

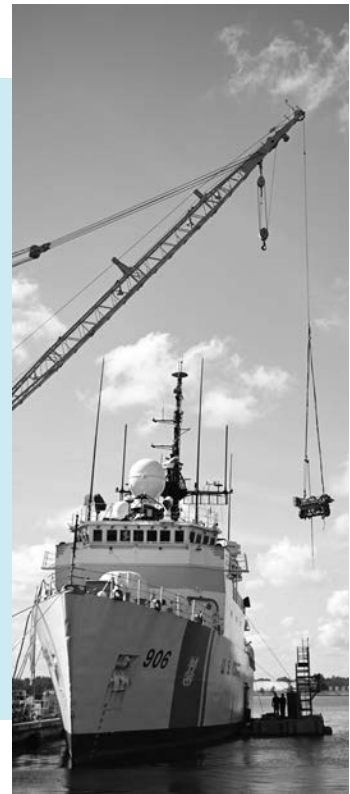


U. S. COAST GUARD YARD

**Shipyard
Infrastructure
Optimization Plan**

On the Cover

A Ship's Service Diesel Generator (SSDG) is removed from the Coast Guard Cutter (CGC) SENECA. CGC SENECA recently received an updated shipboard electrical system at the Coast Guard Yard and will serve as one of two prototypes for the six cutters receiving upgrades as part of the ongoing 270' Famous Class Medium Endurance Cutter (WMEC) Service Life Extension Program (SLEP). The 13 Famous Class cutters were commissioned between 1983 and 1991 with a designed service life of 30 years. 270' WMEC SLEP is designed to extend the service life for six 270' WMECs through Fiscal Year (FY) 2038 to provide an operational capability bridge during the transition to the Offshore Patrol Cutter (OPC).



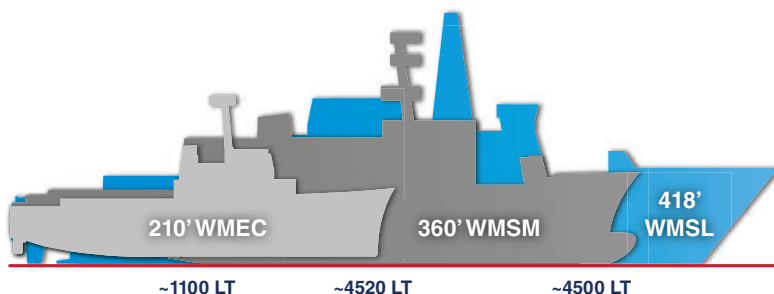


United States Coast Guard Yard

Established in 1899 on a 113-acre waterfront site outside Baltimore, Maryland, the Coast Guard Yard is one of the country's five public shipyards. Throughout its 123-year history, the Yard adapted to the changing needs of the Coast Guard, evolving from shipbuilding and ship repair on wood- and steel-hulled ships in the early 20th Century to its present mission supporting the Service's fleet of patrol boats, medium endurance cutters, tenders, and tugs. In addition to supporting the Coast Guard fleet, the Yard's capability is a strategic asset that can be called upon to best support the National Fleet as the country requires.

Fleet Recapitalization

The Service is currently in the midst of the largest surface fleet recapitalization since World War II (WWII). Recapitalizing Yard facilities and infrastructure is essential to maintaining the Coast Guard's organic depot maintenance capabilities to support the Fleet, particularly in light of a diminishing commercial industrial base throughout the Nation and the competition for limited drydock space that the Service's newer, larger cutters face from U.S. Navy and commercial vessels offering more lucrative maintenance contracts.



This graphic depicts the difference in size between the Coast Guard's legacy RELIANCE Class Medium Endurance Cutter (WMEC) and the larger, more capable Maritime Security Cutter Medium (WMSM) and Maritime Security Cutter Large (WMSL). Some RELIANCE Class cutters were built at the Coast Guard Yard and entered service between 1964 and 1969.

A U.S. Navy Yard Patrol Craft (YP) is lifted from the water as part of the ongoing YP SLEP at the Coast Guard Yard. The wooden-hulled YPs are used for training midshipmen at the nearby U.S. Naval Academy in Annapolis, Maryland.



Unique Capability

The Yard provides a unique capability to achieve Coast Guard and other national objectives with projects supporting the National Oceanic and Atmospheric Administration (NOAA), the U.S. Navy, U.S. Army, other government agencies, and allied nations through the Foreign Military Sales (FMS) program.



Two Ukrainian 110' patrol boats moored pier-side at the Coast Guard Yard. The Service's Foreign Military Sales (FMS) program is currently preparing decommissioned Coast Guard assets like the 110' Island and 87' Marine Protector Class Patrol Boats for delivery to allied nations. Disposition of the Service's 210' WMECs will also be handled by the Cutter Transition Division at the Yard after decommissioning.



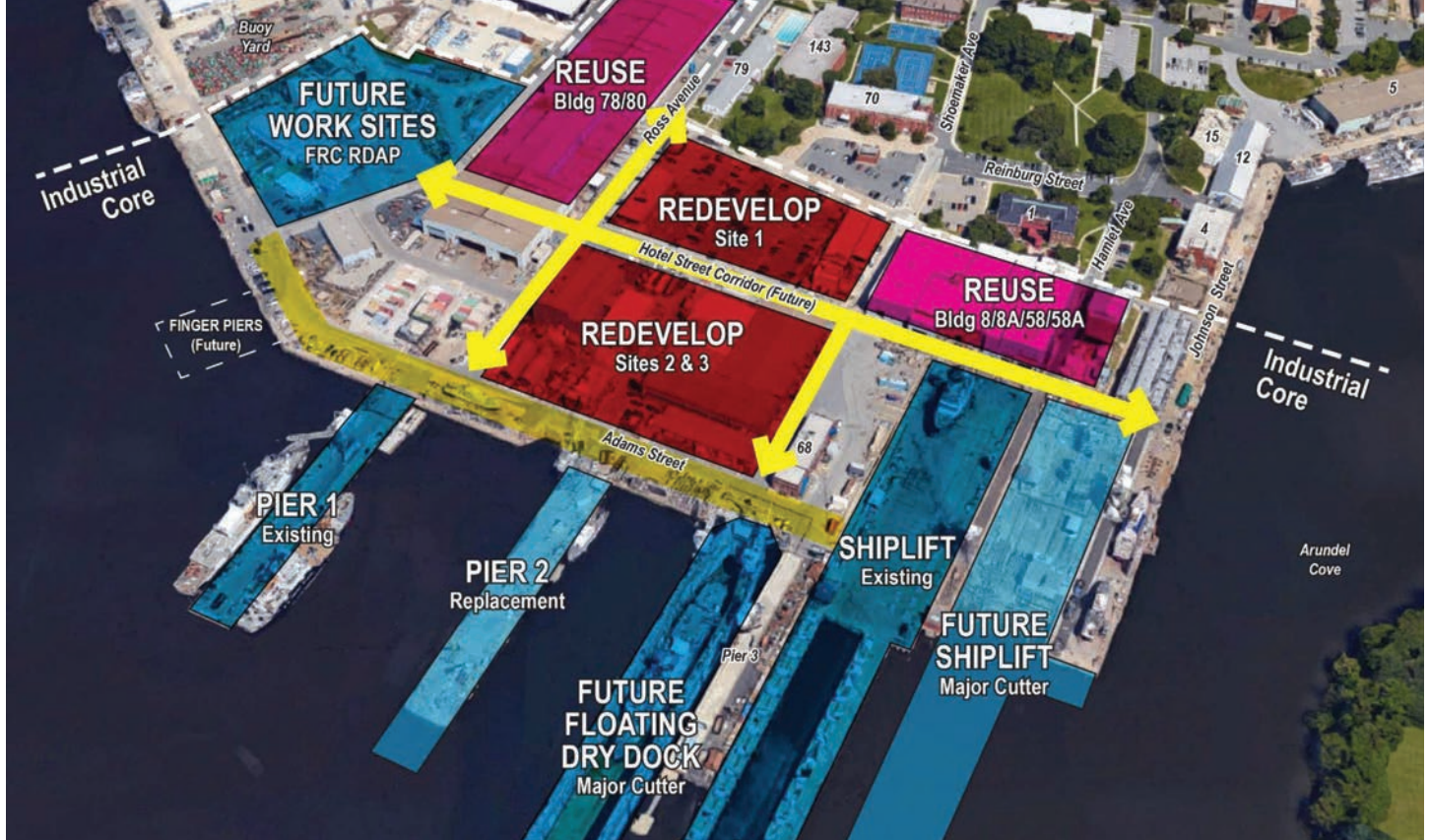
Building 11 at the Coast Guard Yard was constructed in 1927. Efforts to improve efficiency and work flow at the Coast Guard Yard are critical to maintaining both the relevance of the facility and the Service's ability to effectively maintain the cutter fleet into the future.

Aging Facilities

Existing production resources are situated in aging facilities scattered around the Yard. Many of these WWII-era structures are over 70 years old and increasingly obsolete for their current and future missions. The haphazard configuration of facilities results in extensive movements for large components during availabilities as well as satellite production facilities providing duplicate capabilities within shops.

The T. Roland Lewis Shiplift system is the core asset of the Coast Guard Yard, capable of docking up to four ships, including all existing classes of Coast Guard cutters except the WMSL, WMSM, or the Service's heavy and medium polar icebreakers.





Shipyard Infrastructure Optimization Plan

The Shipyard Infrastructure Optimization Plan (SIOP) focuses on redeveloping three sites at the industrial core of the Yard and reusing two existing building complexes. The plan consolidates direct project support functions onto five sites, and an extension of Hotel Street will create a central corridor connecting the west and east ends of the Yard, providing a direct route between production shops and waterfront work sites.

Purpose-built facilities are proposed for shops with significant capacity and configuration gaps. The plan proposes constructing five new buildings totaling 220,970 gross square feet (gsf), demolishing over 18 buildings totaling 166,317 gsf, and retaining facilities which are adaptable based on their configuration and location. The Plan's total estimated cost of construction is \$344 million, executed in six phases, with costs estimated from \$16 million to \$140 million per phase. The Coast Guard is also pursuing the acquisition of a \$114 million major cutter floating dry dock, which will expedite the fielding of major cutter ship-handling capability at the Coast Guard Yard in advance of an eventual shiplift expansion.

Ordnance Shop Personnel conduct testing on a MK 75 gun weapons system that will be installed on a U.S. Navy Frigate. The CG Yard Ordnance Shop conducts overhauls of gun weapons systems for Coast Guard, Navy, and allied vessels.



A Unique Opportunity

The Yard has a unique opportunity that is not often found in comprehensive recapitalization programs. One of the most valuable redevelopment sites is ideally situated to support long-term optimization and is also available for first phase construction efforts, minimizing disruptions to ongoing operations. The phasing strategy enables the Yard to proceed as funding becomes available without being sub-optimized at any point. These improvements will result in an estimated 50 to 60 percent reduction in large component movement during a vessel's depot maintenance availability and an estimated 20 to 30 percent reduction in movement associated with shipboard-oriented work.

Phase 0: Construct new major cutter capable floating drydock.

Phase 1: Demolish existing paint complex and construct new facility.

Phase 2: Construct new multi-story electrical complex to collocate functions.

Phase 3: Redevelop current electrical shop location. Demolish building 68 and construct new inside machine shop, temporary services shop, and Project Resident Office (PRO) Baltimore facility.

Phase 4: Consolidate outside machine shop functions into a single facility. Demolish building 11 to increase laydown space along East Wharves. Extend Hotel Street.

Phase 5: Construct new Ordnance Shop.

Phase 6: Construct WMSM waterfront infrastructure, including Pier 2 replacement and new Shiplift.

The \$350 million estimate for phases one through six included in the original SIOP was based on research and cost estimates done before the recent sharp increases in construction costs and commodity prices. The Coast Guard estimates \$400 million in Procurement, Construction, and Improvement (PC&I) funding would accomplish the preparations for, and construction of, a floating drydock (phase one of this project was included on the Fiscal Year (FY) 2023 Unfunded Priorities List (UPL) for \$56 million), as well as phases one, two, and three of the SIOP within the 5 year funds expiration window of PC&I funding.



CGC BISCAYNE BAY, a 140' Bay Class Icebreaking Tug (WTGB), at the completion of its Service Life Extension Program (SLEP). The Bay Class were built between 1979 and 1988. The last WTGB completed SLEP in Fiscal Year (FY) 2020, ensuring an additional 15 years of domestic icebreaking capability in the Northeast and Great Lakes.



A Main Diesel Engine (MDE) is lowered into CGC SKIPJACK, an 87' Marine Protector Class Patrol Boat, as part of a Recurring Depot Availability Program (RDAP). The Coast Guard Yard has successfully used RDAP to complete critical maintenance with minimal schedule variability, improved quality, and lower costs. The RDAP has also reduced the need for extensive midlife availability work. The lessons learned with 87' RDAP will be applied to the Coast Guard's 154' Sentinel Patrol Craft fleet.

