

Why GAO Did This Study

NNSA is simultaneously modernizing the nation's nuclear weapons stockpile and the infrastructure on which weapons research and production programs depend. These efforts include multi-billion-dollar defense programs and projects that provide the capabilities needed for maintenance and modernization programs. Congress previously directed NNSA to identify its needed capabilities.

The Senate report accompanying the National Defense Authorization Act for Fiscal Year 2020 includes a provision for GAO to review NNSA's approach to managing its defense programs and to identifying capabilities. This report examines the extent to which NNSA (1) used selected portfolio management leading practices to manage its maintenance and modernization programs and projects and (2) developed a comprehensive and complete capability assessment to support portfolio management.

GAO reviewed NNSA documentation related to portfolio management and capabilities and compared it with leading practices and legislative requirements. GAO also interviewed NNSA officials from six agency offices.

What GAO Recommends

GAO is making two recommendations: NNSA should (1) establish a portfolio management framework and (2) develop a comprehensive and complete capability assessment. NNSA concurred in principle with the recommendations and stated that they have addressed them. GAO believes that NNSA needs to take additional actions to fully address the recommendations.

View [GAO-21-398](#). For more information, contact Allison Bawden at (202) 512-3841 or bawdena@gao.gov.

NUCLEAR SECURITY ENTERPRISE

NNSA Should Use Portfolio Management Leading Practices to Support Modernization Efforts

What GAO Found

The National Nuclear Security Administration (NNSA) has partially implemented selected leading practices to manage the work necessary to maintain and modernize the nation's nuclear weapons stockpile. GAO found that NNSA is in the early stages of initiating its portfolio management processes and has partially implemented leading practices, such as establishing a clearly defined portfolio of work. For example, NNSA officials stated that its Weapons Activities appropriations account is a portfolio of work. However, NNSA has not developed clearly defined and appropriately empowered governance roles, such as a portfolio manager, for its Weapons Activities portfolio. As NNSA continues to develop its approach to portfolio management, establishing a portfolio management framework—consistent with selected leading practices—may allow NNSA to fully implement all leading practices, better define how program offices will pursue strategic stockpile modernization objectives, and optimize portfolio performance in the event that budget trade-offs become necessary.

NNSA's offices have undertaken four separate efforts to identify and assess the capabilities needed across the nuclear security enterprise to meet its stockpile maintenance and modernization mission, but NNSA has not developed a comprehensive or complete capability assessment that could support its portfolio management approach (see fig.). NNSA undertook three of these four independent efforts to identify and assess capabilities in response to different legislative direction and did not incorporate information on all elements of a capability (knowledge, human capital, and infrastructure) in any of the individual efforts. Working across the agency to conduct a comprehensive, complete capability assessment would provide NNSA with a portfolio-level view of the enterprise's capabilities and needs, allowing for planning that considers interdependencies that have been missed in the past when planning focused on individual programs or projects.

Relationship between Capability Assessment and Portfolio Management



Source: GAO analysis of Project Management Institute, Inc., information. | GAO-21-398