Weapon Systems Annual Assessment

Updated Program Oversight Approach Needed

Why GAO Did This Study

Title 10, section 2229b of the U.S. Code contains a provision for GAO to review DOD’s weapon programs. This report assesses the following aspects of DOD’s costliest weapon programs: their characteristics and performance, planned or actual implementation of knowledge-based acquisition practices, and implementation of selected software and cybersecurity practices. The report also assesses oversight implications of DOD’s changes to its foundational acquisition guidance.

GAO identified programs for review based on cost and acquisition status; reviewed relevant legislation, policy, guidance, and DOD reports; collected program office data; and interviewed DOD officials.

What GAO Recommends

GAO recommends DOD develop a reporting strategy to improve oversight of those weapon systems developed using multiple efforts or pathways. DOD concurred with our recommendation.

GAO’s 19th annual assessment of the Department of Defense’s (DOD) weapon programs comes at a time of significant internal changes to the department’s acquisition process. Specifically, DOD began implementing its new acquisition framework intended to, among other things, deliver solutions to the end user in a timely manner. However, GAO found that many programs have planned acquisition approaches that, unless properly managed and overseen, could result in cost and schedule challenges similar to those GAO has reported on for nearly the past 2 decades.

DOD’s new acquisition framework allows program managers to use one or more of six acquisition pathways—including the major capability acquisition and middle-tier acquisition (MTA) pathways used by the programs GAO reviewed. Each pathway is governed by separate policies for milestones, cost and schedule goals, and reporting. Program managers can tailor, combine, and transition between pathways based on program goals and risks associated with the weapon system being acquired (see figure).

Notional Use of Multiple Efforts and Multiple Pathways

DOD’s framework also introduces new considerations to program oversight. In particular, DOD has yet to develop an overarching data collection and reporting strategy for programs transitioning between acquisition pathways or conducting multiple efforts using the same pathway to deliver the intended capability. The lack of a strategy not only limits DOD’s visibility into these programs but also hinders the quality of its congressional reporting and makes the full cost and schedule of the eventual weapon system more difficult to ascertain.

View GAO-21-222. For more information, contact Shelby S. Oakley at (202) 512-4841 or oakleys@gao.gov.
DOD’s reported costs primarily reflect major defense acquisition program (MDAP) investments (see table). However, DOD is increasingly using the MTA pathway to acquire weapon programs. The totals do not include all expected costs because, among other things, MTA estimates do not reflect any potential investments after the current MTA effort, and cost figures do not include programs that have yet to formally select a pathway or are classified or sensitive.

### Department of Defense Total Investments in Selected Weapon Programs GAO Reviewed (fiscal year 2021 dollars in billions)

<table>
<thead>
<tr>
<th>Type of program</th>
<th>Number of programs reviewed</th>
<th>Total planned investment</th>
<th>Air Force</th>
<th>Navy</th>
<th>Army</th>
<th>Department of Defense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major defense acquisition programs</td>
<td>84</td>
<td>$1,791.4</td>
<td>27</td>
<td>38</td>
<td>17</td>
<td>2</td>
</tr>
<tr>
<td>Future major defense acquisition programs</td>
<td>6</td>
<td>$15.1+</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Middle-tier acquisition programs</td>
<td>17</td>
<td>$30.5</td>
<td>11</td>
<td>1</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Department of Defense data. | GAO-21-222

Procurement reductions in DOD’s costliest program—the F-35—drove an MDAP portfolio cost decrease since GAO’s last annual report (see figure). Excluding this program, quantity changes and other factors such as schedule delays contributed to one-year portfolio cost growth. Sixteen MDAPs also showed schedule delays since GAO’s 2020 report. Such delays are due, in part, to delivery or test delays and poor system performance.

### Major Defense Acquisition Program One-Year Cost Change Including and Excluding the F-35 Program (fiscal year 2021 dollars in billions)

![Graph showing cost changes](image)

Source: GAO analysis of Department of Defense data. | GAO-21-222

As GAO found last year, DOD continues to expand its portfolio of the costliest MTA programs, expecting to spend $30.5 billion on current efforts. Due to inconsistent cost reporting by MTA programs, GAO could not assess cost trends across the MTA portfolio. However, GAO observed examples of cost changes on certain MTA programs compared with last year.

Most MDAPs continue to forgo opportunities to improve cost and schedule outcomes by not adhering to leading practices for weapon system acquisitions. Some MTA programs also reported planning to acquire only limited product knowledge during program execution, leading to added risks to planned follow-on efforts.

Further, while both MDAPs and MTA programs increasingly reported using modern software approaches and cybersecurity measures, they inconsistently implemented leading practices, such as frequently delivering software to users and conducting certain types of cybersecurity assessments during development.

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DOD Plans to Invest Over $1.79 Trillion in Its Costliest Weapon Programs, but Not All Costs Are Reported

F-35 reported an overall procurement cost decrease of $23.9 billion in fiscal year 2020, primarily due to lower prime and subcontractor labor rates.

Weapon Programs Do Not Consistently Plan to Attain Knowledge That Could Limit Cost Growth and Deliver Weapon Systems Faster

![Image of F-35](image)