



Committee on Transportation and Infrastructure
U.S. House of Representatives
Washington DC 20515

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June 17, 2019

SUMMARY OF SUBJECT MATTER

TO: Members, Subcommittee on Coast Guard and Maritime Transportation
FROM: Staff, Subcommittee on Coast Guard and Maritime Transportation
RE: Subcommittee Hearing on “Short Sea Shipping: Rebuilding America’s Maritime Industry”

PURPOSE

The Subcommittee on Coast Guard and Maritime Transportation will meet on Wednesday, June 19, 2019, at 2:00 p.m. in 2167 Rayburn House Office Building to examine the state of short sea shipping in the United States. The Subcommittee will hear from the United States Maritime Administration, Maine Port Authority, Lake Carriers’ Association, and Transportation Trades Department, AFL-CIO.

BACKGROUND

Short sea shipping (SSS) refers to the waterborne transportation of commercial freight between domestic ports (from one port in the United States to another port in the United States) through the use of inland and coastal waterways. Since vessels operating in SSS are required by the Jones Act to be built, owned, and crewed by United States citizens, an increased domestic trade would result in significant development for the U.S. maritime industry.

The Department of Transportation’s (DoT) Maritime Administration (MARAD) has determined that increased SSS would result in a number of “public benefits”¹ including:

- Creating and sustaining jobs on U.S. vessels and in U.S. ports and shipyards;
- Increasing the state of good repair of the U.S. transportation system by reducing maintenance costs from wear and tear on roads and bridges;²

¹ See <https://www.maritime.dot.gov/grants/marine-highways/marine-highway>

² Francesca Medda & Lourdes Trujillo (2010) Short-sea shipping: an analysis of its determinants, *Maritime Policy & Management*, 37:3, 285-303, DOI: 10.1080/03088831003700678

- Increasing the environmental sustainability of the U.S. transportation system by using less energy and reducing air emissions per ton-mile of freight moved; and
- Increasing national security by adding to the nation’s strategic sealift resources.³

An opportunity may exist to develop a new SSS policy that will promote the continued development of this method of transportation. While MARAD established the “America’s Marine Highway Program” and a number of limited SSS services exist that take advantage of that resource, the system remains underutilized. For example, in Europe, shipping accounts for 37% of intra-EU trade.⁴ Conversely, in the U.S., there are more than 25,000 miles of coastal, inland, and intracoastal waterways that move more than 1.4 billion tons of freight annually which represents approximately only 2% of the domestic freight.⁵ Despite their inherent efficiencies, domestic coastal and Great Lakes shipping carry barely half as much cargo today as they did in 1960.⁶

The majority of water freight shipping systems in the U.S. operate on the Mississippi River, the Great Lakes, and the St. Lawrence Seaway, and typically transport bulk cargoes. Bulk cargo typically consists of commodities that are transported in large unpackaged quantities. SSS is one of the most cost-effective ways to move heavy, lower value, and non-time-sensitive freight (as SSS is a slower mode of transportation than truck, rail, or air). The types of vessels that could be utilized in new SSS trades include towing, small and medium cargo, and roll-on/roll-off vessels.

Potential Benefits of SSS

Some of the potential benefits of SSS include:

- **Improved Freight Mobility:** The volume of freight transported in the U.S. is expected to continue increasing in the coming years. Also expected to increase is congestion on both our roadways (where trucks carry more than 70% of freight by weight) and our rail networks. Increased SSS capacity could offer freight shippers an additional transportation option and help alleviate increased surface congestion with less federal investment.
- **Reduced Environmental Impact:** Transportation on SSS vessels can have significant energy efficiencies over land-based modes of transportation. On average, trucks can carry one ton of freight approximately 145 miles on a gallon of diesel fuel and rail achieves 477 ton-miles per gallon. Meanwhile, a tug and barge operation can get as much as 647 ton-miles of freight to a gallon of fuel and self-propelled vessels may achieve an

³ Development of Short Sea Shipping: Hearing before the Subcommittee on Coast Guard and Maritime Transportation of the House Committee on Transportation and Infrastructure, 116th Congress. 2 (2007) (Testimony of Sean Connaughton).

⁴ See European Community Shipowners’ Associations. *Short Sea Shipping*. https://www.ecsa.eu/sites/default/files/publications/ECSA_SSS_Download%201_0.pdf

⁵ https://www.researchgate.net/publication/248989077_Short-sea_shipping_An_analysis_of_its_determinants

⁶ See CRS R44831 *Revitalizing Coastal Shipping for Domestic Commerce*. May 2, 2017. <https://crsreports.congress.gov/product/pdf/R/R44831>

even greater rate of energy efficiency.⁷ Shifting freight traffic to waterborne commerce can reduce associated vehicle emissions and improve air quality.⁸

- **Increasing Mariner Jobs:** As the U.S.-flagged international fleet has declined, MARAD has identified a shortage of 1,800 mariners. That shortage has a direct negative effect on the Department of Defense's (DoD) readiness. Increasing the number of small and mid-sized vessels operating in the domestic trades would provide additional platforms on which American mariners can work. Additional opportunities for maritime employment would grow the pool of mariners available for military sealift.
- **Increased Shipbuilding Capacity:** Under current law, vessels carrying cargo between U.S. ports are required to be owned, crewed, and built by United States citizens. SSS vessel construction and repair in U.S. shipyards would help to assure the DoD's access to skilled shipbuilding workers and facilities and promote job creation in the commercial shipbuilding sector.

Potential Impediments to SSS

Factors that could limit the development of SSS include:

- **Duplicated Harbor Maintenance Tax:** As reported by the Congressional Research Service (CRS) the Harbor Maintenance Tax (HMT) is a levy placed on the value of cargo that is imported to a port within the United States or that is transported between two U.S. ports. The levy is assessed at a rate of 0.125% of the value of the cargo. The tax is assessed only once on cargo that is transported between one U.S. port to another; however, cargo that is carried from a foreign port may be taxed twice – once upon arrival at the initial U.S. port, and again if transported aboard a different vessel to another U.S. port. CRS concluded that the tax discourages domestic water shipment of import and export containers.⁹ CRS also noted the tax could be particularly cumbersome for domestic vessel operators carrying containers of mixed cargo assembled by consolidators, because these typically hold shipments from multiple customers.
- **Shipper Reluctance:** There exists a general reluctance among freight shippers to try new, relatively unproven, modes of transportation. Many shippers rely on trucks or trains because they are known modes, and consequently, they may be reluctant to utilize SSS even if it is marginally more cost effective.
- **Ship Financing:** It is difficult for potential shipbuilders to secure financing for new ship construction if they do not have freight contracts in place. Freight and logistics companies are often unwilling to enter into those contracts for a service that has not proven itself and at a cost that cannot be specified before the ship is delivered from a shipyard and placed into service. To help overcome ship financing barriers, SSS proponents have advocated allowing the Capital Construction Fund (CCF) program to be used for SSS. The CCF is a tax-deferred program that allows ship owners to defer

⁷ Texas Transportation Institute, Center for Ports and Waterways, A Modal Comparison of Domestic Freight Transportation Effects on the General Public:2001-2014, prepared for the National Waterways Foundation, January 2017, p. 7.

⁸ Mulligan, Robert F. and Lombardo, Gary A., Short Sea Shipping: Alleviating the Environmental Impact of Economic Growth. World Maritime University Journal of Maritime Affairs, Vol. 5, No. 2, pp. 55-70, 2006. Available at SSRN: <https://ssrn.com/abstract=1028845>

⁹ See CRS R41590, *Can Marine Highways Deliver?*, January 14 2011.

Federal income taxes on their deposits as long as the withdrawals are used to build ships in a U.S. shipyard (similar to an IRA for ship owners). Others have recommended increased use and funding of MARAD's Title XI loan guarantee program under which the Federal Government will guarantee the mortgage of a ship owner for up to 30 years.

- **Insufficient Port Facilities:** Currently, major container ports are built to service large, ocean-going vessels. It is likely any additional cargo that would enter the Marine Highway System would enter at these ports which are equipped with large cranes to service large container ships. An expansion of SSS may require the construction of right-sized infrastructure that can service SSS vessels, many of which may utilize Roll-on/Roll-off technology (meaning that cargo can be driven or pushed on and off the vessel) rather than crane technology. Additional infrastructure investments may be necessary in smaller ports to ensure their ability to receive SSS cargoes.



Figure 1- America's Marine Highway Program, Maritime Administration. Designation of these Marine Highway Routes is the first step towards reducing landside congestion by focusing public and private efforts on increasing the amount of cargoes and passengers transported on commercially navigable waterways. See <https://www.maritime.dot.gov/grants/marine-highways/marine-highway>.

Federal Involvement

Congress established America's Marine Highway Program (AMHP) at MARAD in 2007 in order to reduce landside congestion through the designation of Marine Highway Routes. In 2012, Congress expanded the scope of the program to provide support for projects that generate public benefits by utilizing Marine Highway Routes. Though the AMHP has existed for over a decade and a number of projects have been designated as SSS routes, the system remains underutilized. The Consolidated Appropriations Act of 2019, signed by the President on February 15, 2019, provided \$7,000,000 for the AMHP to be used for Marine Highway Grants for the development and expansion of documented vessels, and port and landside infrastructure.

The AMHP currently includes 25 all-water Marine Highway Routes that serve as extensions to the surface transportation system.¹⁰ Routes are designated by the Secretary of Transportation because they can offer relief to traffic congestion on landside corridors, address excessive air emissions, or other environmental concerns and challenges, or provide new transportation options.

MARAD identifies specific SSS opportunities through the Office of Marine Highways. Every 6 months, MARAD reviews applications and designates new Marine Highway Projects. SSS operators can receive designation through the Office of Marine Highways if their proposal has the potential to offer public benefits and long-term sustainability without long-term Federal support. Once a project has been received designation as a Marine Highway Project, it receives preferential treatment for Marine Highway Grants or any future federal assistance from the DoT and MARAD.

MARAD released its last report on the AMHP in April 2011, where it summarized the motivations behind the Program and federal support required to capture environmental, economic, and security benefits of the Program in addition to steps for implementation.¹¹ The program can work in conjunction with other MARAD grants to improve port and terminal intermodal infrastructure, as well as in collaboration with the Environmental Protection Agency's SmartWay and Clean Ports initiatives.

While MARAD issued grants totaling \$7 million in 2010, the AMHP has not provided the investment, incentives, or assistance needed to jumpstart a robust SSS industry. In 2016 and 2017 the Program received \$5 million from Congress and another \$7 million in 2018.

¹⁰ See <https://www.maritime.dot.gov/grants/marine-highways/marine-highway>

¹¹ See <https://www.maritime.dot.gov/sites/marad.dot.gov/files/docs/intermodal-systems/marine-highways/3051/maradamhreporttocongress.pdf>. The report also includes recommendations for leveraging the program through paired grants.

WITNESS LIST

Panel I

Rear Admiral Mark H. Buzby, USN, Ret.

Administrator

Maritime Administration

Panel II

Mr. Jon Nass

Chief Executive Officer

Maine Port Authority

Mr. James Weakley

President

Lake Carriers' Association

Mr. Larry Willis

President

Transportation Trades Department, AFL-CIO