

Why GAO Did This Study

DOE and DOD are undertaking an extensive effort to sustain and modernize the nuclear weapons stockpile, research and production infrastructure, delivery systems, and the nuclear command and control system. Completing this effort is expected to cost hundreds of billions of dollars over decades. Congress mandated the development of an annual report on the departments' plans and 10-year budget estimates for these efforts. Congress also mandated GAO to review the accuracy and completeness of the DOE and DOD report, with respect to the budget estimate contents and methodology.

This report addresses whether DOE's and DOD's 10-year budget estimates for sustaining and modernizing the nuclear deterrent are consistent with their funding plans, including whether the report provides complete information and a transparent methodology. GAO analyzed the DOE and DOD plans and estimates as of July 2013, and the DOE and DOD guidance and methodologies used to prepare their budget estimates.

What GAO Recommends

To improve the completeness and transparency of subsequent joint reports, GAO recommends that the Secretary of Defense direct DOD components to (1) include at least a range of potential 10-year budget estimates for projects and programs, based on preliminary cost information (this is consistent with a December 2013 recommendation GAO made to DOE); and (2) document assumptions and limitations affecting its NC3 funding estimates. DOD agreed with these recommendations.

View [GAO-14-373](#). For more information, contact John Pendleton at (202) 512-3489 or pendletonj@gao.gov, or David Trimble at (202) 512-3841 or trimbled@gao.gov.

NUCLEAR WEAPONS

Ten-Year Budget Estimates for Modernization Omit Key Efforts, and Assumptions and Limitations Are Not Fully Transparent

What GAO Found

The Departments of Energy's (DOE) and Defense's (DOD) \$263.8 billion, 10-year estimates in their report to Congress for sustaining and modernizing U.S. nuclear weapons capabilities are generally consistent with their funding plans through fiscal year 2018. However, GAO identified shortcomings with respect to the completeness of the budget estimates and the transparency of the assumptions and limitations that underlie the 10-year estimate. Specifically:

- **Nuclear stockpile and infrastructure:** Based on GAO's recent review of DOE's long-term plans and estimates for sustaining and modernizing the nuclear enterprise, we found that DOE's \$97.5 billion estimate in the report includes less funding than will be needed through fiscal year 2018 to meet program milestones for planned nuclear weapon life extensions, and through fiscal year 2023 to meet milestones for constructing key facilities.
- **Nuclear delivery systems:** DOD's \$125.5 billion estimate in the report does not include potential budget estimates for Air Force efforts to modernize intercontinental ballistic missiles or to develop a new bomber. Instead, DOD treated these efforts as zero-cost in the estimate. Consequently, DOD may be significantly underreporting its 10-year estimate, depending on the magnitude of the costs resulting from upcoming decisions about how to modernize these delivery systems.
- **Nuclear command, control, and communications (NC3):** DOD's methodology for preparing its \$40.8 billion estimate to sustain and modernize its system for assuring connectivity between the President and nuclear forces is not fully transparent because key assumptions and potential limitations are not documented in the report to Congress. As a result, Congress has a limited basis for understanding the estimate, or for comparing the estimates in one annual report to the next, as it assesses long-term affordability when allocating resources.

The report omits estimates for certain programs, such as the new bomber, and is not fully transparent in describing key assumptions and limitations for estimating nuclear command, control, and communications system funding, which limits its utility for budgetary planning. Key principles that GAO derived from federal budget guidance stress the importance of including all relevant funding estimates in the plan, as well as documenting methodological assumptions and potential limitations. However, DOD did not specifically direct the Air Force to include a range of potential budget estimates in the report for developing a new intercontinental missile or bomber, where a firm estimate was unavailable. DOD also did not direct that key assumptions and limitations be documented in the report for preparing its NC3 estimates. GAO reported in December 2013 that DOE's nuclear stockpile and infrastructure estimates did not include a range of preliminary budget estimates to account for known future expenses. GAO recommended that DOE include a range of potential budget estimates for preliminary projects and programs in future funding plans, and DOE generally agreed with this recommendation. Without a range of potential estimates and fully documented assumptions and limitations, the report is an incomplete tool for congressional oversight.