# GAO Highlights

Highlights of GAO-20-64, a report to congressional committees

## Why GAO Did This Study

The poor condition of infrastructure at the Navy's four public shipyards-Norfolk Naval Shipyard, Virginia; Portsmouth Naval Shipyard, Maine; Puget Sound Naval Shipyard. Washington; and Pearl Harbor Naval Shipyard, Hawaii—affects the readiness of the aircraft carrier and submarine fleets they are charged with maintaining. In response to congressional direction to create a plan to address the shipyards' infrastructure deficiencies, the Navy developed the Shipyard Infrastructure Optimization Plan, which the Navy estimates will require \$21 billion and 20 years to implement.

Senate Report 115-262 accompanying a bill for the National Defense Authorization Act for Fiscal Year 2019 included a provision for GAO to review the Shipyard Infrastructure Optimization Plan. GAO evaluated the extent to which the plan (1) addresses deficiencies in the infrastructure needed to support the Navy's projected needs. (2) includes reliable cost estimates to address those deficiencies, and (3) identifies clear roles and responsibilities for implementation. GAO reviewed the Navy's shipyard infrastructure plan and cost estimates; conducted site visits to shipyards selected to provide a variety of operational perspectives; and interviewed Navy and shipyard officials.

#### What GAO Recommends

GAO recommends that the Navy enhance the quality and reliability of its shipyard infrastructure plan by incorporating GAO's cost estimating best practices and determining clear shipyard roles and responsibilities for implementing the plan. The Navy concurred with these recommendations.

View GAO-20-64. For more information, contact Diana Maurer at (202) 512-9627 or MaurerD@gao.gov.

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## **NAVAL SHIPYARDS**

## **Key Actions Remain to Improve Infrastructure to Better Support Navy Operations**

### **What GAO Found**

The Navy's 2018 Shipyard Infrastructure Optimization Plan includes actions to address critical deficiencies at the shipyards, but the extent to which the plan fully addresses those deficiencies remains to be seen as the proposed actions are complex and years away from being implemented. The plan includes steps to address dry dock deficiencies, which the Navy expects will provide it with the capacity and capability to perform 67 of 68 ship maintenance periods it is currently unable to support through fiscal year 2040. Once area development plans are complete (see figure), the Navy projects it will take at least \$21 billion over 20 years to fully implement the plan.

### Figure: Navy's Planned Activities to Address Shipyard Deficiencies through 2022



The Navy is identifying key information and resources used in the shipyards' current maintenance process.



The Navy is using that information to create computer models of the shipyards. The Navy began this process at Pearl Harbor in February 2019 and plans to begin at other shipyards in September 2019.



The Navy will use the computer models to simulate the impact on shipyard operations from different potential layouts ("potential shipyards"). The Navy plans to complete this phase by the end of fiscal year 2020.



The Navy will then decide on which "potential shipyard" designs it would like to pursue.



The shipyards will develop unique master plans, called area development plans, that outline all the necessary resources needed to achieve the "potential shipyard" design. The Navy plans to complete this phase by the end of fiscal year 2021.



The Navy will use the area development plans to create a prioritized list of projects that it can use to guide investments. The Navy plans to complete this phase by the end of fiscal year 2022.

Source: GAO analysis of Navy documents and discussions with Navy officials. | GAO-20-64

The Navy's initial cost estimate for the plan did not use certain best practices in developing the estimate, such as documenting key assumptions, accounting for inflation, and addressing risks that together could add billions to the ultimate cost. Navy officials stated that high-quality cost estimates will not be possible until they complete modeling and simulation in fiscal year 2020 and subsequently identify the most effective shipyard layouts and prioritize projects in fiscal year 2022. However, without fully following best practices in subsequent estimates, the Navy risks requesting inadequate resources to address shipyard deficiencies.

The Navy created a program management office in June 2018 to oversee the estimated 20-year-long process of optimizing the shipyards. This program office includes representatives from multiple Navy organizations. However, the office has not formally defined the role of shipyard officials. Navy officials stated that they intend to develop an agreement to address roles and responsibilities, but this has not yet been finalized. Without defining clear shipyard roles and responsibilities, the Navy risks an ineffective implementation of its plan.

United States Government Accountability Office