

Why GAO Did This Study

With estimated acquisition costs of nearly \$400 billion, the F-35 Lightning II—also known as the Joint Strike Fighter—is DOD’s most costly and ambitious acquisition program. The U.S. portion of the program will require annual acquisition funding of \$12.4 billion on average through 2038 to complete development and procure a total of 2,457 aircraft. GAO’s prior work has found that the program has experienced significant cost, schedule, and performance problems.

In 2009, Congress mandated that GAO review the F-35 acquisition program annually for 6 years. This report, GAO’s sixth, assesses the program’s (1) development and testing progress, (2) cost and affordability, and (3) manufacturing and supply chain performance.

GAO reviewed and analyzed the latest available manufacturing, cost, testing, and performance data through December 2014; program test plans; and internal DOD analyses; and interviewed DOD, program, engine and aircraft contractor officials.

What GAO Recommends

GAO recommends that DOD assess the affordability of F-35’s current procurement plan that reflects various assumptions about technical progress and future funding.

View [GAO-15-364](#). For more information, contact Michael J. Sullivan at (202) 512-4841 or sullivanm@gao.gov.

F-35 JOINT STRIKE FIGHTER

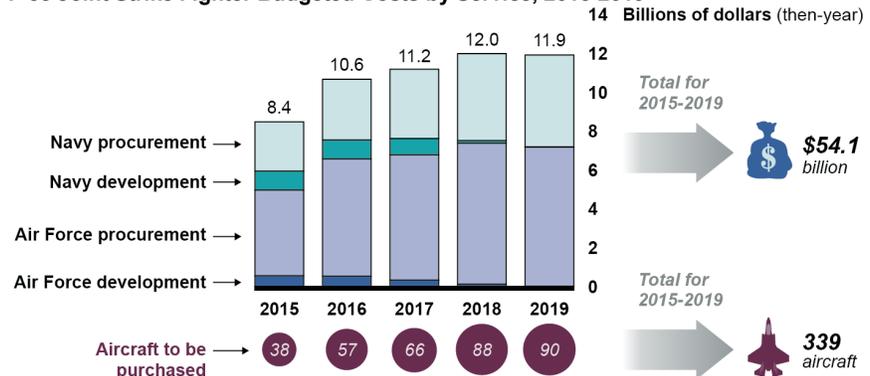
Assessment Needed to Address Affordability Challenges

What GAO Found

The F-35 Joint Strike Fighter program had to make unexpected changes to its development and test plans over the last year, largely in response to a structural failure on a durability test aircraft, an engine failure, and software challenges. At the same time, engine reliability is poor and has a long way to go to meet program goals. With nearly 2 years and 40 percent of developmental testing to go, more technical problems are likely. Addressing new problems and improving engine reliability may require additional design changes and retrofits. Meanwhile, the Department of Defense (DOD) has plans to increase annual aircraft procurement from 38 to 90 over the next 5 years. As GAO has previously reported, increasing production while concurrently developing and testing creates risk and could result in additional cost growth and schedule delays in the future.

Cost and affordability challenges remain. DOD plans to significantly increase annual F-35 funding from around \$8 billion to nearly \$12 billion over the next 5 years (see figure) reaching \$14 billion in 2022 and remaining between \$14 and \$15 billion for nearly a decade. Over the last year, DOD reduced near-term aircraft procurement by 4 aircraft, largely due to budget constraints. While these deferrals may lower annual near-term funding needs, they will likely increase the cost of aircraft procured in that time frame and may increase funding liability in the future. It is unlikely the program will be able to sustain such a high level of annual funding and if required funding levels are not reached, the program’s procurement plan may not be affordable. DOD policy requires affordability analyses to inform long-term investment decisions. The consistent changes in F-35 procurement plans indicate that DOD’s prior analyses did not adequately account for future technical and funding uncertainty.

F-35 Joint Strike Fighter Budgeted Costs by Service, 2015-2019



Source: GAO analysis of Department of Defense data. | GAO-15-364

Manufacturing progress continued despite mixed supplier performance. The aircraft contractor delivered 36 aircraft as planned in 2014, despite a fleet grounding, added inspections, and software delays. In contrast, the labor hours needed to manufacture an aircraft and the number of major design changes have continued to decline over time. Because supplier performance has been mixed, late aircraft and engine part deliveries could pose a risk to the program’s plans to increase production. The contractors are taking steps to address these issues.