June 2023

Portsmouth Naval Shipyard

Accessible Version

Kittery, Maine

Year Established

1800

History/Mission

Portsmouth Naval Shipyard's mission has evolved over the centuries. Portsmouth, located in Kittery, Maine, launched its first ship in 1814. During World War I, the shipyard took on an important role in constructing submarines in addition to its role in maintaining and repairing surface ships. The Navy continued to build submarines at Portsmouth until 1969, when the shipyard launched the last submarine built in a public shipyard. As of 2023, Portsmouth Naval Shipyard exclusively repairs nuclear powered submarines.

Unique Issues

Dry Dock One's shallow depth, coupled with the tidal range, currently restrict it to repairing Los Angeles-class submarines, which the Navy is currently phasing out of service.

Highlights of Planned SIOP Efforts for FY22 to FY27

As part of the Shipyard Infrastructure Optimization Program (SIOP), between fiscal year 2022 and fiscal year 2027, Portsmouth Naval Shipyard plans to expand Dry Dock One so that it may handle Virginia-class submarines; replace and upgrade existing capital equipment, such as a portal crane; and design and potentially begin construction on a new waterfront support facility.

View GAO-23-106067. For more information, contact Diana Maurer at 202-512-9627 or maurerd@gao.gov.

Figure 1: Portsmouth Naval Shipyard

Source: U.S. Navy. | GAO-23-106067

Shipyard Facts

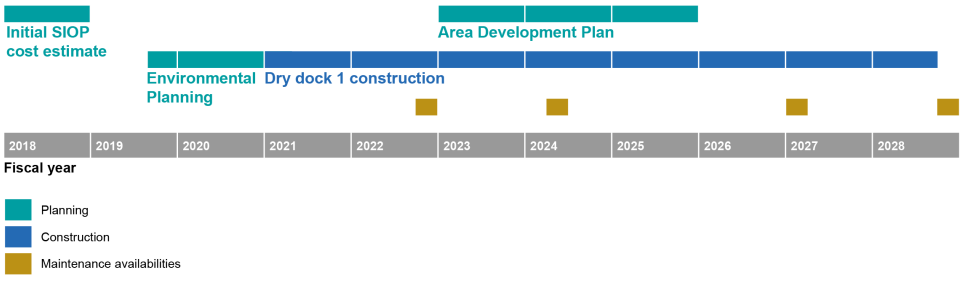
Drydocks: 3

Workforce (fiscal year 2016)**:**
5,508 civilians

Source: GAO analysis of Navy data. | GAO-23-106067

-Size of Shipyard: Approximately 300 acres

Timeline for Portsmouth Naval Shipyard Dry Dock Project



Source: GAO analysis of Navy documents. | GAO-23-106067

Note: An "availability" is the Navy's term for an extended period of ship repair that generally requires a dry dock.

June 2023

Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility

Pearl Harbor, Hawaii

Year Established

1908

History/Mission

The Navy originally established Pearl Harbor Naval Shipyard as a mid-Pacific coaling and repair station. Its mission has evolved over the years. As of 2023, Pearl Harbor Shipyard and Intermediate Maintenance Facility serves as the Navy's largest ship repair facility between the West Coast and East Asia. It focuses primarily on the maintenance and repair of submarines and surface combatants.

Unique Issues

Pearl Harbor Naval Shipyard faces historic preservation challenges that have complicated its infrastructure planning and capital investment. Eighty percent of its nearly 4 million square feet of facilities is designated as historic. According to the Navy, preservation, restoration, or demolition of historic facilities can require additional time and cost for both planning and execution.

Highlights of Planned SIOP Efforts for FY22 to FY27

As part of the Shipyard Infrastructure Optimization Program (SIOP), between fiscal year 2022 and fiscal year 2027, Pearl Harbor Naval Shipyard is in the process of replacing Dry Dock Three with Dry Dock Five; improving capital equipment, such as equipment for maintaining submarines; and engaging in design efforts for a waterfront support facility.

View GAO-23-106067. For more information, contact Diana Maurer at 202-512-9627 or maurerd@gao.gov.

Figure 2: Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility

Source: U.S. Navy. | GAO-23-106067

Shipyard Facts

Drydocks: 4

Workforce (fiscal year 2016)**:**
5,050 civilians

Source: GAO analysis of Navy data. | GAO-23-106067

-Size of Shipyard: 148 acres

Timeline for Pearl Harbor Naval Shipyard Dry Dock Project

Source: GAO analysis of Navy documents. | GAO-23-106067

Note: An "availability" is the Navy's term for an extended period of ship repair that generally requires a dry dock.

June 2023

Puget Sound Naval Shipyard and Intermediate Maintenance Facility

Bremerton, Washington

Year Established

1901

History/Mission

Puget Sound Naval Shipyard, located in Bremerton, Washington, was originally established in 1891 as Naval Station Puget Sound; it was designated a naval shipyard in 1901 and was originally designed to construct ships, including submarine chasers, submarines, and ammunition ships. Currently, it is the largest shipyard on the West Coast, and while it is equipped and staffed to work on all classes of Navy vessels, it primarily conducts maintenance on nuclear-powered aircraft carriers and submarines. It has the only dry dock on the west coast that is capable of servicing an aircraft carrier.

Unique Issues

Puget Sound lies on an active fault line, and the Navy estimates that it will need significant infrastructure improvements in order to make it more likely to survive a severe earthquake.

Highlights of Planned SIOP Efforts for FY22 to FY27

As part of the Shipyard Infrastructure Optimization Program (SIOP), between fiscal year 2022 and fiscal year 2027, Puget Sound Naval Shipyard is in the process of engaging in the design and construction of a new dry dock; engaging in capital equipment improvements, including the replacement of a portal crane; and engaging in the design of a new waterfront support facility.

View GAO-23-106067. For more information, contact Diana Maurer at 202-512-9627 or maurerd@gao.gov.

Figure 3: Puget Sound Naval Shipyard and Intermediate Maintenance Facility

Source: U.S. Navy. | GAO-23-106067

Shipyard Facts

Drydocks: 6

Workforce (fiscal year 2016)**:**
13,425 civilians

Source: GAO analysis of Navy data. | GAO-23-106067

-Size of Shipyard: 179 acres

Dry Dock Timeline

As of March 2023, the Navy is still developing a timeline for construction of the Puget Sound Naval Shipyard and Intermediate Maintenance Facility dry dock project. According to the Navy's March 2023 SIOP update, the Navy has determined a potential construction date of fiscal year 2026 for the Puget Sound Naval Shipyard dry dock.

June 2023

Norfolk Naval Shipyard

Portsmouth, Virginia

Year Established

1767

History/Mission

Norfolk Naval Shipyard is the Navy's oldest shipyard, originally established in 1767 under British rule. It is a full-service shipyard that is capable of repairing and modernizing the entire range of Navy ships, including aircraft carriers, submarines, surface combatants, and amphibious ships. It is the only East Coast naval shipyard capable of dry-docking nuclear-powered aircraft carriers.

Unique Issues

Norfolk Naval Shipyard is vulnerable to flooding events. According to the Navy, the shipyard's dry docks were not designed to accommodate the threats posed by the increased intensity and frequency of severe weather and sea-level rise.

Highlights of Planned SIOP Efforts for *FY22* to FY27

As part of the Shipyard Infrastructure Optimization Program (SIOP), between fiscal year 2022 and fiscal year 2027, Norfolk Naval Shipyard plans to renovate two existing dry docks and upgrade a third dry dock; design and potentially begin construction on a new waterfront support facility; and replace and upgrade capital equipment, such as portal cranes.

Figure 4: Norfolk Naval Shipyard

Source: U.S. Navy. | GAO-23-106067

Shipyard Facts

Drydocks: 5

Workforce (fiscal year 2016)**:**
10,543 civilians

Source: GAO analysis of Navy data. | GAO-23-106067

-Size of Shipyard: 819 acres

Dry Docks Timeline

According to the Navy's March 2023 SIOP update, the Navy is in the process of renovating an existing dry dock and expects to finish this project in fiscal year 2023. The Navy is also planning the renovations for Dry Dock Three and expects to begin construction efforts in fiscal year 2029. Further, the Navy is in the process of upgrading a third dry dock to enable it to support the Ford-class aircraft carriers and expects to complete this work in fiscal year 2027.

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