NATIONAL MARITIME STRATEGY

DOT Is Taking Steps to Obtain Interagency Input and Finalize Strategy
NATIONAL MARITIME STRATEGY

DOT Is Taking Steps to Obtain Interagency Input and Finalize Strategy

Why GAO Did This Study

DOT’s efforts related to a national maritime strategy aimed at helping to ensure the sustainability and competitiveness of the U.S.-flag fleet were first mandated in statute in 2014. In 2018, the due date for the national maritime strategy was extended to February 2020.

A provision in statute directed GAO to identify the challenges facing the U.S. maritime industry and the status of the national maritime strategy. This report (1) identifies selected stakeholders’ views on the key national defense implications of the challenges facing the U.S. maritime industry, among other things, and (2) examines the status of the national maritime strategy and the extent to which DOT coordinated the strategy’s development with relevant federal agencies.

What GAO Found

Selected stakeholders identified some key national defense implications of the challenges facing the U.S. maritime industry. This industry—which includes oceangoing U.S.-registered (i.e., U.S.-flag) ships and U.S. citizen mariners—provides global transportation capabilities to the Department of Defense (DOD) in times of peace, crisis, and war. The Department of Transportation (DOT), in cooperation with DOD and other federal agencies, is responsible for federal programs to ensure that this industry meets defense needs. Stakeholders, as well as DOD officials, cautioned that continued declines in the size and capabilities of the oceangoing U.S.-flag fleet could lead to inadequate capacity for DOD to transport military cargo during a national defense crisis. Likewise, a potential shortage of mariners could lead to DOD not having adequate crews to operate government-owned reserve ships that may be activated during a wartime surge. Seven of the 10 industry stakeholders GAO interviewed stated that a comprehensive national strategy could help address industry challenges.

After a stalled strategy development process that did not include key stakeholders, DOT established a new interagency working group, in September 2019, to finalize the national maritime strategy. DOT has been working on a draft strategy since 2014 to address statutory mandates. In 2017, DOT began revising the draft strategy to align with the new administration’s priorities. Interagency coordination, however, was limited as DOT did not include DOD or other key federal stakeholders. In August 2018, DOT submitted the revised draft to the Office of Management and Budget (OMB) for interagency review. OMB staff told GAO they circulated this draft to 12 agencies and two policy councils in the Executive Office of the President. However, according to OMB staff, OMB suspended this process shortly after it began at the request of the Executive Office of the President because of its plans to convene a committee to consider policy matters related to the strategy. According to DOT officials, the process remained suspended until DOT learned in September 2019 that the Executive Office of the President had not convened and no longer planned to convene such a committee. DOT then established a new interagency working group to revise and finalize the strategy, ending a year-long delay in the strategy’s development (see figure). This working group includes DOD and other key agencies that were not previously consulted and should address gaps in interagency coordination. DOT officials told GAO that they intend to submit the strategy to Congress by February 2020, as required.

Timeline for Developing a National Maritime Strategy

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>Department of Transportation (DOT) revision of the national maritime strategy</td>
</tr>
<tr>
<td>2018</td>
<td>Office of Management and Budget (OMB) interagency review</td>
</tr>
<tr>
<td>2018</td>
<td>DOT establishes interagency working group</td>
</tr>
<tr>
<td>2019</td>
<td>DOT submits strategy for review to OMB</td>
</tr>
</tbody>
</table>

Source: GAO analysis of agency information. | GAO-20-178
Contents

Letter 1

Background 5
Industry Challenges Could Affect National Defense and Federal Actions Are Limited 10
Following Stalled Development Process, DOT Recently Convened Interagency Group to Finalize Strategy 16
Agency Comments 22

Appendix I GAO Contact and Acknowledgments 23

Table

Table 1: Department of Defense and Department of Transportation Studies Related to Maritime Industry Challenges and Defense Needs Identified by Agency Officials 15

Figure

Figure 1: Development Timeline of National Maritime Strategy 21
Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMTS</td>
<td>Committee on the Marine Transportation System</td>
</tr>
<tr>
<td>DOD</td>
<td>Department of Defense</td>
</tr>
<tr>
<td>DOT</td>
<td>Department of Transportation</td>
</tr>
<tr>
<td>EOP</td>
<td>Executive Office of the President</td>
</tr>
<tr>
<td>MARAD</td>
<td>Maritime Administration</td>
</tr>
<tr>
<td>MSP</td>
<td>Maritime Security Program</td>
</tr>
<tr>
<td>OMB</td>
<td>Office of Management and Budget</td>
</tr>
<tr>
<td>Ro-Ro</td>
<td>Roll on/Roll off</td>
</tr>
<tr>
<td>USTRANSCOM</td>
<td>U.S. Transportation Command</td>
</tr>
</tbody>
</table>

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.
January 15, 2020

The Honorable Roger F. Wicker  
Chairman  
The Honorable Maria Cantwell  
Ranking Member  
Committee on Commerce, Science, and Transportation  
United States Senate  

The Honorable Adam Smith  
Chairman  
The Honorable Mac Thornberry  
Ranking Member  
Committee on Armed Services  
House of Representatives  

The Honorable Peter A. DeFazio  
Chairman  
The Honorable Sam Graves  
Ranking Member  
Committee on Transportation and Infrastructure  
House of Representatives  

Federal policy has long acknowledged the importance of the oceangoing U.S.-flag maritime industry to national defense. The industry includes the ships registered in the United States (U.S.-flag ships), the U.S. citizen mariners who crew these ships, and the U.S. shipyards that build and repair ships. The Department of Defense (DOD) relies on this industry in times of peace, crisis, and war. DOD relies on the commercial fleet of U.S.-flag ships engaged in international trade to provide global sealift of equipment, supplies, fuel, and other cargo to destinations worldwide. DOD also relies on U.S. citizen mariners to help crew a reserve fleet of government-owned cargo ships in times of need. These ships are held in reduced operating status with minimal crew in peacetime. When put into full operating status—such as for a surge related to a wartime effort—these reserve ships need additional crew, such as the mariners working on oceangoing U.S.-flag ships. However, as we reported in 2018, the U.S.-flag fleet, shipyards, and workforce have been in decline, and the
industry as a whole faces significant economic sustainability challenges.\(^1\)

For example, the U.S.-flag oceangoing fleet had over a thousand ships after World War II, but today has approximately 180 total, with less than half engaged in international trade.

It has long been recognized that the operating costs of U.S.-flag ships are higher than the operating costs of foreign-flag ships, and that government support is therefore necessary to maintain a fleet of internationally trading U.S.-flag ships.\(^2\) In our 2018 report, we identified two broad challenges in sustaining the U.S.-flag international trading fleet. The first is maintaining the financial viability of the fleet in the face of increasing operating costs and declining government cargo. The second is a potential shortage of U.S. citizen mariners to crew the government-owned ships.

Current federal maritime activities related to these industry challenges are fragmented across multiple agencies and lack a unified federal strategy to address them, but the Department of Transportation (DOT) has been working on a strategy related to some industry challenges. In 2014, DOT was statutorily required to develop two national maritime strategies, one to address the competitiveness of the industry due in 2015\(^3\) and the other to ensure sufficient capacity is available to meet military sealift needs, among other things, due in 2014.\(^4\) DOT has not yet submitted either strategy and intends to submit a single maritime strategy to Congress to meet both mandates. The Maritime Administration (MARAD), within DOT, is the primary federal agency responsible for federal policy in support of the industry and is the lead in developing the strategy. This national maritime strategy is currently required to be submitted to Congress in February 2020.\(^5\)

---


Amid congressional concerns about the status of the strategy, the John S. McCain National Defense Authorization Act for Fiscal Year 2019 included a provision that GAO report on challenges to ensuring that the U.S. maritime industry is sufficient to support defense needs, the status of the national maritime strategy, and other issues. This report

- describes the key national defense implications of challenges facing the U.S.-flag maritime industry, according to selected stakeholders, and the actions the Department of Transportation and other federal agencies have taken to address them, and
- examines the status of the national maritime strategy and the extent to which DOT coordinated the development of the strategy with relevant federal agencies.

To describe selected stakeholders' views on the defense implications of U.S. maritime industry challenges and federal actions to address these challenges, we reviewed documentation from DOT, DOD, and U.S. Coast Guard, among other federal agencies, and our prior work and other relevant reports. We also interviewed federal officials with maritime responsibilities at MARAD, DOD, U.S. Coast Guard, and the Department of Agriculture and the U.S. Agency for International Development, the two agencies that use U.S.-flag ships to deliver food aid internationally (food aid agencies), and a nonprobability sample of 10 industry stakeholders. We made our selection from three broad groups—ocean carriers, mariners, and shipyards—that together comprise the U.S.-flag maritime industry, as well as researchers engaged in this area. Stakeholders were selected to ensure that we gathered information from multiple perspectives and sectors within the industry and included large carriers with U.S.-flag internationally trading ships that participate in federal maritime programs, shipbuilders recommended by industry stakeholders, a union representing mariners, researchers, and relevant industry associations. Because of the broad scope of the industry and wide range of federal involvement, our review does not provide an exhaustive list of industry challenges and their defense implications, nor do we identify all federal maritime actions. Results of our interviews are not generalizable to all stakeholders but provide insight about and illustrative examples of industry challenges and federal actions.

6Pub. L. No. 115-232, § 3513, 132 Stat. 1636, 2311-12 (2018). To meet the reporting deadline for this mandate, we briefed committee staff in September 2019 on our preliminary findings.
To examine the status of the national maritime strategy and the extent to which DOT coordinated its development with relevant federal agencies, we reviewed relevant laws and Office of Management and Budget (OMB) guidance on the interagency review process. In addition, we interviewed relevant DOT and MARAD officials as well as the OMB staff responsible for interagency review. We also inquired with all of the agencies and the policy councils in the Executive Office of the President (EOP) that OMB said it had included in interagency review to understand the nature and extent of their involvement.7 We interviewed subject matter experts within DOD, U.S. Coast Guard within the Department of Homeland Security, and food aid agencies to obtain their perspectives on the development of the strategy. We did not evaluate the content of the draft strategy because the strategy is currently under development and subject to change. To consider the extent to which MARAD coordinated its development with relevant federal agencies, we also used our prior work on leading practices for enhancing and sustaining interagency collaboration. Because we focused on the extent to which DOT obtained sufficient input in developing and revising the strategy, we determined that one of these key practices—ensuring that all the relevant participants have been included in the collaborative effort—was most relevant to this review.8

We conducted this performance audit from December 2018 to January 2020 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

---

7These agencies were the Department of Commerce, Department of Defense, Army Corps of Engineers, Department of Energy, Environmental Protection Agency, Department of Homeland Security, Department of the Interior, Department of Justice, Office of the Director of National Intelligence, Department of State, Department of the Treasury, and the U.S. Agency for International Development, as well as the National Security Council and Council on Environmental Quality within the Executive Office of the President.

A series of laws and policy directives dating back to 1904 require DOD to rely in large part on U.S.-flag commercial ships over government-owned or foreign-flag ships for its sealift needs. More recently, a 1989 National Security Directive reaffirmed the policy of relying on U.S.-flag commercial ships to provide sealift in times of peace, crisis, and war. These requirements and policies align with the following principles from the Merchant Marine Act of 1936, as amended:

- A fleet of commercial ships with military utility that are owned and operated by U.S. citizens and are able to provide reliable support during difficult wartime missions is necessary for national defense. According to testimony by the Commander of U.S. Transportation Command (USTRANSCOM), during Operation Desert Shield, 7 percent of foreign-flag ships refused to go into war zones, whereas U.S.-flag ships continued to deliver cargo as promised. DOD officials we interviewed also noted that U.S. mariners have a history of providing outstanding support to the nation, but cited several situations in which civilian mariners refused to complete a government mission due to security concerns.

---

9The law commonly referred to as the Cargo Preference Act of 1904 (1904 Act) (Pub. L. No. 58-198, 33 Stat. 518 (1904)) (codified as amended at 10 U.S.C. § 2631), requires that, in general, only U.S.-flag ships be used in the transportation by sea of supplies bought for the military. In addition, with respect to the Cargo Preference Act of 1954 (1954 Act) (Pub. L. No. 83-664, 68 Stat. 832 (1954)) (codified as amended at 46 U.S.C. § 55305(b)) that requires certain amounts of government cargo be shipped on U.S.-flag commercial ships, Defense Federal Acquisition Regulations generally provide that while such requirement is applicable to DOD, compliance with the 1904 Act historically has resulted in DOD exceeding the 1954 Act’s requirements. 48 C.F.R. § 247.570(b). With respect to the 1954 Act, in circumstances where no privately owned commercial U.S.-flag ships are available at fair and reasonable rates, U.S. government owned ships may be used and foreign-flag ships may be contracted. 46 U.S.C. § 55305(b). In addition, in the 1954 Wilson-Weeks Agreement between DOD and the Department of Commerce, since codified in DOD policy, DOD committed to using privately owned U.S.-flag ships for merchant shipping to carry out DOD’s logistical needs beyond the capacity of its own government-owned fleet, to the extent “consistent with military requirements and prudent management.”


A pool of trained U.S. mariners is needed to crew the U.S.-flag fleet. According to USTRANSCOM and MARAD, U.S. mariners are necessary to crew not only the U.S.-flag commercial ships but also the U.S. government-owned reserve cargo ships. When put into full operating status—such as for a surge related to a wartime effort—the government needs additional trained and qualified mariners to operate these U.S. reserve cargo ships. U.S.-flag commercial ships, which are required to be staffed by U.S.-citizen mariners, provide a pool of mariners who can be used for this task. Because mariners work on ships for months at a time, commercial ships typically have at least two full sets of mariners to crew a single ship—one set of which is on the ship while the other is on leave. In times of crisis, one set of mariners could continue to work on the commercial ship, while some of those on leave could be called upon to voluntarily crew ships in the government-owned reserve fleet.

A U.S. presence in international trade is needed to carry goods overseas. According to MARAD, a U.S. presence in international trade helps ensure that both commercial shippers and the military can access ships, and associated transportation networks, to carry their goods overseas at all times, both in times of peace and in times of war.

Government Support of U.S.-Flag Industry

The U.S. government financially supports oceangoing U.S.-flag ships in two key ways: (1) Maritime Security Program (MSP) stipends and (2) cargo preference requirements.

- **Maritime Security Program**: Since fiscal year 1996, the MSP has provided an annual stipend set by statute, subject to annual appropriations, to support a specific number of internationally trading U.S.-flag ships. In return for receiving the stipend, the MSP ship operator agrees to keep the ship or an equivalent ship under the U.S. flag for the life of the MARAD-issued operating agreement, and enrolled in a Voluntary Intermodal Sealift Agreement. By statute, the MSP is to enroll no more than 60 ships and provide each with a stipend of $5 million annually in fiscal years 2018-2020, subject to the

12The Voluntary Intermodal Sealift Agreement is an agreement between the U.S. government and operators of U.S.-flag ships. These operators commit to provide their intermodal resources and a certain percentage of their ship's capacity to meet national defense needs during times of war or national emergency. In exchange, operators receive priority for peacetime DOD cargo contracts.
availability of appropriations.\footnote{In addition, the amount of this stipend is set at $5,233,463 for fiscal year 2021, and at $3,700,000 for each of fiscal years 2022-2025, subject to the availability of appropriations. 46 U.S.C. § 53106(a)(1).}

\footnote{13}The MSP was designed as a less costly replacement for the Operating Differential Subsidy that, since 1936, had subsidized the higher operating costs of the U.S.-flag fleet compared to foreign-flag ships operating on similar routes and trades. The MSP currently covers approximately 71 percent of the average annual operating cost differential between U.S. and foreign-flag ships, although this share varies across ships in the MSP, according to DOT’s estimates. The other key way that these ships can make up the operating cost differential is by carrying government cargo under cargo preference requirements.\footnote{14}

- **Cargo Preference:** A series of laws requires federal agencies to transport some portion of their cargo on U.S.-flag ships, to the extent such ships are available at fair and reasonable rates. For example, current law requires that 100 percent of military cargo be transported on U.S.-flag ships, unless the rates are found by the President to be excessive or otherwise unreasonable.\footnote{15} According to a 2015 MARAD report, DOD accounts for 59 percent of total government cargoes.\footnote{16} For non-military cargo, including food aid, current law requires federal agencies to transport a minimum of 50 percent of their cargo on privately owned U.S.-flag commercial ships.\footnote{17} Federal agencies can meet cargo preference requirements by transporting cargo on any privately owned U.S.-flag commercial ships, including those in the MSP. As we reported in 2018, federal stakeholders have differing views on cargo preference requirements. On the one hand, these requirements result in higher shipping costs for food aid agencies, costs that agency officials said negatively affect their missions.\footnote{18} On the other hand, these requirements help support the financial viability of U.S.-flag ships by helping to offset the cost differential between 10 U.S.C. § 2631.


\footnote{16}46 U.S.C. § 55305(b).

\footnote{17}GAO-18-478.
U.S.-flag and foreign-flag ships. According to the 2015 MARAD report, the higher freight rates that DOD and other federal agencies pay to transport government cargo on U.S.-flag ships are critical to the financial viability of U.S.-flag ships in international trade, including MSP ships.\textsuperscript{19}

In addition, the law commonly referred to as the Jones Act generally requires that maritime transport of cargo between points in the United States be carried by ships that are owned by U.S. citizens, registered under the U.S.-flag, and built in the United States. One of the purposes of the Jones Act is to provide the nation with a strong domestic maritime industry that can serve as a naval or military auxiliary in time of war or national emergency. As of August 2019, there were 99 oceangoing ships operating domestically (i.e., in the Jones Act fleet), according to MARAD data. We reported in 2013 that the effect of any potential modifications to the Jones Act on the U.S.-flag maritime industry would be uncertain. While repealing the Jones Act could increase competition with foreign-flag ships and reduce costs for shippers, it could also affect the reliability of the industry and have a negative effect on the U.S.-flag maritime industry and national security.\textsuperscript{20}

Maritime Roles Split across Multiple Federal Agencies

DOT, DOD, and the Department of Homeland Security, among others, play a key role in federal policy related to the U.S.-flag maritime industry. Specifically:

- DOT, through MARAD, is the primary federal agency responsible for federal policy in support of the industry. DOT administers the MSP in consultation with DOD, provides funding to federal and state maritime academies, provides financial assistance to shipyards, and maintains a fleet of 56 government-owned cargo ships in reserve to provide sealift during war and national emergencies.

- DOD, through USTRANSCOM, jointly administers the MSP with DOT, and uses the U.S.-flag maritime industry to meet its sealift needs. DOD also maintains a fleet of 15 government-owned ships in reserve to provide sealift during war and national emergencies. We refer to

\textsuperscript{19}Maritime Administration (2015).

DOT’s and DOD’s fleets together as the government-owned reserve fleet.

- The Department of Homeland Security, through the U.S. Coast Guard, oversees and regulates the U.S. maritime industry and marine transportation system. This includes overseeing and approving merchant mariner training programs, credentialing U.S. merchant mariners, documenting U.S.-flag ships, and maintaining the U.S. registry, among other functions.

- The Department of Agriculture and United States Agency for International Development administer multiple international food-aid programs. Under cargo preference requirements, they must use the U.S.-flag maritime industry to transport at least 50 percent of their government cargo when U.S.-flag ships are available at fair and reasonable rates.21

National Maritime Strategy

Since 2014, DOT has been required by law to develop two strategies: one to address industry challenges and the other to ensure the viability of U.S. sealift capability. First, the Howard Coble Coast Guard and Maritime Transportation Act of 2014 mandated that DOT, in consultation with U.S. Coast Guard, submit a national maritime strategy to Congress by February 2015.22 The law mandated that this strategy:

- Identify federal regulations and policies that reduce the competitiveness of the U.S.-flag maritime industry.
- Provide recommendations to make the fleet more competitive in international trade.
- Enhance U.S. shipbuilding capacity.

In January 2018, the John S. McCain National Defense Authorization Act for Fiscal Year 2019 provided a new deadline of February 2020 for this strategy to be submitted.23

The second strategy, due in April 2014 and mandated by the Consolidated Appropriations Act of 2014, was to develop a national sealift

2146 U.S.C. § 55305(b).
strategy in collaboration with DOD to ensure the long-term viability of the U.S. Merchant Marine.\(^{24}\) This act additionally required DOT to identify the impact of reduced cargo preference requirements. DOT plans to submit a single maritime strategy to meet both these 2014 mandates. DOT completed a draft national maritime strategy that went through OMB interagency review in 2016.\(^{25}\) However, DOT did not finalize this strategy and submit it to Congress prior to the change in presidential administration. In August 2018, we recommended that DOT complete the strategy and publish a timeline for finalizing the strategy. DOT agreed to implement our recommendation.\(^{26}\)

**Industry Challenges Could Affect National Defense and Federal Actions Are Limited**

**Selected Stakeholders Identified Several Areas in which Maritime Industry Challenges Could Affect National Defense**

The U.S.-flag maritime industry faces an array of challenges that could negatively affect national defense. Federal assessments, as well as the federal officials we interviewed, underscored that the industry is critical to national defense, and that some potential sealift needs could be difficult for the U.S. industry to meet. All 10 of the industry stakeholders we interviewed identified at least one challenge related to each of the three broad sectors of the industry: (1) ships, (2) shipyards, and (3) mariners.

- **Ships.** Seven of the 10 stakeholders we interviewed expressed concern that declines in the size of the U.S.-flag fleet could lead to

---


\(^{25}\)Whereas DOT is the lead agency responsible for the content of the strategy, OMB’s interagency review process is intended to ensure that agency-led policy development is consistent with the administration’s priorities. In this established process, OMB staff determine which agencies and components within EOP to include in interagency review. OMB staff transmits materials to review by email to central mailboxes for each agency and EOP component. Each agency is then responsible for ensuring the appropriate officials and sub-offices are provided the document for review. After OMB receives comments from agencies, OMB staff generally provide them to the agency that drafted the report to incorporate these comments into the draft, according to OMB staff we interviewed.

\(^{26}\)GAO-18-478.
shortfalls in overall capacity or number of certain types of ships needed to carry defense cargo. Defense officials we interviewed and recent DOD needs assessments indicated that the current internationally trading U.S. fleet was generally sufficient to meet current needs but also raised some concerns about potential future gaps in certain situations. For example, the current U.S.-flag internationally trading fleet has 6 petroleum tankers—down from 36 in 1990—and USTRANSCOM has estimated potential needs for 86 tankers to fulfill DOD sealift requirements under the National Defense Strategy.\(^2^7\) Currently, according to USTRANSCOM officials we interviewed, U.S.-flag tankers and tankers flagged in other countries currently meet DOD needs, but these officials stated that access to allied foreign-flag petroleum tankers is increasingly uncertain in the current geo-political environment. Likewise, roll on/roll off ships (commonly referred to as Ro-Ros because it is possible to drive vehicles on and off the ships) are essential to move military vehicles, and DOD officials we interviewed stated they currently have assured access to roughly 3.5-million square feet of commercial capacity, which just meets current needs. A recent DOD analysis estimated 3.9 million square feet of Ro-Ro capacity will be needed in 2023. Seven of the stakeholders we interviewed raised concerns about limits in the overall capacity or a mismatch between the types of ships most needed for defense and those needed for commerce. Additionally, three stakeholders added that the Jones Act fleet—which is larger than the U.S.-flag fleet of internationally trading ships and also includes ships with sealift capabilities—would likely not be available in a time of crisis without significant disruption to U.S. domestic trade.

- **Shipyards.** Seven of the 10 stakeholders we interviewed expressed concerns about declines in U.S. shipyard capacity. According to MARAD and DOD officials, U.S. shipyards are an important part of ensuring government-owned cargo ships can be fully activated. According to a USTRANSCOM official, a shortage of shipyard capacity has contributed to increasing repair time for the government reserve fleet. In August 2017, we reported that incidents of degraded or out of service equipment in the government reserve fleet had increased over the previous 5 years.\(^2^8\) According to two stakeholders


that operate U.S.-flag ships, U.S.-flag carriers are also experiencing maintenance delays at U.S. shipyards. For example, a representative of one U.S.-flag international carrier stated that it has difficulties scheduling needed work in a timely manner in the United States. In the face of these difficulties, as well as other business considerations, international ocean carriers may turn to foreign shipyards for repair services.

Currently, according to MARAD, in April 2019, there were nine active shipyards in the United States with facilities capable of building large commercial ships. MARAD officials noted that while the domestic tug and barge industry is doing well, the side of the industry building large, self-propelled oceangoing ships is struggling due to declines in new orders. One stakeholder observed that U.S. shipyards are building very few new ships and noted that the industry could lose additional capacity in the coming years without a stream of new orders. Three stakeholders also expressed concern that shipyard workers have lost some of the necessary skills to support oceangoing commercial ships.

- **Mariners.** Nine of the 10 stakeholders we interviewed identified potential gaps in the skills or availability of U.S. citizen mariners. Likewise, federal officials we interviewed, as well as a recent government study, indicated there could be too few mariners to support sustained military sealift operations. When put into full operating status—such as for a surge related to a wartime effort—the government’s reserve fleet needs additional crew, and DOD counts on mariners working on oceangoing U.S.-flag ships to meet this need. MARAD and DOD have raised concerns about the sufficiency of U.S.-citizen mariners to meet this need. For example, in September 2017, in a statutorily mandated report, MARAD’s Maritime Workforce Working Group estimated a shortage of over 1,800 mariners in the event of a drawn-out military effort, although it also recommended data improvements to increase the accuracy of the count of available mariners.²⁰


USTRANSCOM officials we interviewed added that they are concerned with not only the total number of mariners but also their specific mix of skills. Similarly, five stakeholders we interviewed identified potential mariner skills gaps because the U.S.-flag commercial fleet has modernized more quickly than the government-owned reserve fleet, so U.S.-citizen mariners in the commercial sector may lack experience with the technologies used on aging government-owned ships. Four stakeholders specifically noted potential shortages in mariners qualified to operate the 26 steam-powered ships that are in the government-owned reserve fleet, noting this older technology is no longer common on commercial ships. Seven stakeholders we spoke with stated that fleet and cargo reductions have led to fewer opportunities to crew ships, limiting career development paths for mariners.

Federal Actions to Support Industry Are Largely Limited to the Administration of Established Programs and Policies and Studying Issues

Current federal actions to address industry challenges and meet defense needs include administering long-standing policies and programs as well as studying underlying issues, rather than new efforts to confront these challenges. Established federal policies and programs—including the MSP, cargo preference requirements, and the Jones Act, among others—have not markedly changed in recent years. Officials explained that within the existing statutory framework, they have tried to better align the MSP fleet with defense needs. For example, within the last 2 years, they enrolled three roll on/roll off ships that provide a net increase in square-footage compared to the ships they replaced, among other improvements. Cargo preference requirements, also, have largely remained the same since 2012. MARAD has made efforts to better ensure these requirements are understood and followed by federal contracting officers, contractors, and sub-contractors who make shipping decisions and are supposed to abide by these requirements. Specifically, MARAD has developed training on cargo preference and conducted outreach to various agencies and industries. Further, agencies have taken other actions to improve existing programs in ways that could aid defense. These actions include initiatives to make it easier for veterans to earn merchant marine credentials and bureaucratic improvements to speed the process to flag a ship in the United States.

Five of the 10 stakeholders we interviewed noted that these established policies and programs, collectively, are vital to the U.S.-flag maritime industry. Four stakeholders emphasized that the internationally trading U.S.-flag industry is supported by three sources of revenue—MSP stipends, government cargo, and commercial cargo—and stated that reductions in any of these three sources would likely cause further declines in the international-trading fleet. Similarly, an industry organization representing Jones Act carriers and a representative of a shipyard that builds ships for the fleet emphasized that the legal requirements for domestic shipping were essential to the viability of the fleet.32

In recent years, MARAD and other key federal agencies with maritime roles have focused on studying the industry and recent trends. DOT and DOD officials we interviewed identified several recent and ongoing efforts (see table 1).33 Currently, in response to a recommendation in the previously mentioned Maritime Workforce Working Group report, MARAD has begun a new effort to survey mariners to determine the number who are qualified, available, and willing to serve on short notice on U.S. government-owned sealift ships or commercial ships in times of national emergencies or to meet defense sealift needs.34 At this early date, DOT does not have specific plans for how to use the information gathered to change programs or practices. Likewise, USTRANSCOM regularly studies DOD’s sealift needs, through formal studies, ongoing cargo forecasts, and drills. For example, the Mobility Capabilities and Requirements Study of 2018 assessed the ability of mobility forces—including sealift capacity—to accomplish wartime missions as delineated in the 2018 National Defense Strategy based on anticipated fiscal year

---


33We did not review the underlying methodologies of these studies.

34MARAD last conducted a survey of mariners in 2002. In addition to the current survey, MARAD officials have testified that they are working with the U.S. Coast Guard to improve mariner data systems so these systems will include some of the types of information the survey will collect. Mark H. Buzby, MARAD Administrator, The State of the U.S. Flag Maritime Industry, testimony before the U.S. House of Representatives Committee on Transportation and Infrastructure, Subcommittee on Coast Guard and Maritime Transportation, 115th Congress, 2nd sess., January 17, 2018.
2023 fleet capabilities and capacities. This study updated a similar study completed in 2010.\(^{35}\)

<table>
<thead>
<tr>
<th>Agency</th>
<th>Study Title and Date</th>
<th>Description of Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Defense (DOD)</td>
<td>Mobility Capabilities and Requirements Study (2018)</td>
<td>The study assessed whether commercial maritime capabilities could meet DOD requirements, among other things. According to DOD officials, this classified study concluded that current maritime capabilities still met DOD requirements but highlighted challenges related to DOD’s reliance on allied nation ships to meet certain needs.</td>
</tr>
<tr>
<td>DOD</td>
<td>Commercial Sealift Study (2015)</td>
<td>The study assessed the capacity of the U.S. commercial maritime industry to support DOD sealift requirements. It found that declines in the commercial industry were likely to continue absent government action and made several recommendations.</td>
</tr>
<tr>
<td>DOD</td>
<td>Cargo Forecasts and Drills (ongoing)</td>
<td>U.S. Transportation Command, within DOD, regularly forecasts future cargo volumes. Officials we interviewed estimated defense cargo will slightly increase in 2020. DOD also conducts test activations and other drills to assess fleet readiness and capabilities.</td>
</tr>
<tr>
<td>Department of Transportation (DOT)</td>
<td>Maritime Workforce Working Group study (2017)</td>
<td>The Maritime Administration within DOT issued a report that found that the current number of U.S.-citizen mariners is insufficient to support sustained activation of the government-owned reserve fleet for military operations. The report also detailed data limitations that cause uncertainty regarding the actual number of existing qualified mariner and, thus, the extent of the shortage. The report included several recommendations to address these issues, which DOT is considering, according to officials.</td>
</tr>
<tr>
<td>DOT</td>
<td>Mariner Survey (2018)</td>
<td>In response to a working group recommendation, the Maritime Administration plans to begin an effort to survey U.S.-citizen mariners to better understand their skills, availability, and ability to crew ships. Officials indicated this effort will survey approximately 16,000 individuals and anticipate completing the effort in 2021.</td>
</tr>
</tbody>
</table>

Source: GAO summary of agency information. | GAO-20-178.

Federal agencies have taken limited actions to address challenges industry stakeholders have identified, and the effects of those actions are unclear. For example, in addition to procuring or repairing ships as a customer, MARAD administers the small-shipyard grant program\(^{36}\) to

---


provide cash support to sustain some shipyard capacity. MARAD officials we interviewed explained that while this grant program focuses on shipyards that tend to be too small to serve larger commercial ships needed to support defense sealift, it does help maintain the shipyard workforce. Similarly, the effect on carriers of U.S. food aid shipments is ambiguous in light of recent budget uncertainties. For example, officials we interviewed at the Department of Agriculture did not have estimates of food-aid cargo volumes beyond current appropriations because recent budget proposals from the administration have proposed eliminating much of the funding for these programs.

According to 7 of the 10 stakeholders we interviewed, federal actions have not adequately addressed industry challenges, and many expressed concern that defense needs are at risk because of certain weaknesses in the federal approach. For example, four stakeholders noted that MARAD’s strategy to operate its fleet of government-owned reserve cargo ships in reduced operating status limits the opportunities for U.S.-citizen mariners to get experience on these ships, which may require distinct skills to operate (e.g., steam engines). Five stakeholders worried that federal actions were not working toward a common purpose or spurring industry innovation. Seven stakeholders stated that a comprehensive national strategy is needed to ensure, for example, that federal actions are working toward common goals to support the industry and are concerned that DOT had not yet submitted such a strategy, despite working on one since 2014.

After a stalled strategy development process that did not include key stakeholders, in September 2019 DOT established a new interagency working group to finalize the strategy prior to the February 2020 deadline. Since 2017, the draft national maritime strategy, initially completed in 2016, has gone through three subsequent phases of development—DOT revision, OMB’s interagency review, and a renewed interagency working group. However, key federal agencies were omitted from DOT’s revisions and OMB’s interagency review. In September 2019, DOT formed a new interagency working group through the Committee on the Marine Transportation System (CMTS), an established interagency group for improving federal coordination and policies that affect the marine

---

37 Since 2012, the President’s Budget Requests have proposed eliminating the funding for this program.
transportation system, as a way to bring key federal stakeholders together to finalize the strategy.

- **DOT’s strategy revision.** In 2017, the new administration instructed DOT to revise the existing draft strategy—which had been completed but not submitted to Congress under the prior administration—to align with its priorities. These priorities included DOD’s revised National Defense Strategy.\(^{38}\) Whereas DOT had held symposiums of maritime industry stakeholders and a broad array of federal agencies in 2014 when developing the initial draft strategy, DOT’s efforts to revise the strategy in 2017 and 2018 did not include substantive coordination activities with industry or other federal agencies. Subject matter experts within DOD reported to us in June 2019 that they had not seen a draft of the strategy since they provided comments during the OMB interagency review process that occurred in 2016.\(^{39}\) In addition, these DOD officials were unaware that the strategy was under revision. Similarly, in June and July 2019, officials at the Department of Homeland Security and subject matter experts within the U.S. Coast Guard told us they had not been consulted during the revision of the strategy since 2017. Accordingly, the largest government user of the U.S. flag fleet—DOD—and the agency overseeing credentialing of the U.S. Merchant Marine—the U.S. Coast Guard—were not able to provide input to DOT on revisions to the strategy mandated to ensure the long term viability of the U.S.-flag maritime industry.

DOT officials we interviewed cited two main reasons for not engaging in new outreach and coordination specific to the revision of the strategy. First, they stated that the input they received in 2014 remained relevant as the challenges facing the industry have remained consistent. Moreover, DOT officials stated they are in regular contact with other federal agencies about maritime topics in general and, therefore, had a good understanding of these agencies’ positions. As a result, DOT officials told us they did not expect that the input they would receive from renewed outreach would be different from what they received in 2014.

\(^{38}\)Department of Defense, 2018 National Defense Strategy of The United States of America: Sharpening the American Military’s Competitive Edge.

\(^{39}\)In addition, USTRANSCOM officials stated they participated in the 2014 MARAD symposiums.
While DOT did not engage in substantive coordination during the strategy’s revision, it did provide status updates to some stakeholders on the progress of the strategy. For example, during a June 2018 meeting of the Marine Transportation System National Advisory Committee, DOT officials briefed industry representatives and participating federal agencies on the status of the strategy. During this briefing, DOT officials stated that the strategy had “undergone extensive revisions since 2015...but the vision, mission, and guiding principles are largely the same,” with the strategy refocused on areas where DOT plays a lead or major role. DOT officials stated this meeting afforded participants an opportunity to comment on topics germane to the strategy. DOT, however, did not circulate a draft of the strategy at this meeting, and so substantive reviews of the draft’s content were not possible. In August 2018, DOT completed its revisions and submitted the draft strategy to OMB for interagency review.

- **OMB’s interagency review process.** After receiving the revised strategy from DOT, OMB staff initiated the interagency review process. In August 2018, OMB staff sent the strategy to 12 federal agencies and 2 policy councils in the Executive Office of the President, according to OMB staff. DOT officials did not provide input to OMB on which agencies should review the strategy. According to DOT officials, they do not typically provide this type of input. We inquired with all 12 agencies and both councils whether

---

40The Maritime Transportation System National Advisory Committee is a chartered, non-federal body that advises DOT through the MARAD administrator on matters relating to U.S. marine transportation and its seamless integration with other segments of the transportation systems, including the viability of the U.S. Merchant Marine. As of May 2019, the committee was made up of 28 members representing port operators, shipyards, labor unions, academics, and shipping companies.


42According to DOT officials and OMB staff, the strategy is subject to change prior to the February 2020 deadline to submit the strategy. As a result, we did not evaluate the content of the draft national maritime strategy for this report.

43These agencies and councils are the Department of Commerce, Department of Defense, Army Corps of Engineers, Department of Energy, Environmental Protection Agency, Department of Homeland Security, Department of the Interior, Department of Justice, Office of the Director of National Intelligence, Department of State, Department of the Treasury, United States Agency for International Development, National Security Council, and Council on Environmental Quality.
they received the strategy from OMB and provided comments. As of September 2019, officials at six agencies or councils confirmed they had received the strategy in August 2018, and relevant officials at five agencies stated they did not have records of receiving the strategy. OMB staff we interviewed emphasized that it is the responsibility of each agency to make sure the strategy is provided to the right people within the agency. OMB did not include the Department of Agriculture, a major shipper of food aid, in the interagency review process, and Department of Agriculture subject matter experts told us they were not consulted by DOT during the revision of the strategy.

Shortly after circulating the draft strategy, OMB suspended the interagency review process following a request from the EOP. According to OMB staff, in August 2018, an EOP policy council planned to convene a Policy Coordination Committee to address policy questions related to the strategy. As a result, OMB did not pass on the interagency comments it had already received to DOT, but instead provided those comments to the EOP policy council. According to DOT officials, OMB did not inform them that OMB had halted the interagency review process at the request of the EOP policy council. According to DOT officials, the process remained suspended until September 2019, when DOT officials learned from OMB staff that this committee had not and would not convene on the draft national maritime strategy. Furthermore, these DOT officials told

---

44These six include are the Council on Environmental Quality, the Department of Commerce, Department of Energy, Department of the Interior, Department of State, and the United States Agency for International Development. United States Agency for International Development provided comments back to OMB in late August 2018 while Commerce, Energy, Interior, and State did not provide comments to OMB. The Council on Environmental Quality declined to confirm whether it provided comments. Additionally, officials from the Office of the Director of National Intelligence declined to confirm whether they received the strategy and the Department of the Treasury could not find information either way. Officials from the National Security Council did not provide information.

45These agencies are DOD, Department of Homeland Security, Army Corps of Engineers, the Department of Justice, and the Environmental Protection Agency. According to OMB staff, all of these agencies, except the Department of Homeland Security, confirmed receipt of the strategy at the time it was distributed.

46Policy Coordination Committees are the “main day-to-day fora for interagency coordination of national security policies, and provide policy analysis for the more senior committees of the national security system and ensure timely responses to the President’s decisions.” The President, “Organization of the National Security Council, the Homeland Security Council, and Subcommittees,” National Security Presidential Memorandum 4, April 4, 2017.
us that until September 2019, when we informed them that OMB had suspended the process, they had been unaware that any such committee had been under consideration. Moreover, they indicated DOT had not worked with any EOP policy councils to resolve policy questions or concerns during that time. Likewise, DOD officials we interviewed also were unaware of any Policy Coordination Committee related to the strategy and had not worked with any EOP policy councils to resolve policy questions or concerns. As a result, from approximately September 2018 to September 2019, DOT was not working to advance the strategy, according to DOT officials we interviewed, nor did the OMB interagency process provide DOT with input from other agencies.

- **Renewed interagency working group.** Following our inquiries about both DOT’s and OMB’s interagency collaboration, in September 2019, DOT formed an interagency working group to finalize the strategy. According to DOT officials, following discussions with OMB, they understood that DOT could renew its efforts to finalize the strategy. According to DOT officials, DOT determined that the CMTS was the best forum for this finalization to occur.47 DOT officials explained the purpose of the working group is to receive substantive input from other agencies, fine tune the content of the strategy, and coordinate final edits. DOT officials told us the working group is open to any member of CMTS that elects to participate. Officials with CMTS we interviewed told us that it functions as an interagency forum for policy discussion and coordination, at the discretion of member agencies, and can help address issues that cut across multiple agencies. As of October 2019, participating agencies in the CMTS working group included DOT, OMB, DOD, and the Department of Homeland Security, among other agencies with maritime roles and responsibilities relevant to the strategy. DOT officials expected the working group to complete its work by the end of November 2019. After that time, DOT plans to send the strategy to OMB for an additional round of interagency review and clearance and to submit the finalized strategy to Congress. DOT officials stated the department remains committed to meeting the deadline to submit a finalized strategy by the February 2020 deadline. See figure 1 for the timeline of these three phases of development.

---

47CMTS membership include 23 voting agencies or commissions, including the majority of agencies OMB circulated the draft strategy to in August 2018 as well as the Department of Agriculture.
Our previous work has found that national strategies are a mechanism for interagency collaboration, and that accordingly they can be used to address a range of purposes, including policy development and program implementation. We also found that collaborative mechanisms benefit from certain leading practices, including ensuring that all relevant participants have been included. These participants should have full knowledge of the relevant resources in their agency, the ability to commit those resources, and the knowledge, skills, and abilities to contribute to the collaborative effort. In addition, OMB guidance states that prior to submitting a document to OMB for interagency review, the submitting agency should make intensive efforts to reach agreement on policy issues in areas where there is overlapping interest between agencies.

Since 2017, and throughout DOT’s revision of the strategy and the OMB interagency review initiated in 2018, key federal agencies and personnel were not included in the strategy’s development and lacked opportunities

---

48 GAO-04-408T.

49 GAO-12-1022.
to provide their input on the strategy at that time. Without these agencies’
input, DOT did not have assurance that the strategy incorporated the
agencies’ expertise or the most up-to-date information relevant to the
strategy, including on DOD’s most recent sealift needs and priorities.
Given the interconnected nature of maritime issues and the breadth of the
statutory requirements for DOT to address in the strategy, including
provisions that call for collaboration with DOD, interagency collaboration
is an important step toward developing an effective national strategy.
DOT’s work with the CMTS interagency working group should help
ensure such collaboration and the input of key stakeholders that had
previously not contributed to the revision of the strategy. In light of this
new effort and our prior recommendation in 2018 that DOT complete and
finalize the strategy, we are not making a new recommendation in this
report.50

We provided a draft of this report to DOD, OMB, DOT, and the
Department of Homeland Security for review and comment. DOD, DOT,
and the Department of Homeland Security provided technical comments,
which we incorporated as appropriate. OMB told us that they had no
comments on the draft report.

Agency Comments

We are sending copies of this report to the appropriate congressional
committees, Secretaries of Transportation, Defense, Homeland Security,
and Director of OMB and other interested parties. In addition, the report
will be available at no charge on the GAO website at http://www.gao.gov.

If you or your staff have any questions about this report, please contact
me at (202) 512-2834 or flemings@gao.gov. Contact points for our
Offices of Congressional Relations and Public Affairs may be found on
the last page of this report. GAO staff who made key contributions to this
report are listed in appendix I.

Susan A. Fleming
Director, Physical Infrastructure Issues

50GAO-18-478.
Appendix I: GAO Contact and Acknowledgments

GAO Contact
Susan A. Fleming, (202) 512-2834 or flemings@gao.gov

Staff
Acknowledgments
In addition to the individual named above, Alwynne Wilbur (Assistant Director); John Stambaugh (Analyst in Charge); David Blanding; Lilia Chaidez; Emil Friberg; Geoffrey Hamilton; Dawn Hoff; Diana Maurer; Jan Montgomery; Valerie Nowak; Josh Ormond; Molly Ryan; Travis Schwartz; Sarah Veale; Michelle Weathers; and Suzanne Wren made key contributions to this report.
**GAO’s Mission**
The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO’s commitment to good government is reflected in its core values of accountability, integrity, and reliability.

**Obtaining Copies of GAO Reports and Testimony**
The fastest and easiest way to obtain copies of GAO documents at no cost is through our website. Each weekday afternoon, GAO posts on its website newly released reports, testimony, and correspondence. You can also subscribe to GAO’s email updates to receive notification of newly posted products.

**Order by Phone**
The price of each GAO publication reflects GAO’s actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO’s website, [https://www.gao.gov/ordering.htm](https://www.gao.gov/ordering.htm).

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

**Connect with GAO**
Connect with GAO on Facebook, Flickr, Twitter, and YouTube. Subscribe to our RSS Feeds or Email Updates. Listen to our Podcasts. Visit GAO on the web at [https://www.gao.gov](https://www.gao.gov).

**To Report Fraud, Waste, and Abuse in Federal Programs**
Contact FraudNet:
Website: [https://www.gao.gov/fraudnet/fraudnet.htm](https://www.gao.gov/fraudnet/fraudnet.htm)
Automated answering system: (800) 424-5454 or (202) 512-7700

**Congressional Relations**
Orice Williams Brown, Managing Director, [WilliamsO@gao.gov](mailto:WilliamsO@gao.gov), (202) 512-4400, U.S. Government Accountability Office, 441 G Street NW, Room 7125, Washington, DC 20548

**Public Affairs**
Chuck Young, Managing Director, [youngc1@gao.gov](mailto:youngc1@gao.gov), (202) 512-4800, U.S. Government Accountability Office, 441 G Street NW, Room 7149, Washington, DC 20548

**Strategic Planning and External Liaison**
James-Christian Blockwood, Managing Director, [spel@gao.gov](mailto:spel@gao.gov), (202) 512-4707, U.S. Government Accountability Office, 441 G Street NW, Room 7814, Washington, DC 20548

Please Print on Recycled Paper.