GÃO	United States Government Accountability Office Testimony Before the Subcommittee on Coast Guard and Maritime Transportation, Committee on Transportation and Infrastructure, House of Representatives
For Release on Delivery Expected at 10:00 a.m ET Wednesday, June 12, 2024	COAST GUARD ACQUISITION
	Actions Needed to Address Affordability Challenges
	Statement of Shelby S. Oakley, Director, Contracting and National Security Acquisitions

# GAO **Highlights**

Highlights of GAO-24-107584, a testimony before the Subcommittee on Coast Guard and Maritime Transportation, Committee on Transportation and Infrastructure, House of Representatives

#### Why GAO Did This Study

The U.S. Coast Guard employs a variety of vessels and aircraft, several of which are approaching the end of their intended service lives. Consequently, the Coast Guard plans to invest billions of dollars to acquire several high priority assets. These include three Polar Security Cutters. 25 Offshore Patrol Cutters, and 79 additional MH-60T helicopters.

This statement addresses (1) challenges with the affordability of the Coast Guard's portfolio of major acquisitions, and (2) key questions that the Coast Guard and Congressional decision-makers will need to address because of these challenges. The statement also highlights GAO's prior recommendations and matters for Congress which, if implemented, would help address the challenges. This statement is largely based on GAO's prior work on Coast Guard acquisitions issued from 2012 through 2024, including GAO-18-454, GAO-23-105805 and GAO-23-105949.

Information about the scope and methodology of prior work on which this statement is based can be found in those products.

#### What GAO Recommends

Since 2012, GAO has made 48 recommendations (16 of which remain open) on how to better manage the Coast Guard's major acquisition programs. GAO will continue to monitor the agency's progress in addressing these recommendations. GAO has also made matters for congressional consideration to improve Coast Guard acquisitions. Two of these matters remain open.

View GAO-24-107584. For more information, contact Shelby S. Oakley at (202) 512-4841 or OakleyS@gao.gov.

## COAST GUARD ACQUISITION

### Actions Needed to Address Affordability Challenges

#### What GAO Found

The Coast Guard plans to spend over \$40 billion to modernize its vessels and aircraft. But it faces persistent challenges managing its major acquisition programs—generally those with life-cycle cost estimates of at least \$300 million. These challenges include:

Cost growth. Coast Guard's planned investments for its portfolio of major acquisitions increased by \$8.2 billion since 2018. The increase is primarily related to cost increases on the Offshore Patrol Cutter program and additional investments in MH-60T helicopters. This problem increases the cost pressure on the overall portfolio.

Lack of long-term planning. The Coast Guard makes short-term budget decisions that obscure the trade-offs needed to balance the long-term affordability of the portfolio. In 2014, GAO recommended that the Coast Guard develop a long-term plan to manage its highest priority efforts. The agency agreed and statute directed the Coast Guard to develop such a plan. But the Coast Guard, as of June 2024, has yet to produce one.

Affordability. The Coast Guard's short-term budget decisions have resulted in a buildup-or bow wave-of near-term unfunded acquisitions. These decisions could negatively affect future acquisition efforts and operations.

The Coast Guard's Offshore Patrol Cutter



Source: U.S. Coast Guard. | GAO-24-107584

**Program uncertainties.** Further, the Coast Guard faces uncertainties—such as unrealistic schedules and cost estimates-on two of Coast Guard's highest priority programs: the Offshore Patrol Cutter and Polar Security Cutter. These uncertainties will likely exacerbate portfolio affordability challenges.

GAO has made several recommendations and matters for Congressional consideration that, if implemented, would inform key questions for decisionmakers, such as:

- How can Coast Guard manage its acquisition programs to achieve better cost and schedule outcomes?
- Which programs will decision-makers cut, reduce, or defer to balance the • affordability of the Coast Guard portfolio?

Chairman Webster, Ranking Member Carbajal, and Members of the Subcommittee:

I am pleased to be here today to discuss the Coast Guard's management of its acquisition portfolio, including key challenges with the affordability of this portfolio. The affordability of the Coast Guard's portfolio has consequences affecting its ability to accomplish its vitally important missions. These include search and rescue; ports, waterways and coastal security; migrant interdiction; drug interdiction; aids to navigation; and ice operations. Having the right assets to accomplish these missions relies, in part, on being able to afford them within expected budgets, and, if necessary, make hard decisions about what to prioritize. However, the Coast Guard continues to rely on the annual budget process and its 5year Capital Investment Plan for long-term acquisition planning, processes which we found have contributed to affordability problems.

My statement today will address (1) challenges with the affordability of the Coast Guard's portfolio of major acquisitions, and (2) key questions that decision-makers will need to address because of these challenges. I will also highlight areas where our prior recommendations, if implemented, would help the Coast Guard address these challenges. This statement is based on our extensive body of work examining the Coast Guard's acquisition efforts spanning more than a decade.<sup>1</sup>

For the reports cited in this statement, among other methodologies, we analyzed Department of Homeland Security acquisition management policy and Coast Guard guidance, data, and documentation. We interviewed Coast Guard officials at its headquarters and selected field units to determine the total cost of the Coast Guard's acquisition portfolio and how the Coast Guard manages its acquisition portfolio. Further detailed information on our scope and methodology can be found in the reports cited in this statement. For this statement, we obtained some updated information from the Coast Guard on program costs and funding.

We conducted the work on which this statement is based in accordance with generally accepted government auditing standards. Those standards

<sup>&</sup>lt;sup>1</sup>GAO, Coast Guard Acquisitions: Actions Needed to Address Longstanding Portfolio Management Challenges, GAO-18-454 (Washington, D.C.: July 24, 2018); Coast Guard Acquisitions: Better Information on Performance and Funding Needed to Address Shortfalls, GAO-14-450 (Washington, D.C.: June 5, 2014); and Coast Guard: Portfolio Management Approach Needed to Improve Major Acquisition Outcomes, GAO-12-918 (Washington D.C.: Sept. 20, 2012).

	evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.
Cost Growth, Short- Term Planning, and Uncertainty about High Priority Programs Exacerbate Affordability Challenges of the Coast Guard's Portfolio	
Major Acquisition Portfolio Increased \$8.2 Billion from 2018 to 2024	From 2018 to 2024, the Coast Guard's planned investments for its portfolio of major acquisition programs increased from \$32.3 billion to at least \$40.5 billion, or by 25.5 percent. <sup>2</sup> This represents an \$8.2 billion increase over the 6-year period. For some of these programs, however, the Coast Guard is developing or updating its cost baselines, which may reveal additional estimated costs. Additionally, the Coast Guard currently estimates that it will need about \$18 billion to complete development and acquire the assets. See table 1 for details on the increased estimated cost and remaining investment required of each major acquisition program.

require that we plan and perform the audit to obtain sufficient, appropriate

 $<sup>^2{\</sup>rm The}$  Department of Homeland Security generally defines major acquisition programs as those with life-cycle cost estimates of at least \$300 million.

Table 1: Total Estimated Acquisition Cost and Remaining Investment Required for Coast Guard Major Acquisition Programs
in 2018 and 2024 (then-year dollars in millions)

Program	Total estimated acquisition cost <sup>a</sup>		Remaining investment required	Estimated date program completes acquisition <sup>b</sup>
	2018	2024	2024	
National Security Cutter	\$6,135	\$7,831	\$421	2027
Fast Response Cutter	\$4,243	\$3,779 <sup>c</sup>	(\$296) <sup>d</sup>	2027
Offshore Patrol Cutter	\$12,101	\$14,576 <sup>e</sup>	\$10,691	2038
Polar Security Cutter	\$3,207	\$3,121 <sup>f</sup>	\$1,539	TBD
Waterways Commerce Cutter	n/a	\$1,075 <sup>g</sup>	\$871	TBD
Medium Range Surveillance Aircraft (HC- 144B/HC-27J)	\$2,507	\$2,397	\$552	2032 <sup>h</sup>
Long Range Surveillance Aircraft (HC-130J)	\$3,038 <sup>i</sup>	\$2,644	\$616	2032
Short Range Recovery Helicopter (MH-65E)	\$1,070	\$1,070	\$209	2024
Medium Range Recovery Helicopter (MH-60T)	n/a	\$4,034 <sup>j</sup>	\$3,269	2030
Total	\$32,301	\$40,527	\$17,872	n/a

Source: GAO presentation of and analysis of Coast Guard data. | GAO-24-107584

Legend: n/a = not applicable.

<sup>a</sup>Total estimated acquisition cost is the threshold cost from the acquisition program baseline, which establishes a program's costs, schedule, and performance parameters. The acquisition program baseline is the agreement between the acquisition program, component, and department-level officials that establishes how systems being acquired will perform, when they will be delivered, and what they will cost. In accordance with DHS policy, the acquisition program baseline for a program establishes objective (target) and threshold (maximum acceptable costs, latest acceptable milestones, and minimum or maximum acceptable performance) parameters for a program.

<sup>b</sup>As provided by the Coast Guard's 5-year Capital Investment Plan, dated fiscal year 2022, estimated completion dates can reflect the completion of different activities depending on the program and are based on funding levels in the 5-year plan.

<sup>c</sup>The 2024 acquisition program baseline cost estimate does not include costs associated with personnel and shore infrastructure for the Fast Response Cutter. The prior estimate in 2018 includes these costs. The Coast Guard estimates that personnel costs are \$184.8 million and shore infrastructure costs are \$267.2 million in base year 2008 dollars.

<sup>d</sup>The Fast Response Cutter program of record was increased in 2020 by six and again in 2022 by one, for a total of seven additional cutters beyond the program of record. The program was subsequently rebaselined to account for this change in quantities. In 2024, the Coast Guard received \$220 million for two additional Fast Response Cutters. According to the Coast Guard, the Fast Response Cutter program is rebaselining to address the recent increase to the program of record.

<sup>e</sup>The Coast Guard has yet to develop an acquisition program baseline that covers the entire duration of the program. It plans to have the updated acquisition program baseline for the Offshore Patrol Cutter program approved in late fiscal year 2024.

<sup>†</sup>An updated acquisition program baseline that will include an updated cost estimate is expected in the first quarter of fiscal year 2025. In April 2024, the Congressional Budget Office estimated the cost of the three Polar Security Cutters to be \$5.1 billion.

<sup>g</sup>This reflects the cost estimate in the preliminary acquisition program baseline for the Waterways Commerce Cutter program. As of May 2024, the initial acquisition program baseline had yet to be approved.

<sup>h</sup>Date applies to the completion of the HC-27J program. The acquisition effort for the HC-144B aircraft is close to completion, with full operational capability expected in 2024.

<sup>I</sup>The 2018 total estimated acquisition cost included funding for the HC-130H program. This program was canceled in the 2014 Consolidated Appropriations Act and the acquisition program baseline was updated in March 2020 to reflect this change. The 2024 total estimated acquisition cost is only for the HC-130J acquisition.

<sup>j</sup>MH-60T includes three increments. Increments 1 and 2 both have a current acquisition program baseline with a current cost estimate. Increment 3 has a preliminary acquisition program baseline with a preliminary cost estimate.

The \$8.2 billion increase is primarily related to cost increases on the Offshore Patrol Cutter (OPC) program and the addition of the medium range recovery helicopter or MH-60T to the portfolio, which we discuss in greater detail below. This problem increases the cost pressure on the overall portfolio.

Lack of Long-Term Planning Hinders the Coast Guard's Ability to Make Necessary Tradeoffs For over 10 years, we have repeatedly found two main challenges in how decision-makers, including the Office of Management and Budget (OMB), the Department of Homeland Security (DHS), and the Coast Guard, budget for the Coast Guard's portfolio of acquisitions (1) the expected cost of the Coast Guard's portfolio does not align with its plans and funding levels; and (2) OMB, DHS, and the Coast Guard have made short-term budget decisions that obscure the trade-offs needed to balance the long-term affordability of the portfolio.<sup>3</sup> For example:

In 2012, we found that the Coast Guard's approach of relying on the annual budget process to manage portfolio affordability did not provide the best basis for making decisions to develop a more balanced and affordable portfolio in the long-term.<sup>4</sup> To help provide decision-makers with current information to determine budgets, we recommended that the Coast Guard conduct a comprehensive portfolio review to develop revised baselines that reflect acquisition priorities as well as realistic funding scenarios. DHS agreed with the recommendation. However, as part of our recommendation follow-up procedures, we found that the Coast Guard's efforts to implement the recommendation did not include significant trade-off decisions needed to improve the affordability of the portfolio. We eventually closed the recommendation as not implemented. However, we continue to believe that a comprehensive portfolio review that reflects acquisition

<sup>3</sup>GAO-12-918; GAO-14-450; and GAO-18-454.

<sup>4</sup>GAO-12-918.

priorities as well as realistic funding scenarios would aid the Coast Guard in managing the affordability of its portfolio.

 In 2014, we found that the Coast Guard's annual budget-driven tradeoff approach created constant churn as program baselines had to continually realign with budget realities instead of budgets being formulated to support program baselines.<sup>5</sup> This resulted in trade-off decisions between capability and cost being pushed into the future. At the time, OMB, DHS, and the Coast Guard took steps to address the affordability challenges of Coast Guard's acquisition portfolio. For example, OMB conducted annual performance and mission-based reviews of the Coast Guard's acquisition portfolio as part of the annual budget process. OMB officials told us at the time that they made little progress in identifying the trade-offs that would make the portfolio more affordable, such as adjusting the quantities or capabilities of assets needed to meet mission needs.

To help the Coast Guard improve the long-term outlook of its portfolio, in 2014, we recommended that the Coast Guard develop a 20-year fleet modernization plan that identified all acquisitions needed to maintain its current level of service and the fiscal resources necessary to build the identified assets. The Coast Guard agreed with the recommendation. Subsequently, in 2016, the Coast Guard Authorization Act of 2015 directed the Coast Guard to complete a 20year Long-term Major Acquisitions Plan, to be submitted to congressional committees as part of a report on the status of the Coast Guard's major acquisition programs.<sup>6</sup> In November 2017, Coast Guard officials told us they were developing a 20-year long-term plan that specifically focused on their highest priority recapitalization and sustainment efforts to meet the intent of the 2016 congressional mandate.

In June 2021, however, as part of our recommendation follow-up procedures, Coast Guard officials told us they did not yet have an approved 20-year plan. According to officials, the plan must be

<sup>&</sup>lt;sup>5</sup>GAO-14-450.

<sup>&</sup>lt;sup>6</sup>Pursuant to 14 U.S.C. § 5103(a), the broader status report on the Coast Guard's major acquisition programs is to be submitted to the Senate Committee on Commerce, Science, and Transportation of the Senate and the House Committee on Transportation and Infrastructure every 2 years. See the Coast Guard Authorization Act of 2015, Pub. L. No. 114-120, § 204(e) (2016) (codified at 14 U.S.C. § 5103(e), formerly numbered § 2903, adding the long-term major acquisitions plan). In addition, the Commandant of the Coast Guard is to submit the long-term major acquisitions plan to the House Committee on Homeland Security. Pub. L. No. 114-120, § 101(f).

approved by relevant agencies, including OMB and DHS. In 2021, we closed the recommendation as not implemented, since we had no evidence that this plan was imminent. As of June 2024, the Coast Guard has yet to submit a 20-year plan to Congress. We continue to believe that a 20-year plan identifying all acquisitions needed to maintain the current level of service and the fiscal resources needed to build the identified assets would help decision-makers take informed steps to improve the long-term outlook of the Coast Guard's portfolio of major acquisitions.

In 2018, we found the Coast Guard continued to manage its acquisitions through its annual budget process and a statutorily mandated 5-year Capital Investment Plan.<sup>7</sup> Coast Guard officials said the Capital Investment Plan reflected the highest priorities of the department and that trade-off decisions were made as part of the annual budget process. However, the effects of those decisions, such as which acquisitions would take on more risk so others could be prioritized and adequately funded, were not communicated in the Capital Investment Plan to key decision-makers. This was because including such information was not statutorily required.

We recommended, in 2018, that the Coast Guard include in the Capital Investment Plan a discussion of how it prioritizes acquisition programs and describe how its trade-off decisions could affect other acquisition programs. This would provide decision-makers with the information needed to see how annual trade-offs were affecting other current and future programs. DHS agreed with this recommendation and the Coast Guard included limited trade-off information in its Capital Investment Plan, starting with the fiscal year 2021-2025 document. We closed the recommendation as implemented.

More recently, in April 2023, in response to congressional direction, the Coast Guard completed a fleet mix analysis of its cutters.<sup>8</sup> The analysis determined the number and types of cutters the Coast Guard needs.

<sup>&</sup>lt;sup>7</sup>GAO-18-454. See 14 U.S.C. § 5102 (formerly numbered § 2902). Since 2012, the Coast Guard has been required to submit its Capital Investment Plan with the President's budget in any given year. The Capital Investment Plan is approved by DHS and the Office of Management and Budget and, as we have reported in the past, is subject to significant change each year.

<sup>&</sup>lt;sup>8</sup>168 Cong. Rec. H1709, H2404 (Mar. 9, 2022) (explanatory statement accompanying the Department of Homeland Security Appropriations Act, 2022, Pub. L. No.117-103, div. F); 168 Cong. Rec. S8553, S8564 (explanatory statement accompanying the Department of Homeland Security Appropriations Act, 2023, Pub. L. No. 117-328, div. F. (2022)).

These include enforcement and security cutters, seagoing and coastal aids to navigation cutters, inland aids to navigation cutters, polar icebreaking cutters, and domestic ice operations cutters. The Coast Guard noted that the analysis was not constrained by any projected budgetary levels. As such, the fleet mix results did not mirror the Coast Guard's current program of record, which is reflected in the Capital Investment Plan. For example, the study showed that the Coast Guard's desired fleet level includes more cutters than the Coast Guard is currently planning to acquire. The extent that this analysis will be incorporated into annual budget requests for the Coast Guard is unclear.

Further obfuscating the outlook of the Coast Guard's portfolio affordability is that amounts received for certain programs in recent years has exceeded what the President's annual budget request requested for the Coast Guard. This has included funding for HC-130Js, three additional National Security Cutters not included in the original program of record, and additional new airframes for the MH-60T helicopters. These additional funds have allowed the Coast Guard to purchase or field assets sooner than planned. However, this process also contributes to the Coast Guard's affordability problem as it allows the Coast Guard, DHS, and OMB to avoid making tough trade-off decisions that would otherwise be necessary to include these items in the President's annual budget requests.

Additionally, as required by statute, the Coast Guard submits an annual Unfunded Priorities List after its budget is submitted.<sup>9</sup> The list includes program or mission requirements that were not selected for funding in the proposed budget but that are deemed necessary to address operational needs. For instance, the Coast Guard has included post-delivery activities for the 11th National Security Cutter in the last three Unfunded Priorities Lists. These activities are essential for each cutter to reach full operational capability, yet the President's annual budget request did not include funding for them. The Coast Guard's five most recent Unfunded Priorities Lists have averaged \$1.1 billion in procurement, construction, and improvement activities, which adds 75 percent to the Coast Guard's already stated needs in the annual President's budget submission.

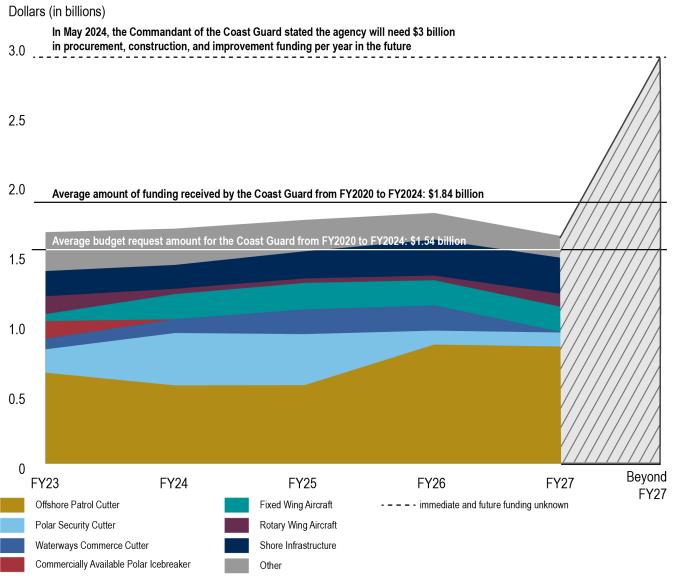
<sup>&</sup>lt;sup>9</sup>14 U.S.C. § 5108.

Coast Guard Faces Bow Wave of Unaffordable Acquisitions in Both the Near-Term and Long-Term

For over 10 years, we have reported that the Coast Guard's short-term term budget decisions have resulted in a buildup—or bow wave—of near-term unaffordable acquisitions. This bow wave of funding needs negatively affects future acquisitions efforts and potentially affects future operations.<sup>10</sup> This bow wave consists of new acquisition programs and recapitalization efforts, as well as maintenance projects, which continue to put pressure on available resources. Further, the Coast Guard has been asked to conduct additional missions in recent years, placing greater strain on operational assets. For example, the planned Arctic Security Cutters will fulfill a mission that the Coast Guard is not currently executing due to a lack of available assets. Figure 1 provides aggregate projected funding for various major Coast Guard acquisitions from fiscal years 2023 through 2027 Capital Investment Plan, along with average budget requests and funding received from fiscal years 2020 through 2024.

<sup>&</sup>lt;sup>10</sup>GAO, Coast Guard Acquisitions: Limited Strategic Planning Efforts Pose Risk for Future Acquisitions, GAO-17-747T (Washington, D.C.: July 25, 2017); Coast Guard Recapitalization: Matching Needs and Resources Continue to Strain Acquisition Efforts, GAO-17-654T (Washington D.C.: June 7, 2017); GAO-18-454; and GAO-14-450.

# Figure 1: Coast Guard's Procurement, Construction, and Improvement Funding Projections as Depicted in Its Fiscal Year (FY) 2022 Capital Investment Plan for FYs 2023 through 2027



Source: GAO analysis of Coast Guard data. | GAO-24-107584

Note: The "other" category depicted in the graphic contains funding projections for the National Security Cutter and Fast Response Cutter, among other programs.

As reflected in the figure, the Coast Guard's projected needs from fiscal years 2023 through 2027 exceed the average amount requested from fiscal years 2020 through 2024. Also, the Coast Guard's average funding received exceeded the average budget request for the Coast Guard by

\$300 million over the last 5 years. Further, the Commandant of the Coast Guard recently stated, during a Congressional hearing in May 2024, that the agency will need up to \$3 billion in annual funding to support its planned acquisitions.

The cost growth and uncertainties on two of the Coast Guard's highest priority programs—Polar Security Cutter (PSC) and Offshore Patrol Cutter (OPC)—are not fully reflected in the figure above and will likely exacerbate the affordability concerns of Coast Guard's portfolio.

- PSC. In November 2023, the PSC program declared a cost breach.<sup>11</sup> The program determined it required additional funding in excess of its \$3.1 billion cost threshold, based on updated cost data. The program plans to submit its updated life-cycle cost estimate to DHS for approval by September 2024. The program also plans to submit its revised acquisition program baseline to DHS by the end of 2024.<sup>12</sup> While the cost estimate is not complete, the program's remediation plan indicated that updated costs exceeded 20 percent of the previous baseline threshold of \$3.1 billion, or at least \$600 million. Additionally, as noted above, in April 2024, the Congressional Budget Office estimated the cost of the PSC program to be about \$5.1 billion, or 63 percent more than what is reflected in the program's cost baseline. This gap raises further questions about the affordability of this program in a constrained budget environment.
- **OPC.** In June 2023, we found that, since the OPC program's inception in 2012, the program had experienced cost growth of over 40 percent.<sup>13</sup> The program attributed its cost increase to several factors, including damage caused by Hurricane Michael in 2018; additional costs incurred by the decision to split the program into multiple stages and award stage 2 to a new shipbuilder; and increased infrastructure

<sup>12</sup>According to DHS policy, programs in breach status are required to develop a remediation plan that outlines a time frame for the program to either return to its parameters, rebaseline (i.e., establish new cost, schedule, or performance parameters), or have a DHS-led program review that results in recommendations for a revised baseline.

<sup>13</sup>GAO, Coast Guard Acquisitions: Offshore Patrol Cutter Program Needs to Mature Technology and Design, GAO-23-105805 (Washington, D.C.: June 20, 2023).

<sup>&</sup>lt;sup>11</sup>According to DHS policy, a program that has not met or will not meet any of its cost, schedule, or performance thresholds approved in its acquisition program baseline will be considered in breach status. In other instances, if an acquisition program cannot meet an approved cost, schedule, or performance parameter due to a change in scope, resulting from circumstances beyond the program's control, it may be approved for an administrative update as an alternative to being considered in breach status.

costs.<sup>14</sup> However, we found indicators that other problems also pose additional risk to OPC's costs, such as the shipbuilder's quantity of complex work remaining. Further, the program has yet to set a cost baseline for the entire program, which currently consists of 2 stages. The updated baseline is expected to be approved in late fiscal year 2024. Given the program's troubled past with cost growth on stage 1 and uncertainties surrounding stage 2, the estimated costs for the program could be greater than the \$14.6 billion reflected in its current baseline. The pressure on the affordability of the portfolio will likely worsen towards the end of the 5-year window of the 2022 Capital Investment Plan. The OPC is projected to begin requiring almost 50 percent of the Coast Guard's total acquisition budget starting in 2026 to fund the planned two cutters per year.

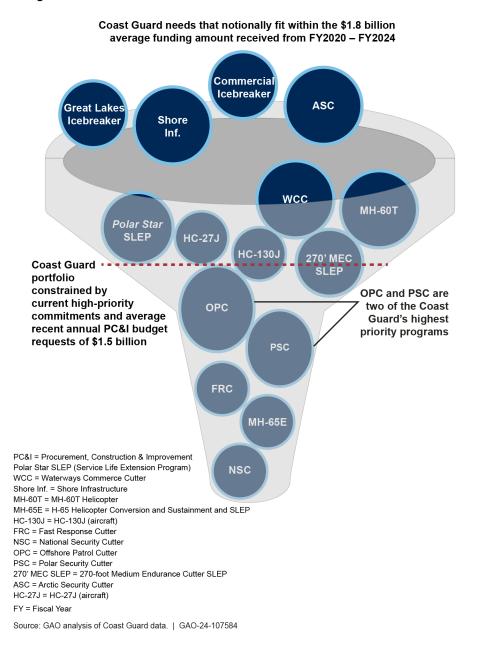
Further, in May 2024, we found that the PSC and OPC have struggled with achieving a stable design to support construction, as called for by the shipbuilding leading practices that we identified in 2009.<sup>15</sup> We previously found that, when a program proceeds into construction with an unstable design, it increases the risk of completing out-of-sequence construction and rework, which can result in further increased cost growth, as it already has for the OPC program.

The Coast Guard also faces a bow wave of unfunded acquisitions beyond the 5-year window of the current Capital Investment Plan. Figure 2 shows the current and future acquisitions that, based on current Coast Guard programs and requirements, need to be addressed for the Coast Guard to meet its statutory missions, along with the backlog of shore infrastructure projects.<sup>16</sup>

<sup>&</sup>lt;sup>14</sup>After Hurricane Michael devastated the original shipbuilder's facilities, the Coast Guard split the program into two stages, with stage 1 covering OPCs 1-4 and stage 2 covering OPCs 5-15. The Coast Guard plans to acquire OPCs 16-25 under a separate stage.

<sup>&</sup>lt;sup>15</sup>GAO, Coast Guard Acquisitions: Opportunities Exist to Improve Shipbuilding Outcomes, GAO-24-107488 (Washington, D.C.: May 7, 2024).

<sup>&</sup>lt;sup>16</sup>See 6 U.S.C. § 468 (defining the Coast Guard's statutory missions).



# Figure 2: Notional Depiction of Coast Guard Acquisition's Priorities in Constrained Budget Environment

This bow wave of longer-term programs brings with it significant uncertainty around the total funding the Coast Guard will need in the future. These programs include the PSC, OPC, shore infrastructure, and the MH-60T helicopter:

**PSC.** The PSC program has experienced significant schedule delays that have affected the timing of its funding needs. In July 2023, we found the program did not have a realistic program schedule and experienced an approximate 3-year delay in maturing the PSC's design—which, as of May 2024, is now almost 4 years behind.<sup>17</sup> According to program officials, the delay was attributable to several factors, including U.S.-based designers and shipbuilders generally lacking experience with heavy polar icebreakers, the complexity of the ship design, shipbuilder design errors, design changes to meet government specifications, and COVID-19 effects. The delay led the program to declare a schedule breach in November 2023. The program is in the process of updating its schedule estimates to develop a new schedule baseline. The PSC program originally planned to complete the design and start lead ship construction by no later than June 2021. However, as of May 2024, Coast Guard officials stated they were assessing the decision on when to start lead ship construction as part of the ongoing breach remediation process.<sup>18</sup>

<sup>&</sup>lt;sup>17</sup>GAO, Coast Guard Acquisitions: Polar Security Cutter Needs to Stabilize Design Before Starting Construction and Improve Schedule Oversight, GAO-23-105949 (Washington, D.C.: July 27, 2023).

<sup>&</sup>lt;sup>18</sup>The PSC program adopted an unrealistic schedule at the outset of the program. In September 2018, we found that the PSC's planned delivery dates were not informed by a realistic assessment of shipbuilding activities. We recommended that the program develop a schedule in accordance with leading practices for project schedules to set realistic schedule goals for all three PSCs before the contract option for construction of the lead ship was awarded. However, we closed the recommendation as not implemented because the program proceeded with the award in April 2019 without developing a realistic schedule. See GAO, *Coast Guard Acquisitions: Polar Icebreaker Program Needs to Address Risks before Committing Resources,* GAO-18-600 (Washington, D.C.: Sept. 4, 2018).



Figure 3: The Coast Guard's Polar Security Cutter

Source: Bollinger Mississippi Shipbuilding. | GAO-24-107584

It is unclear when and to what extent the anticipated PSC cost growth—which could be as high as \$2 billion, as noted earlier—will require funding given the delays and the unrealistic program schedule. Nevertheless, it is clear that this growth will exacerbate the concerns about the affordability of the Coast Guard's portfolio.

• **OPC.** The Coast Guard is in the midst of fielding the most expensive acquisition program in its portfolio—the OPC. As noted earlier, it is uncertain whether the OPC will cost more than the \$14.6 billion reflected in its most current acquisition program baseline for 25 OPCs. The Commandant of the Coast Guard has previously called the OPC the agency's top priority. As such, the Coast Guard is likely to prioritize the OPC in its budget requests over other acquisition programs.

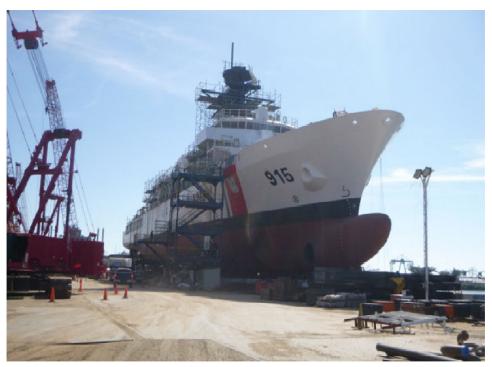


Figure 4: The Coast Guard's Offshore Patrol Cutter

Source: U.S. Coast Guard. | GAO-24-107584

However, since 2020, we have found that Coast Guard has allowed the OPC program to repeatedly move forward through key acquisition decisions, despite significant risks with the program.<sup>19</sup> To help mitigate some of the risks, in October 2020, we recommended that the program mature technology for the davit—a crane that lowers and raises a ship's small boats—for stage 1 ships prior to moving further through construction.<sup>20</sup> DHS concurred with this recommendation. In June 2023, the program had not yet developed a plan to mature the technology.<sup>21</sup> As of August 2023, the Coast Guard said that it was still tracking two remaining high-risk issues with the davit—one of which may have implications for completing the design of a portion of the ship. Further, the Coast Guard awarded a detail design and

<sup>&</sup>lt;sup>19</sup>GAO, *Coast Guard Acquisitions: Opportunities Exist to Reduce Risk for the Offshore Patrol Cutter Program*, GAO-21-9 (Washington, D.C.: Oct. 28, 2020); GAO-23-105805; and GAO-24-107488.

<sup>&</sup>lt;sup>20</sup>GAO-21-9.

<sup>&</sup>lt;sup>21</sup>GAO-23-105805.

construction contract for the stage 2 ships without adequately maturing the stage 2 davit. It remains to be seen how the Coast Guard will manage stage 2 of the program and the consequences this will have on the longer-term affordability of the portfolio.<sup>22</sup>

Shore infrastructure. In February 2019, we found that the Coast Guard is confronted with a costly backlog of shore infrastructure projects—related to piers, docks, boat stations, air stations, and housing units—that is contributing to concerns of affordability for its recapitalization and related sustainment efforts.<sup>23</sup> This backlog totaled at least \$2.6 billion at that time. We also found that Coast Guard budget requests did not provide accurate information about its shore infrastructure needs. Specifically, Coast Guard targets for recapitalization of shore assets exceeded \$290 million annually. However, budget requests for fiscal years 2012 through 2018 ranged from about \$5 million to about \$99 million annually. Further, at various points during this period, the Coast Guard received more funding than requested for shore infrastructure needs, ranging from about \$5 million to about \$130 million annually.

<sup>&</sup>lt;sup>22</sup>The Coast Guard plans to start lead ship construction for OPC stage 2 by September 2024. We will continue to monitor the program's stage 2 progress and status.

<sup>&</sup>lt;sup>23</sup>GAO, Coast Guard Shore Infrastructure: Applying Leading Practices Could Help Better Manage Project Backlogs of at Least \$2.6 Billion, GAO-19-82 (Washington, D.C.: Feb. 21, 2019).



Figure 5: Damage at Station Port Aransas in Texas, Resulting from Hurricane Harvey in 2017

Source: GAO. | GAO-24-107584

We recommended that the Coast Guard include supporting details about competing project alternatives and report trade-offs in congressional budget requests and related reports. In 2019, DHS agreed with our recommendation, but the Coast Guard noted, in 2021, that addressing this recommendation is challenging due to limitations such as budget caps imposed by OMB and DHS. As of January 2024, the Coast Guard was working toward publishing some related information on its website, according to officials, such as its shore infrastructure annual report. Without such information about Coast Guard's realistic budgetary requirements, Congress will lack critical information that could help to prioritize funding to address the Coast Guard's shore infrastructure backlogs. This situation could worsen as the Coast Guard will likely require additional infrastructure upgrades for the three PSCs and future Arctic Security Cutters. We continue to believe that implementing this recommendation will aid decisionmakers and the Coast Guard in making better trade-off decisions.

Further, since identifying the \$2.6 billion in shore infrastructure costs in our February 2019 report, we found additional shore infrastructure

costs related to the Coast Guard's plans for increasing its fleet of MH-60T helicopters. The Coast Guard estimates that this expansion will require \$1.3 billion in air station infrastructure upgrades. It is unclear how the Coast Guard intends to pay for these upgrades given the large backlog of infrastructure projects previously identified.

MH-60T. In January 2021, the Coast Guard decided to consolidate its helicopter fleet to an all medium-range (MH-60T) fleet and phase out its short-range (MH-65D/E) fleet. This would grow the MH-60T fleet by 79 aircraft. According to Coast Guard documentation, it made this decision because the MH-65D/E helicopter manufacturer ended production of the helicopter in 2018. The Coast Guard noted that this led to an increased difficulty in obtaining critical parts, such as gearboxes, which decreased fleet availability. As a result, the Coast Guard had to reduce flight hours for the MH-65D/E fleet. The Coast Guard plans for its future helicopter fleet to be comprised of at least 127 MH-60T helicopters.<sup>24</sup> Once implemented, the Coast Guard's fleet size would be 13 percent smaller—moving from its current 146 units to at least 127 units.

#### Figure 6: The Coast Guard's MH-60T Helicopter



Source: U.S. Coast Guard. | GAO-24-107584

However, as we found in April 2024, the Coast Guard has not assessed whether the MH-60T helicopter best meets its mission

<sup>&</sup>lt;sup>24</sup>As stated above, the Coast Guard estimates that, as part of growing the MH-60T fleet, it will require \$1.32 billion for air station infrastructure changes to accommodate the larger MH-60T aircraft.

needs under its plans to consolidate its fleet.<sup>25</sup> This is because the Coast Guard did not assess alternatives to support this approach. Coast Guard officials stated that the MH-60T helicopter is more capable than the MH-65D/E. However, questions remain on its ability to meet certain mission demands, particularly those operations that require helicopters to operate and be secured on a cutter. We recommended that the Commandant of the Coast Guard assess the type of helicopters the Coast Guard requires to meet its mission demands, as part of an analysis of alternatives. DHS agreed with this recommendation but noted that the Coast Guard had already assessed the type and number of helicopters it needed to meet its mission demands, based on a 2020 RAND study.<sup>26</sup> DHS noted that, based on that study, the Coast Guard should move towards greater medium-range helicopter recovery capacity, as those aircraft provide favorable cost solutions and increased capability.

However, as we stated in our April 2024 report, the RAND study also supported the Coast Guard maintaining a mix of helicopter types. Specifically, the RAND study identified a benefit to the Coast Guard having a fleet composed primarily of MH-60T helicopters along with sufficient short-range helicopters to complete certain missions, such as drug interdiction. However, the Coast Guard did not assess alternative helicopters to the MH-60T that may meet its cutter deployment demands. Notably, during our review, Coast Guard headquarters officials stated that they could benefit from assessing different helicopter types to guide their acquisition approach and address capability shortfalls before the introduction of the MH-60T program's successor. As we stated in our April 2024 report, the Coast Guard can benefit from further analysis as it examines how its helicopter fleet can best meet its mission demands in the coming decades. We continue to support our recommendation that an analysis of alternatives would help the Coast Guard make the best use of its resources.

<sup>&</sup>lt;sup>25</sup>GAO, Coast Guard: Aircraft Fleet and Aviation Workforce Assessments Needed, GAO-24-106374 (Washington, D.C.: Apr. 9, 2024).

<sup>&</sup>lt;sup>26</sup>RAND Homeland Security Operational Analysis Center, *Meeting U.S. Coast Guard Airpower Needs: Assessing the Options*, (2020). The Homeland Security Operational Analysis Center is a federally funded research and development center operated by the RAND Corporation under contract with the Department of Homeland Security.

Key Questions Remain About the Affordability of the	Decision-makers, including Congress, OMB, DHS, and Coast Guard will have to make difficult decisions to address the affordability concerns surrounding the Coast Guard's acquisition portfolio. <sup>27</sup> Key questions to inform those decisions include:
Portfolio	<ul> <li>What steps can Coast Guard take to better manage its acquisition programs to achieve better cost and schedule outcomes?</li> </ul>
	<ul> <li>When will Coast Guard, in coordination with OMB and DHS, develop a long-term plan to inform the affordability of Coast Guard's acquisition portfolio?</li> </ul>
	<ul> <li>Which programs will decision-makers cut, reduce, or defer to balance the affordability of the Coast Guard portfolio?</li> </ul>
	• What capability gaps or reductions in mission capability will Coast Guard operators and the public face because of the unaffordable portfolio?
	Our prior recommendations and matters for Congress, if implemented, will help inform actions to address these questions.
	In conclusion, the Coast Guard's persistent challenges in managing its programs within established cost and schedule goals highlight the need for the Coast Guard to reexamine how it manages its acquisition portfolio. Since 2012, we have made 48 recommendations to DHS and the Coast Guard on how to better manage the Coast Guard's portfolio of major acquisition programs. Currently, we have 16 recommendations that the Coast Guard has yet to fully address and eight others that we closed because of Coast Guard's inaction or because they were overcome by events. Fully addressing the remaining recommendations will help position the Coast Guard to make hard decisions about its portfolio. <sup>28</sup>
	Additionally, I wanted to note how important your oversight has been to help the Coast Guard make difficult trade-off decisions. Ensuring that decision-makers answer those key questions I posed earlier should help provide you with better information moving forward to provide oversight of the Coast Guard's budget. Similarly, over the last 13 years, we have
	<sup>27</sup> In May 2024, we testified on steps that Coast Guard could take to improve its acquisition outcomes, including implementing GAO's prior recommendations and considering adoption of ship design leading practices. See GAO-24-107488 and GAO, <i>Navy Shipbuilding: Increased Use of Leading Design Practices Could Improve Timeliness of Deliveries</i> , GAO-24-105503 (Washington, D.C.: May 2, 2024).

<sup>28</sup>GAO-23-105949; and GAO-23-105805.

	made four matters for congressional consideration to improve the management of Coast Guard acquisitions, including the affordability of the portfolio. <sup>29</sup> Congress has yet to act on two of these matters, including that the Coast Guard update its acquisition policy to establish that all shipbuilding programs should 1) mature critical technologies to a technology readiness level 7 prior to a program's contract award for detailed design and construction, and 2) achieve 100 percent completion of basic and functional design prior to the start of lead ship construction. <sup>30</sup> Another matter was closed as not implemented when it became overcome by events due to changes the Coast Guard made to the information included in the Capital Investment Plan. I encourage you to consider these matters as you deliberate the Coast Guard's current budget request.
	Chairman Webster, Ranking Member Carbajal, and Members of the Subcommittee, this completes my prepared statement. I would be pleased to respond to any questions that you may have at this time.
GAO Contact and Staff Acknowledgments	If you or your staff have any questions about this testimony, please contact Shelby S. Oakley, Director, Contracting and National Security Acquisitions, at (202) 512-4841 or oakleys@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement.
	GAO staff who made key contributions to this testimony are Claire Li (Assistant Director), John W. Crawford (Analyst-in-Charge), Rose Brister, Tonya Humiston, Min-Hei (Michelle) Kim, Christian Perez, Matthew St. Geme, and Jacob Wu. Other staff who made key contributions to the reports cited in the testimony are identified in the source products.

<sup>&</sup>lt;sup>29</sup>GAO, Coast Guard: Action Needed As Approved Deepwater Program Remains Unachievable, GAO-11-743 (Washington, D.C.: July 28, 2011); GAO-14-450; and GAO-23-105805.

<sup>&</sup>lt;sup>30</sup>Technology readiness level 7 occurs when a system prototype demonstration occurs in an operational or realistic environment. Basic and functional design include key tasks such as routing all major distributive systems (electricity, water, and utilities), providing information on the position of piping, and includes a 3D model of the ship structure and major system, with vendor-furnished information incorporated to support understanding of final system design. Leading practices indicate that completing basic and functional design leads to design stability.

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