

# GAO Highlights

Highlights of [GAO-23-106067](#), a report to congressional committees

## Why GAO Did This Study

The Navy's four public shipyards are critical to maintaining the readiness of its fleet of aircraft carriers and submarines. However, the condition of their dry docks and facilities is poor, and their equipment is generally past its useful life. Further, the Navy reports that without improvements to shipyard infrastructure, it will be unable to support almost a third of the planned maintenance periods for aircraft carriers and submarines through 2040, hindering fleet readiness. In 2018, the Navy estimated it would require \$21 billion and 20 years to implement the SIOPI; however, the projected costs and scope of the effort have grown.

The National Defense Authorization Act for Fiscal Year 2022 includes a provision that GAO assess the Navy's progress in implementing the SIOPI. This report evaluates the extent to which the Navy (1) has developed a full cost and schedule estimate for the SIOPI, (2) used cost and schedule estimating best practices for the Portsmouth Naval Shipyard dry dock project, and (3) planned funding for the Portsmouth and Pearl Harbor Naval Shipyards dry dock projects that align with cost estimates. GAO analyzed cost and schedule documentation, reviewed SIOPI reports, and interviewed Naval shipyard officials.

## What GAO Recommends

GAO is making three recommendations, including that for all key SIOPI projects, the Navy update its risk analyses associated with its cost estimates throughout the design process and improve its use of best practices for schedule estimates. The Navy concurred with these recommendations.

View [GAO-23-106067](#). For more information, contact Diana Maurer at (202) 512-9627 or [maurerd@gao.gov](mailto:maurerd@gao.gov).

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## NAVY READINESS

### Actions Needed to Address Cost and Schedule Estimates for Shipyard Improvement

## What GAO Found

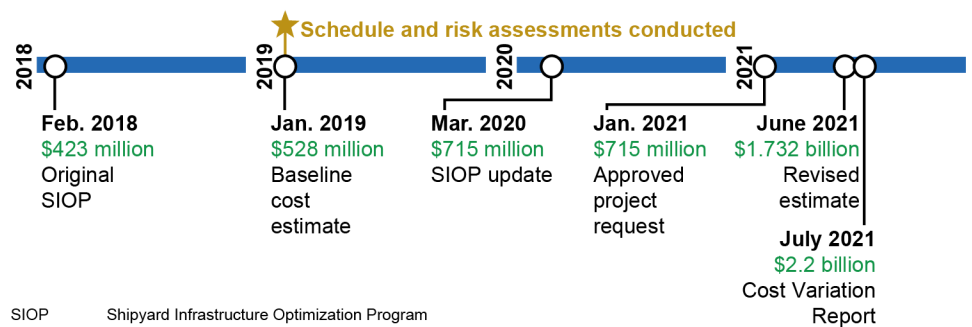
The Navy has not developed a full cost and schedule estimate for its Shipyard Infrastructure Optimization Program (SIOPI)—an effort to improve its dry docks, facilities, and equipment—and reports that it will not be able to do so until fiscal year 2025. In the interim, the Navy plans to provide annual updates of the estimated costs of SIOPI projects it intends to undertake during the next 5 years. The Navy reports that it cannot develop an estimate for the full SIOPI until 2025, after each shipyard completes their detailed infrastructure plans identifying specific facility projects. In 2022, the Navy completed its first plan for Pearl Harbor Naval Shipyard. The Navy's estimated cost for Pearl Harbor increased significantly—from an estimated \$6.1 billion in 2018 to \$16 billion in 2022. The Navy faces challenges developing a reliable cost and schedule estimate for the full SIOPI and its associated efforts, including project uncertainty, volatile commodity prices, and a lack of expertise completing dry dock projects.

The Navy's cost and schedule estimates for the Portsmouth Naval Shipyard dry dock project followed most, but not all, GAO best practices. The dry dock project at Portsmouth Naval Shipyard is the first and only key SIOPI project underway as of January 2023. GAO identified two issues with the estimates:

- The Navy's cost sensitivity, risk, and uncertainty analyses were based on the preliminary design and were not updated to reflect the final design (see fig.). The cost estimate grew from \$528 million for the baseline cost estimate to \$2.2 billion for the final amount, in part due to a lack of competition.
- The Navy's schedule did not accurately determine key tasks or document the flexibility available in its activities without affecting the program's finish date.

Following cost and schedule estimating best practices for key SIOPI projects would help Navy leadership make informed decisions, prepare for unanticipated costs, and focus on critical activities, which could improve SIOPI results.

Changes in Cost Estimates for Portsmouth Naval Shipyard Dry Dock Project



Reports on the Navy's enacted and planned funding for two dry dock projects align with current cost estimates and incorporate significant cost increases experienced to date. In its 2023 five-year plan, the Navy estimated it would cost \$3.6 billion for the dry dock project at Pearl Harbor and \$2.2 billion for the dry dock project at Portsmouth. As of March 2023, the Navy had received \$1.6 billion for these projects and requested, or planned to request, an additional \$4.2 billion.