

# Goals and Objectives for a Stronger Maritime Nation: A Report to Congress

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U.S. Department of Transportation  
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Washington, DC 20590

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# Goals and Objectives for a Stronger Maritime Nation: Report to Congress

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## Foreword

To develop goals and objectives for this report, the Department of Transportation (DOT), through the Maritime Administration (MARAD), conducted two symposiums and other outreach activities with industry and the public from October 2013 through December 2019. Many recommendations and suggestions were received from stakeholders about how to achieve greater employment of U.S.-flag vessels, create more jobs for American mariners, improve the ability of ports to handle more cargo and larger ships, sponsor research, and achieve other goals and objectives identified in this report. These recommendations and critical thinking served as the foundation for the development of four Goals that form the basis of this report.

There was a strong belief within DOT that all the feedback had merit, including those suggestions that may be beyond the scope of this report, may require changes to current budgetary resources, or may require changes in law. Therefore, DOT/MARAD established Federal Register dockets for the January and May 2014 symposiums to memorialize the stakeholder feedback and serve as a future resource.<sup>1</sup>

While the Federal role and mission in support of a stronger maritime nation is shared among the more than 25 agencies and directorates, this report provides recommendations as they relate to governmental authorities and directives under the DOT. However, it recognizes the value of interagency collaboration in support of the Marine Transportation System (MTS). This report is not intended to supplant the U.S. Committee on the Marine Transportation System (CMTS) National Strategy for the Marine Transportation System: Channeling the Maritime Advantage (2017), rather it provides appropriate recommendations related to DOT/MARAD authorities. All goals and objectives are subject to the limitations of existing legal authority and the availability of funding. Interagency action across Federal agencies and within the CMTS partnerships is needed to implement many of the non-DOT goals and objectives identified within this report.

The DOT extends its gratitude to the inter-departmental cooperation of its military partners and members of the CMTS, for which the Secretary is Chair, and the extraordinary support from U.S. maritime stakeholders and the public who are committed to the U.S. Merchant Marine and the MTS.

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<sup>1</sup> Federal Register notices for the symposiums: <https://www.federalregister.gov/documents/2013/10/28/2013-25396/national-maritime-strategy-symposium-cargo-opportunities-and-sealift-capacity> and <https://www.federalregister.gov/documents/2014/03/24/2014-06307/second-national-maritime-strategy-symposium-domestic-shipping-opportunities>. Docket submissions can be found at: <https://www.regulations.gov/docket?D=MARAD-2013-0101> and <https://www.regulations.gov/docket?D=MARAD-2014-0044>

## I. Executive Summary

This Report to Congress addresses certain requirements of the Consolidated Appropriations Act, 2014, the Howard Coble Coast Guard and Maritime Transportation Act of 2014 (Coble Act), and the John S. McCain National Defense Authorization Act for Fiscal Year 2019 to provide recommendations for specific issues related to the Marine Transportation System (MTS) and national sealift strategies.

To address these legislative requirements, DOT/MARAD conducted outreach activities with industry and the public from October 2013 through December 2019, which resulted in the development of the following four strategic goals:

- **Goal 1:** Strengthen U.S. Maritime Capabilities Essential to National Security and Economic Prosperity
- **Goal 2:** Ensure the Availability of a U.S. Maritime Workforce that Will Support the Sealift Resource Needs of the National Security Strategy
- **Goal 3:** Support Enhancement of U.S. Port Infrastructure and Performance
- **Goal 4:** Enable Maritime Industry Innovation in Information, Automation, Safety, Environmental Impact and Other Areas

The legislative requirements were also addressed through a DOT/MARAD report to Congress in 2015 that discusses the impact of government-impelled cargo on the U.S. merchant marine.<sup>2</sup>

Thirty-nine objectives under the four goals were also developed to provide direction toward enhancing the MTS and our Nation. Within one year, the DOT, through the Maritime Administration and in coordination with the CMTS and other Federal agencies and entities, as appropriate, will:

- Prioritize the 39 objectives for near, medium and long-term capability;
- Develop an implementation plan for the near-term objectives;
- Consider a timeline for addressing the medium and long-term objectives; and,
- Review and report on regulations that impact the competitiveness of the U.S. flag fleet.

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<sup>2</sup> U.S. Department of Transportation Maritime Administration, A Report to Congress: Impacts of Reductions in Government Impelled Cargo on the U.S. Merchant Marine, <https://www.agri-pulse.com/ext/resources/pdfs/04-21-2015-Report-to-Congress-on-the-Impact-of-Reduction-in-Government-Impelled-Cargo-on-the-US-Merchant-Marine.pdf>, April 21, 2015.

## II. Introduction and Guiding Principles

### Introduction

The U.S. Marine Transportation System (MTS) is critical to national security and the economic prosperity of the Nation. The military depends on MTS industries, vessels, infrastructure, logistics networks, and personnel during times of war and national emergency. The MTS is an integrated network that consists of 25,000 miles of coastal and inland waters and rivers serving 361 ports.<sup>3</sup> The MTS supports \$5.4 trillion of economic activity each year and accounts for the employment of more than 31 million Americans.<sup>4</sup> Privately-owned U.S.-flag ships in the international trades, the U.S. mariners they employ, and the U.S. shipyards and port facilities that support and sustain the ships' operation and maintenance have long been relied upon as primary resources to serve as a naval and military auxiliary in time of war or national emergency. These ships, mariners, and facilities have been integral and essential to the defense of our Nation. The capability of the MTS to support military contingency operations, whenever and wherever needed, is advantageous.

As with many U.S. businesses that compete internationally for markets and labor, U.S.-flag ships have higher operating costs relative to foreign-flag vessels.<sup>5</sup> The U.S. DOT and maritime industry are very interested in methods which will lower operating costs, thereby lowering operating cost differentials. To keep our MTS strong in international trade, U.S. Government programs under DOT serve to partially compensate carriers for the operating cost differential between U.S.-flag and foreign-flag vessels. U.S. regulatory compliance is not a major impediment to the competitiveness of the U.S. flag registry, but future improvements in the regulatory process and policy may reduce costs without decreasing safety risk.<sup>6</sup>

In 2014, Congress passed, and the President signed into law, two pieces of legislation requiring DOT to collaborate with other agencies to address important challenges within the MTS. This Report to Congress addresses these legislative requirements:

- Section 169 of the *Consolidated Appropriations Act, 2014*<sup>7</sup> provided “[t]hat the Secretary of Transportation and the Administrator, in collaboration with the Department of Defense, shall further develop a national sealift strategy that ensures the long-term viability of the U.S. Merchant Marine.”

<sup>3</sup> Committee on Marine Transportation System, <http://www.cmts.gov/background/index.aspx>; U.S. Department of Homeland Security, online at <https://www.dhs.gov/transportation-systems-sector>.

<sup>4</sup> American Association of Port Authorities, online at <http://www.aapa-ports.org/advocating/content.aspx?ItemNumber=21150>.

<sup>5</sup> Comparison of U.S. and Foreign-Flag Operating Costs, U.S. Department of Transportation Maritime Administration, <https://www.maritime.dot.gov/sites/marad.dot.gov/files/docs/resources/3651/comparisonofusandforeignflagoperatingcosts.pdf> September 2011 (compilation of selected vessel owners' responses); National Academy of Sciences, Engineering and Medicine Transportation Research Board, Letter Report: Impact of United States Coast Guard Regulations on United States Registry, <http://onlinepubs.trb.org/onlinepubs/reports/USFlagRegistry.pdf>, 2016.

<sup>6</sup> National Academy of Sciences, Engineering and Medicine Transportation Research Board, Letter Report: Impact of United States Coast Guard Regulations on United States Registry, <http://onlinepubs.trb.org/onlinepubs/reports/USFlagRegistry.pdf>, 2016.

<sup>7</sup> Consolidated Appropriations Act, 2014, Pub. L. No. 113-76, 128 Stat. 5, 598 (2014).

- Section 603 of the *Coble Coast Guard and Maritime Transportation Act of 2014*<sup>8</sup> directed the DOT in consultation with the U.S. Coast Guard (USCG) to submit to Congress a national maritime strategy that shall:

1. Identify –
  - A. Federal regulations and policies that reduce the competitiveness of U.S.-flag vessels in international transportation markets<sup>9</sup>; and
  - B. The impact of reduced cargo flow due to reductions in the number of members of the United States Armed Forces stationed or deployed outside of the United States; and
2. Include recommendations to –
  - A. Make U.S.-flag vessels more competitive in shipping routes between United States and foreign ports<sup>10</sup>;
  - B. Increase the use of U.S.-flag vessels to carry cargo imported to and exported from the United States;
  - C. Ensure compliance by Federal agencies with chapter 553 of title 46, United States Code (cargo preference laws);
  - D. Increase the use of third-party inspection and certification authorities to inspect and certify vessels;
  - E. Increase the use of short sea transportation routes, including routes designated under section 55601(c) of title 46, United States Code, to enhance intermodal freight movements; and
  - F. Enhance United States shipbuilding capability.

- Section 3513(b) of the *John S. McCain National Defense Authorization Act for Fiscal Year 2019*<sup>11</sup> amended Section 603(a) of the Coble Act to set a deadline of “[n]ot later than 18 months after the date of the enactment of the John S. McCain National Defense Authorization Act for Fiscal Year 2019.”

To develop recommendations, MARAD conducted outreach activities with industry and the public from October 2013 through December 2019. This outreach included forums with stakeholders held on January 14-16, 2014 and May 6, 2014, and periodic meetings with the Maritime Transportation System National Advisory Committee (MTSNAC) and its Mariner Workforce Working Group (MWWG), the National Defense Transportation Association (NDTA) sealift working group, and the U.S. Transportation Command (USTC) Voluntary Intermodal Sealift Agreement Executive Working Group. Through this process, the maritime industry and other maritime stakeholders provided a wide range of suggestions on how to improve the

<sup>8</sup> Coble Coast Guard and Maritime Transportation Act of 2014, Pub. L. No. 113-281, § 603, 128 Stat. 3022, 3061 (2014).

<sup>9</sup> Section 603(b)(1)(A) of the Coble Act is not addressed in this report. As part of DOT’s broader deregulatory goals, DOT continues to work toward addressing this requirement and will provide a supplemental report at a later date.

<sup>10</sup> Section 603(b)(2)(A) of the Coble Act is not addressed in this report. As part of DOT’s broader deregulatory goals, DOT continues to work toward addressing this requirement and will provide a supplemental report at a later date.

<sup>11</sup> John S. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. No. 115-232, § 3513, 132 Stat. 1636, 2312 (2018).

strength, competitiveness, efficiency, and safety of the U.S. Merchant Marine and MTS, which served as the foundation for this report. The DOT, working with the Department of Defense (DOD), the Department of Homeland Security, and the other departments, agencies and offices through the CMTS, organized the recommendations and critical thinking into four Goals. Appendix C provides a crosswalk of the statutory requirements, references, and Goals and Objectives that were developed through this effort.

This Report to Congress is intended to address specific statutory requirements of Section 169 of the 2014 Appropriations Act and Section 603 of the Coble Act. DOT will work to address Sections 603(b)(1)(A) and 603(b)(2)(A) within the next year. The goals and objectives contained within this report pertain to areas of maritime transportation in which DOT has the lead or major role among U.S. Government agencies.<sup>12</sup> While the recommendations and critical thinking from the stakeholders and the public served as a foundation for the four Goals and thirty-nine Objectives, some of the feedback received falls outside the scope of DOT's jurisdiction and this report.

### Guiding Principles

DOT is committed to meeting its statutory and policy responsibilities regarding support for the U.S. MTS in accordance with the following guiding principles, which apply to all the Goals and Objectives contained within this report:

1. Maritime readiness supports national security and a more resilient economy: DOT strongly supports DOD and the Department of Homeland Security (DHS) in their missions to protect our citizens and national interests in times of crisis and natural disaster. Similarly, DOT supports DHS policies to protect national security, including the National Strategy for Global Supply Chain Security,<sup>13</sup> the Transportation Systems Sector-Specific Plan,<sup>14</sup> and related or successor DHS plans.
2. Maritime transportation is an important component of the multimodal transportation system: In coordination with other Federal Agencies, DOT is committed to using an integrated, multimodal transportation system approach to optimize the contribution of water transportation to the cost-effective, reliable, safe, secure, and environmentally responsible movement of goods and people.
3. A safe, modern, and efficient transportation system is essential to our economic well-being: Well-planned investments in the MTS benefit the Nation's global and domestic trade, economic competitiveness, jobs, mobility, safety, security, and the environment.

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<sup>12</sup> On June 21, 2018, the Administration released the "Delivering Government Solutions in the 21st Century: Reform Plan and Reorganization Recommendations," which includes recommendations to reorganize several maritime transportation functions among Federal agencies (<https://www.whitehouse.gov/wp-content/uploads/2018/06/Government-Reform-and-Reorg-Plan.pdf>). This document does not address those areas of the maritime sector that have been proposed to come under DOT purview in the future. However, should such a reorganization occur, DOT intends to update the Strategy to reflect any new maritime responsibilities of the Department.

<sup>13</sup> White House, National Strategy for Global Supply Chain Security, January 2012.

<sup>14</sup> DHS, Transportation Systems Sector, <https://www.dhs.gov/transportation-systems-sector>



4. The MTS must be resilient and flexible: Unauthorized use of technologies, cyber-attacks, major weather events and earthquakes, and manmade disruptions can have major adverse consequences for mobility and security. DOT will support DHS and other Federal and State agencies to identify vulnerabilities and take steps to ensure continuity of operations.
5. Maritime transportation has the capacity to alleviate future traffic congestion: DOT will work to identify marine highway routes that, if strategic investments are made at key points along the route, could have significant capacity to handle more freight.
6. Better data, models, and tools for decision-making are needed: DOT, in coordination with other Federal agencies, will promote the use and development of better data and models to measure shipping costs and logistics, mobility, capacity, productivity, and the condition of infrastructure so that planners can more effectively prioritize investments, optimize traffic, and mitigate congestion.
7. Financing programs must be improved: DOT will work to maximize the effectiveness of existing programs, as well as new programs, provided through the President's Infrastructure Plan, the Fixing America's Surface Transportation (FAST) Act, and other legislation to improve public and private access to Federal grants, stipends, loan guarantees, and financing assistance.
8. Cooperation and collaboration are critical: DOT is committed to engagement and collaboration with public and private interests across all modes of transportation at the Federal, State and local levels, including with shippers, carriers, landside port operators, and the public.
9. Innovation is the core strength of the United States and our competitive advantage: Our Nation has an established record of innovative approaches to the maritime industry, including the development of containerization and modern intermodal concepts. DOT and its government, academic, and industry partners will continue to support research in new technologies and methods and promote the incorporation of proven advanced technologies (such as liquefied natural gas (LNG) fueled ship propulsion) in the building, operation, and maintenance of our maritime transportation assets.
10. MTS participants must be good stewards of the environment: DOT will continue to seek out every available opportunity to innovate and cooperate with other agencies in the implementation of environmentally clean, cost-effective, and community-friendly technologies and practices.

## **Department of Transportation Strategic Plan**

The Goals and emphases of this report broadly conform to those of the DOT Strategic Plan for FY 2018-2022. The DOT Strategic Plan goals are as follows:<sup>15</sup>

- **Safety:** Reduce transportation-related fatalities and serious injuries across the transportation system.
- **Infrastructure:** Invest in infrastructure to ensure mobility and accessibility and to stimulate economic growth, productivity, and competitiveness for American workers and businesses.
- **Innovation:** Lead in the development and deployment of innovative practices and technologies that improve the safety and performance of the Nation's transportation system.
- **Accountability:** Serve the Nation with reduced regulatory burden and greater efficiency, effectiveness and accountability.

## **U.S. Coast Guard Maritime Commerce Strategic Outlook**

The Coast Guard has the responsibility to safeguard the Marine Transportation System and enable the uninterrupted flow of maritime commerce. The U.S. Coast Guard published the Maritime Commerce Strategic Outlook in October 2018, which emphasizes three lines of effort that complement DOT goals:

- Facilitating lawful trade and travel on secure waterways;
- Modernizing aids to navigation and mariner information systems; and
- Transforming workforce capacity and partnerships.

## **National Security Strategy of the United States of America**

The National Security Strategy 2017 establishes four pillars to achieve a strategic vision for protecting the American people. DOT goals support the defense industrial base, including our aviation, surface, and maritime transportation sectors.

- Pillar I - Protect the American people, the homeland, and the American way of life.
- Pillar II - Promote American prosperity.
- Pillar III - Preserve peace through strength.
- Pillar IV - Advance American influence in the world as a positive force.

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<sup>15</sup> DOT, U.S. Department of Transportation Strategic Plan for FY 2018-2022, February 2018, <https://www.transportation.gov/dot-strategic-plan>.

### III. State of the U.S. Merchant Fleet, Mariner Workforce, Ports and Shipbuilding

The MTS integrates our economy into the vast global system that moves more than 90 percent of the world's trade by tonnage, including consumer goods, agricultural products, energy, and raw materials. Of the goods that the U.S. imports and exports, approximately 69 percent by weight and 40 percent by value move by water transportation and through our national port system.<sup>16</sup> These industries, vessels, infrastructure, and the personnel that support them also play a critical role in national security, supporting the Nation's ability to provide sealift for the military services during times of war and national emergency:

- **U.S.-Flag Vessels in the International Trades.** As of August 2019, there were 81 large, privately-owned self-propelled U.S.-flag merchant-type vessels of 1,000 gross tons or greater per vessel, and operating exclusively in the U.S. international trades, down from 106 ships as of the end of 2010.<sup>17</sup> These 81 vessels consist of 40 containerships, 21 roll-on/roll-off (Ro-Ro) ships, 11 general cargo/multi-purpose ships, 6 tankers, and 3 dry bulk ships, which are supported by Maritime Security Program stipends (60 vessels) and Preference Cargo from U.S. government agencies. None of the U.S.-flag vessels engaged exclusively in the U.S. international trades, were built in U.S. shipyards. Similarly, the share of our trade carried on such vessels has declined steadily since the end of World War II. Estimates using 2015 U.S. Census foreign trade data indicate that just 1.5 percent of U.S. waterborne imports and exports by tonnage move on oceangoing commercial vessels registered under the flag of the United States. The U.S.-flag fleet carried close to 4 percent of our ocean freight by tonnage from 1977 until 1993 and was 2 percent as of 2003.
- **U.S.-Flag Vessels in the Domestic Trades.** The U.S. domestic water transportation (Jones Act) market is served by approximately 41,000 vessels owned, operated, and built by U.S. citizens.<sup>18</sup> Jones Act vessels are protected by law from foreign competition and operate on U.S. inland and intracoastal waterways, lakes, oceans along the coasts of the United States, and to non-contiguous States and U.S. territories.<sup>19</sup> The great majority of vessels in the domestic trades consist of tugs and barges, work and supply vessels used in the offshore oil industry, and specialty vessels such as pilot boats, dredge vessels, and others. As of August 2019, however, only 99 of the 41,000 vessels operating in the U.S. domestic market are large

<sup>16</sup> DOT/Bureau of Transportation Statistics, Freight Facts and Figures 2017, U.S. International Merchandise Trade Value and Weight by Transportation Mode: 2016, p. 2-15. The United States also has extensive overland trade with Canada and Mexico. <http://www.bts.gov/newsroom/freight-facts-and-figures-2017>.

<sup>17</sup> DOT/Maritime Administration, U.S.-Flag Privately-Owned Fleet (As of August 19, 2019 and January 1, 2016), <https://www.marad.dot.gov/resources/data-statistics/>.

<sup>18</sup> U.S. Army Corps of Engineers, WATERBORNE TRANSPORTATION LINES OF THE UNITED STATES, Calendar Year 2016 Volumes 1 through 3 consolidated, p. 55. Published October 2017. This count includes U.S.-flag oceangoing ships, tugs, offshore support vessels, ferries, Great Lakes vessels, and non-self-propelled vessels (liquid and dry cargo barges) operating and/or available for operation as of December 31, 2015, but does not include vessels primarily used as fishing vessels or dredges or derricks, etc., used in construction work.

<sup>19</sup> Section 27 of the Merchant Marine Act of 1920, as amended, popularly known as the Jones Act, requires vessels that serve the U.S. domestic trades be: owned by a U.S. citizen or by companies controlled by individuals that are U.S. citizens with at least 75 percent of ownership; operated with crews that are all U.S. citizens in licensed positions and at least 75 percent U.S. citizens in unlicensed positions; built (or rebuilt, or seized) in the United States; and registered under the U.S. flag with a coastwise endorsement from the U.S. Coast Guard.

cargo-carrying merchant-type vessels capable of self-propelled operation in the deep oceans (comparable to vessels operating in international trades). These 99 large vessels consist of 57 tankers, 24 containerships, 9 general cargo/multi-purpose ships, 7 Ro-Ros, and 2 dry bulk ships. These large ocean-going vessels and their crews engaged in domestic trade, are primarily sustained by the Jones Act. Approximately 873 million short tons of domestic freight moved by water in 2017—equivalent to 5.5 percent of the estimated U.S. domestic freight tonnage carried by all transportation modes.<sup>20</sup> The majority of this tonnage moved on non-self-propelled barges.

- **Military Sealift.** By statute, the Department of Defense is required to rely on U.S. mariners and the U.S.-flag commercial fleet for military sealift and support, to avoid reliance on foreign countries in a crisis.<sup>21</sup> In an activation, the vessels and crews are integrated into the surge sealift fleet, along with 63 merchant-type, government-owned surge sealift vessels that are crewed by mariners drawn from the commercial fleet. The Jones Act, Maritime Security Program, and Preference Cargo from federal agencies are the three pillars that support U.S.-flag commercial sealift. The U.S.-flag commercial fleet played a critical strategic role during World War II and the size of the fleet peaked in 1951. For various reasons, the size of the U.S.-flag commercial fleet has fallen over time as the maritime industry modernized. Further, the size of the fleet decreased from 282 vessels in 2000 to 180 in August 2019, largely due to a decline in the number of tankers and bulk carriers. The U.S.-flag fleet has been roughly steady since 2014. These ocean-going, self-propelled U.S.-flag vessels operate in a global shipping market that includes over 40,000 large self-propelled merchant ships.<sup>22</sup> Within that global market, the Department of Defense already relies on foreign-flag tankers, due to lack of U.S.-flag capabilities.
- **Maritime Workforce.** The United States maintains a workforce of highly qualified maritime professionals, reflecting a strong tradition of maritime education and training. As large U.S.-flag commercial vessels have left the fleet and international credentialing and certification requirements have become more stringent and costly, it is possible that the size of the mariner workforce will decline.<sup>23</sup> Any further decline of the mariner workforce increases the risk of not having a sufficient number of mariners with appropriate experience and credentials to support sustained operations of more than six months by the full U.S. Government surge sealift fleet, U.S. Government non-surge fleet, and U.S.-flag commercial fleet during a wartime emergency.

<sup>20</sup> U.S. Army Corps of Engineers, WATERBORNE COMMERCE OF THE UNITED STATES Calendar Year 2016, Part 5-National Summaries, p. 1-3 and U.S. Department of Transportation, Freight Facts and Figures 2017 (Table 2-1). Note that the Corps' estimate of domestic waterborne freight includes waterborne movements of petroleum that are not included in the Commodity Flow Survey published in Table 2-1 of Freight Facts and Figures 2017. MARAD added the petroleum movements to the domestic freight numbers in Table 2-1 to calculate the 5.5 percent waterborne share of domestic freight.

<sup>21</sup> Statutes include: 46 U.S.C. § 50101(a)(2); 10 U.S.C. § 2631; 46 U.S.C. § 51104; 46 U.S.C. § 53102; 46 U.S.C. § 53107; 46 U.S.C. § 55302; 50 U.S.C. § 4558, and by National Security Directive 28.

<sup>22</sup> Maritime Administration, U.S. Department of Transportation, U.S.-Flag Privately-Owned Fleet, 1946–2016, <https://www.maritime.dot.gov/sites/marad.dot.gov/files/docs/outreach/data-statistics/7066/us-fleet-summary-table-1946-2016.xlsx>

<sup>23</sup> Maritime Workforce Working Group Report, Maritime Administration, September 29, 2017 <https://www.maritime.dot.gov/sites/marad.dot.gov/files/docs/mariners/1026/mwwwg-report-congress-final3.pdf>

- **U.S. Port Infrastructure.** U.S. ports are critical domestic and international transportation hubs. Port activity generates almost 31 million jobs, accounting for 25.7% of the U.S. GDP in 2018, and adding \$378.1 billion to federal, state and local taxes.<sup>24</sup> The ability of ports to successfully increase capacity and serve larger vessels more efficiently is vital to the health of many domestic industries. The advent of containerization and intermodal freight services have helped increase cargo-handling efficiency over the last 50 years. However, with trade expected to increase to meet the demands of a growing population, augmented with increased ferry transits, cruise ships, rapidly changing technology, and other non-cargo vessel traffic in our waterways and ports<sup>25</sup>, as well as more stringent security-related requirements, greater attention must be made to the physical and informational infrastructure required to keep our ports, safe, secure and efficient.
- **U.S. Ship Construction and Repair Facilities.** In 2015, U.S. shipyards, of which there were 124, built 1,281 vessels of all sizes. The great majority of these vessels consisted of tugs, barges, and offshore supply vessels that operate in the U.S. domestic maritime trades.<sup>26</sup> Over the last several decades, however, large U.S. shipyards and their skilled labor forces for building large commercial vessels have atrophied due to low-cost, highly-subsidized international shipbuilding competition, and other factors resulting in shipyard closures and reductions in the U.S. vendor base. Only two large self-propelled merchant-type vessels intended to operate exclusively in the commercial international trade (as opposed to the U.S. domestic trade) have been built in U.S. shipyards since 1990, and these were built in 1998.<sup>27</sup> The largest U.S. commercial shipyards construct limited numbers of large self-propelled merchant-type vessels for domestic use, averaging 5 large self-propelled vessels per year over the last 5 years, with a peak of 10 such vessels in 2016.<sup>28</sup> This production is small, however, relative to the worldwide production of 1,408 such ships in 2016. New orders for smaller vessels have also fallen since 2015. The ability to sustain commercial building of large vessels is important to the Nation's ability to readily expand the fleet and repair vessels during national emergencies.

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<sup>24</sup> Martin & Associates, 2018 National Economic Impact of the U.S. Coastal Port System, Executive Summary, March 2019 for the American Association of Port Authorities.

<sup>25</sup> Bureau of Transportation Statistics, U.S. Department of Transportation, National Transit Database and North American Cruise Statistical Snapshot, May 2012.

<sup>26</sup> U.S. Army Corps of Engineers, WATERBORNE TRANSPORTATION LINES OF THE UNITED STATES, Calendar Year 2016 Volumes 1 through 3 consolidated, p. 57. Published October 2017. The data include U.S.-flag vessels operating and/or available for operation December 31, 2016. Vessels primarily used as fishing vessels or dredges or derricks, etc., used in construction work are excluded.

<sup>27</sup> IHS Sea-Web Maritime Database Query, March 9, 2018. U.S. shipyards export some smaller non-merchant-type vessels, such as workboats and dredges, as well as recreational boats.

<sup>28</sup> IHS Sea-Web Maritime Database Query, March 9, 2018.

#### **IV. Goals and Objectives to Support a Stronger Maritime Nation**

##### **Goal 1: Strengthen U.S. Maritime Capabilities Essential to National Security and Economic Prosperity**

###### **Objectives for Goal 1:**

- 1.1 Leverage U.S. maritime policies to advance U.S. commercial interests in the global economy.
- 1.2 Increase the use of U.S. flagged vessels in domestic energy transportation and international energy markets.
- 1.3 Develop and expand marine highway service options and facilitate their further integration into the current U.S. surface transportation system through the America's Marine Highway Program, especially where water-based transport is the most efficient, effective and sustainable option.
- 1.4 Adapt organizational structures and related authorities, roles, and responsibilities to ensure the sustained ability to monitor the global performance of the U.S. flagged fleet and the third-party organizations that perform delegated inspection and certification functions on the U.S. Government's behalf.
- 1.5 Ensure effective use of third parties for inspection and certification by strengthening third-party oversight, auditing, and integrated risk management.
- 1.6 Address the challenges of the Arctic's rapidly-changing environment to ensure the safety and security of the U.S. marine transportation system.
- 1.7 Recapitalize the Ready Reserve Force (RRF) with modern vessels as ships reach the end of their usable lives.
- 1.8 Improve the capability of U.S.-flag international trading vessels to better align with DOD and DOT sealift requirements through a combination of MSP funding, MSC chartering, enforcement of preference cargo requirements, regulatory reform and policy, and incentives to reduce vessel operating costs.
- 1.9 Examine new ways to support shipbuilding and repair facilities, and increase U.S. coastwise trade for eligible U.S.-flag vessels.
- 1.10 Enhance the U.S. shipyard base by fostering support for shipyard modernization and innovation, and promoting use of the Capital Construction Fund (CCF) and Construction Reserve Fund (CRF) programs.

##### **Goal 2: Ensure the Availability of a U.S. Maritime Workforce that Will Support the Sealift Resource Needs of the National Security Strategy**

###### **Objectives for Goal 2:**

- 2.1 Attract and equip mariners and other maritime workers with skills needed to support the Nation's sealift and economic needs.
- 2.2 Develop an accurate roster of sealift-qualified mariner volunteers.

- 2.3 Foster innovation in maritime education and training.
- 2.4 Designate the US Merchant Marine Academy (USMMA) as the National Center for Maritime Excellence.
- 2.5 Update USMMA education curricula to address future innovation and emerging technologies.
- 2.6 Increase the percentage of seagoing employment at appropriate levels of qualification for maritime academy graduates.
- 2.7 Coordinate with the maritime industry and labor to emphasize “best practices” training standards against sexual harassment, assault and discrimination, and increase diversity in the maritime workforce.
- 2.8 Recapitalize three State Maritime Academy (SMA) training ships by 2025 to provide safe and modern merchant marine training platforms.
- 2.9 Support the training and education of unlicensed mariners (ratings) using domestic Centers of Maritime Excellence.
- 2.10 Incentivize the qualification of steam engineers to assure an adequate pool to support full RFF activation until full RRF recapitalization is achieved.
- 2.11 Engage with community colleges, K-12 schools, and non-SMA training institutions to promote the development of future mariners and other skilled maritime workers.
- 2.12 Work with interagency partners to improve credentialing processes for mariners, shipyard workers, port workers, and transitioning veterans.

### **Goal 3: Support Enhancement of U.S. Port Infrastructure and Performance**

#### **Objectives for Goal 3:**

- 3.1 Leverage America’s Marine Highways Program to further reduce landside congestion and increase port efficiency.
- 3.2 Coordinate with port authorities, Metropolitan Planning Organizations (MPOs), State DOTs, and other stakeholders to significantly reduce national port congestion through improved planning and information.
- 3.3 Incorporate more maritime data from other authoritative sources into DOT’s multimodal data inventory.
- 3.4 Facilitate U.S. port access to funding and financial assistance to modernize and improve port infrastructure and increase intermodal efficiency, including measures to improve infrastructure resiliency to storm surge and other risks.
- 3.5 Work with DOT interagency partners to enhance the safety of surface transportation intermodal connectors.
- 3.6 Work with stakeholders to improve and expand landside facilities at U.S. ports and intermodal connectors to ensure adequate accommodation of all sizes of dry bulk, tanker, LNG, and containerships.
- 3.7 Work with stakeholders and Federal partners to address U.S. ports’ capability to accommodate changes in waterway and vessel characteristics, including the recapitalization of aging waterway facilities, aids to navigation and construction tenders,

infrastructure such as locks and dams, and navigation services to maintain a safe and efficient system.

- 3.8 Compile informed forecasts of long-term demand and technology trends to prepare adequate and resilient future port and landside capacity.
- 3.9 Increase the effectiveness of the National Port Readiness Network.
- 3.10 Develop a comprehensive plan for accommodating vessels using LNG as fuel, including LNG bunkering facilities in key domestic ports.
- 3.11 Work with stakeholders to improve and expand wind energy shore side support.
- 3.12 Work with stakeholders to leverage emerging future technologies to improve port efficiency.

#### **Goal 4: Drive Maritime Innovation in Information, Automation, Safety, Environmental Impact, and Other Areas**

##### **Objectives for Goal 4:**

- 4.1 Work with government and industry stakeholders to facilitate innovations that improve the safety, security, and resilience of the MTS.
- 4.2 Leverage existing Intelligent Transportation System (ITS) technologies, conduct research on innovative solutions, and work with industry and academia to develop new ITS applications to benefit the safety and efficiency of the maritime transportation/intermodal transportation environment.
- 4.3 Work with government, industry, and labor partners to accelerate the adoption of productivity and safety-enhancing automation for vessel and port functions, while also meeting national needs for conventional technologies and preserving the existing maritime workforce.
- 4.4 Promote research to reduce environmental impacts of maritime activities, including assistance to ports and vessel operators to comply with Federal regulations regarding invasive species, vessel emissions (including by using alternative fuels), and other marine impacts.
- 4.5 Support the implementation of inshore and offshore fairways to prevent construction of obstacles and ensure free flow of commerce, in coordination with resource development proposals and other ocean management plans.



## **The Way Forward**

This report provides thirty-nine objectives under four goals:

1. Strengthen U.S. Maritime Capabilities Essential to National Security and the Economic Prosperity;
2. Ensure the Availability of a U.S. Maritime Workforce that Will Support the Sealift Resource Needs of the National Security Strategy;
3. Support Enhancement of U.S. Port Infrastructure and Performance; and,
4. Drive Maritime Innovation in Information, Automation, Safety, Environmental Impact, and Other Areas.

Within one year, the DOT, through the Maritime Administration and in coordination with the CMTS and other Federal agencies, as appropriate, will:

- Prioritize the 39 objectives for near, medium and long-term capability;
- Develop an implementation plan for the near-term objectives;
- Consider a timeline for addressing the medium and long-term objectives; and,
- Review and report on regulations that impact the competitiveness of the U.S. flag fleet.

## **Appendix A: U.S. Law, Policy and Plans Related to this Report**

National Security Strategy of 2017  
Passenger Services Act of 1886  
Military Cargo Preference Act of 1904  
Shipping Act of 1916  
Merchant Marine Act of 1920 (Jones Act)  
Merchant Marine Act of 1928  
Intercoastal Shipping Act of 1933  
Public Resolution 17 of 1934  
Merchant Marine Act of 1936  
Merchant Ship Sales Act of 1946  
Cargo Preference Act of 1954  
Clean Air Act of 1963  
Merchant Marine Act of 1970  
Clean Water Act of 1972  
Marine Protection, Research, and Sanctuaries Act of 1972  
Deepwater Port Act of 1974  
Shipping Act of 1984  
Food Security Act of 1985 and Bipartisan Budget Act of 2013  
National Security Directive 28 (NSD 28), October 28, 1989  
Maritime Security Act of 1996  
Ocean Shipping Reform Act of 1998  
Maritime Security Act of 2003  
Coast Guard and Maritime Transportation Act of 2006  
Energy Independence and Security Act of 2007  
National Defense Authorization Act for Fiscal Year 2009  
Moving Ahead for Progress in the 21<sup>st</sup> Century Act of 2012  
Coast Guard and Maritime Transportation Act of 2012  
Water Resources Reform and Development Act of 2014 (WRRDA)  
Howard Coble Coast Guard Act of 2014  
Fixing America's Surface Transportation Act of 2015 (FAST Act)  
Consolidated Appropriations Act of 2016  
National Defense Authorization Act for Fiscal Year 2018  
National Defense Authorization Act for Fiscal Year 2019  
Consolidated Appropriations Act of 2014  
Consolidated Appropriations Act of 2018

## Appendix B: Statutory Authority and Policies

**Merchant Marine Act of 1936:** For the last 82 years, the principal authority for the U.S. Government's support of the merchant marine has been provided by the Merchant Marine Act of 1936 (1936 Act), as amended.

**National Security Directive 28:** The role of the U.S. Merchant Marine as a naval and military auxiliary, established under the 1936 Act, is reflected in National Security Directive 28 (NSD 28), implemented on October 28, 1989.

**Howard Coble Coast Guard and Maritime Transportation Act of 2014:** Section 603 of the Public Law 113-281, the *Howard Coble Coast Guard and Maritime Transportation Act of 2014* (Coble Act), directs DOT in consultation with USCG to produce a strategy that identifies:

- Federal regulations and policies that reduce:
  - the competitiveness of U.S.-flag vessels in international transportation markets<sup>29</sup>; and
  - the impact of reduced cargo flow due to reductions in the number of members of the U.S. Armed Forces stationed or deployed outside of the United States; and
- includes recommendations to:
  - make U.S.-flag vessels more competitive in shipping routes between United States and foreign ports<sup>30</sup>;
  - increase the use of U.S.-flag vessels to carry cargo imported to and exported from the United States;
  - ensure compliance by Federal agencies with chapter 553 of title 46, U.S. Code (cargo preference laws);
  - increase the use of third-party inspection and certification authorities to inspect and certify vessels;
  - increase the use of short sea transportation routes, including routes designated under section 55601(c) of title 46, U.S. Code, to enhance intermodal freight movements; and
  - enhances U.S.-shipbuilding capability.

**National Freight Transportation Policy:** U.S. ports and waterways are not directly addressed in the 1936 Act or the Coble Act. DOT notes, however, the inclusion of ports and waterways in the Report to Congress conforms to a broader, more inclusive approach to transportation policy reflected in the *Fixing America's Surface Transportation Act of 2015* (FAST Act) and the National Freight Strategic Plan (NFSP) (issued in draft by DOT in October 2015). Both these documents explicitly recognize ports and waterways as components of the National Freight System, including through the National Multimodal Freight Network (Section 8001 of the FAST Act), the Port Performance Freight Statistics Program (Section 6018 of the FAST Act), and the predecessor freight network defined in the October 2015 draft NFSP.

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<sup>29</sup> Section 603(b)(1)(A) is not addressed in this report. As part of DOT's broader deregulatory goals, DOT continues to work toward addressing this requirement and will provide a supplemental report at a later date.

<sup>30</sup> Section 603(b)(2)(A) is not addressed in this report. As part of DOT's broader deregulatory goals, DOT continues to work toward addressing this requirement and will provide a supplemental report at a later date.

## Appendix C: Matrix of How the Legislative Requirements are Met

**Goal 1:** Strengthen U.S. Maritime Capabilities Essential to National Security and the Economic Prosperity

**Goal 2:** Ensure the Availability of a U.S. Maritime Workforce that Will Support the Sealift Resource Needs of the National Security Strategy

**Goal 3:** Support Enhancement of U.S. Port Infrastructure and Performance

**Goal 4:** Drive Maritime Innovation in Information, Automation, Safety, Environmental Impact and Other Areas

Requirement	Goal 1	Goal 2	Goal 3	Goal 4	Additional Resources
2014 Appropriations Act § 169: Develop a national sealift strategy that ensures the long-term viability of the U.S. Merchant Marine	X	X		X	
Coble Act § 603(b)(1)(A): Identify Federal regulations and policies that reduce the competitiveness of U.S.-flag vessels in international transportation markets	*				*As part of DOT's broader deregulatory goals, DOT and DHS continue to work toward addressing this requirement. DOT will provide a supplemental report within one year.
Coble Act § 603(b)(1)(B): Identify the impact of reduced cargo flow due to reductions in the number of members of the U.S. Armed Forces stationed or deployed outside of the United States	X	X			2015 Report to Congress discusses the impact of government-impelled cargo on the U.S. merchant marine
Coble Act § 603(b)(2)(A): Include recommendations to make U.S.-flag vessels more competitive in shipping routes between U.S. and foreign ports		*	*		*As part of DOT's broader deregulatory goals, DOT and DHS continue to work toward addressing this requirement. DOT will provide a supplemental report within one year.
Coble Act § 603(b)(2)(B): Include recommendations to increase the use of U.S.-flag vessels to carry cargo imported to and exported from the U.S.	X				
Coble Act § 603(b)(2)(C): Include recommendations to ensure compliance by Federal agencies with chapter 553 of title 46, US Code (cargo preference laws)	X				
Coble Act § 603(b)(2)(D): Include recommendations to increase the use of third-party inspection and certification authorities to inspect and certify vessels	X				
Coble Act § 603(b)(2)(E): Include recommendations to increase the use of short sea transportation routes, including routes designated under section 55601(c) of title 46, US Code, to enhance intermodal freight movements	X		X		
Coble Act § 603(b)(2)(F): Include recommendations to enhance U.S. shipbuilding capability	X			X	