several of which are at critical points in their development, are expected to consume 78 percent of the funds for NASA's major projects. Therefore, existing and new projects will be competing for remaining funds. Fully accounting for the funding, schedule, and technical challenges facing these projects is important due to the cascading effects these challenges could have across the portfolio. NASA has implemented several initiatives to reduce acquisition risk, but management of some of these initiatives remains a concern. For example, while NASA has implemented tools in recent years to provide better insight into and oversight of its acquisition projects, the training for and implementation of these tools have not been consistently and thoroughly applied.