
Contribution of the Jones Act Shipping Industry to the US Economy

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Executive Summary

The US domestic waterborne commerce industry is governed at the federal level by the Jones Act (section 27 of the Merchant Marine Act of 1920), which among other things requires US domestic waterborne commerce to be carried on vessels that are built and registered in the United States. The Jones Act also requires such vessels to be predominantly owned and crewed by US citizens. Domestic waterborne commerce includes trade between ports in the US mainland, Hawaii, Alaska, Puerto Rico, and the outlying territories.¹ Under the Passenger Vessel Services Act of 1886, domestic passenger transportation is subject to similar requirements as freight transportation, and as such is included in this study of the economic impact of the Jones Act.

The Transportation Institute engaged PwC to quantify the economic impacts of the Jones Act shipping industry in terms of employment, labor income, output, and value added² for 2016, the most recent year for which a consistent set of data is available. In describing these impacts, this report considers three separate channels -- the direct impact, the indirect impact, and the induced impact -- that in aggregate provide a measure of the total economic impact of the Jones Act shipping industry.

- **Direct impacts** include the jobs, labor income, and value added *directly attributable* to the Jones Act shipping industry.
- **Indirect impacts** include the jobs, labor income, and value added occurring *throughout the supply chain* of the Jones Act shipping industry.
- **Induced impacts** include the jobs, labor income, and value added resulting from *household spending* of labor and proprietors' income earned either directly or indirectly from the Jones Act shipping industry's spending.

This report quantifies the industry's **operational impact** (due to purchases of intermediate inputs and payments of labor compensation and dividends) and **capital investment impact** (due to its investment in new structures and equipment) at the national level. Separate detail is also provided on the industry's operational impact at the state and congressional district levels.³ These economic impacts represent all of the backward linkages of the Jones Act shipping industry to its suppliers. They do not

¹ Shipments between Guam, American Samoa, and other domestic ports are not subject to the US-build requirement but still must comply with the US crew and US ownership requirements.

² Value added refers to the additional value created at a particular stage of production. It is a measure of the overall importance of an industry and represents the industry's portion of US gross domestic product ("GDP"). Value added consists of: employee compensation, proprietors' income, income to capital owners from property, and indirect business taxes (including excise taxes, property taxes, fees, licenses, and sales taxes paid by businesses). By comparison, output represents the total value of sales, which includes the cost of intermediate inputs.

³ The industry's *capital investment impact* is not quantified at the state or congressional district levels due to the non-availability of capital expenditure data at the state level.

capture any forward linkages (i.e., the economic impact on production in sectors that use domestic waterborne shipping as an input).

The primary objectives of the Jones Act cabotage provisions are to maintain a merchant marine fleet that can serve as an auxiliary to the military in times of national emergency, provide shipping services essential to maintain the flow of US waterborne commerce, and support the domestic shipbuilding and repairing industry.⁴

Military analysts have concluded that absent the Jones Act, commercial ship production in the United States would cease.⁵ Also, declines in the seafarer population would make it more difficult to fill the shore-based jobs that are required to keep ports and harbors operating efficiently. The crews hired by Jones Act vessels serve as a ready pool of labor and also a future resource, in terms of the source of future shore-based port operators.⁶

The Jones Act fleet also provides extra capacity and manpower that the military can call upon during deployments.⁷ Rather than maintaining a fleet of vessels that sits dormant until a period of deployment, the military can call on the Jones Act fleet on a temporary basis. For example, the SS Northern Lights, a Jones Act trailership, made 25 voyages and 49 port calls to the Iraqi war zone in the early 2000s.⁸ The Jones Act fleet and its crews can be drawn upon quickly to support US military operations.

The Jones Act fleet is subject to strict inspections and maintenance schedules under US environmental, safety, and other regulations. Foreign vessels must comply with US environmental, safety, and other regulations when in US territorial waters, but they are not subject to them once they enter international waters.⁹ As a result, most of their operations are not subject to US regulations. By contrast, Jones Act vessels operating on coastwise routes generally are continuously subject to US regulatory oversight.

The Jones Act fleet moves a variety of goods along the nation's internal waterways, across the Great Lakes, and over the oceans to Hawaii, Alaska, Puerto Rico, and US territories. In 2016, the most recent year for which data are available, 877 million tons of goods were moved between US ports, relieving congestion on the nation's roadways and railways. The Jones Act fleet moved a variety of products, from raw materials and commodities like coal and crude oil to finished consumer products.

In 2016, approximately 95,470 US jobs in the commercial shipbuilding and domestic waterborne transportation industries are estimated to be directly attributable to the Jones Act shipping industry. These jobs directly resulted in \$54.0 billion in US

⁴ As described in the objectives of the Jones Act, 46 U.S.C. section 50101.

⁵ Industrial College of the Armed Forces, National Defense University, *Shipbuilding 2014*, p. 23.

⁶ See S.J. Petit, et al., "Ex-Seafarers Shore-Based Employment: The Current UK Situation," *Maritime Policy* 29(6), November 2005.

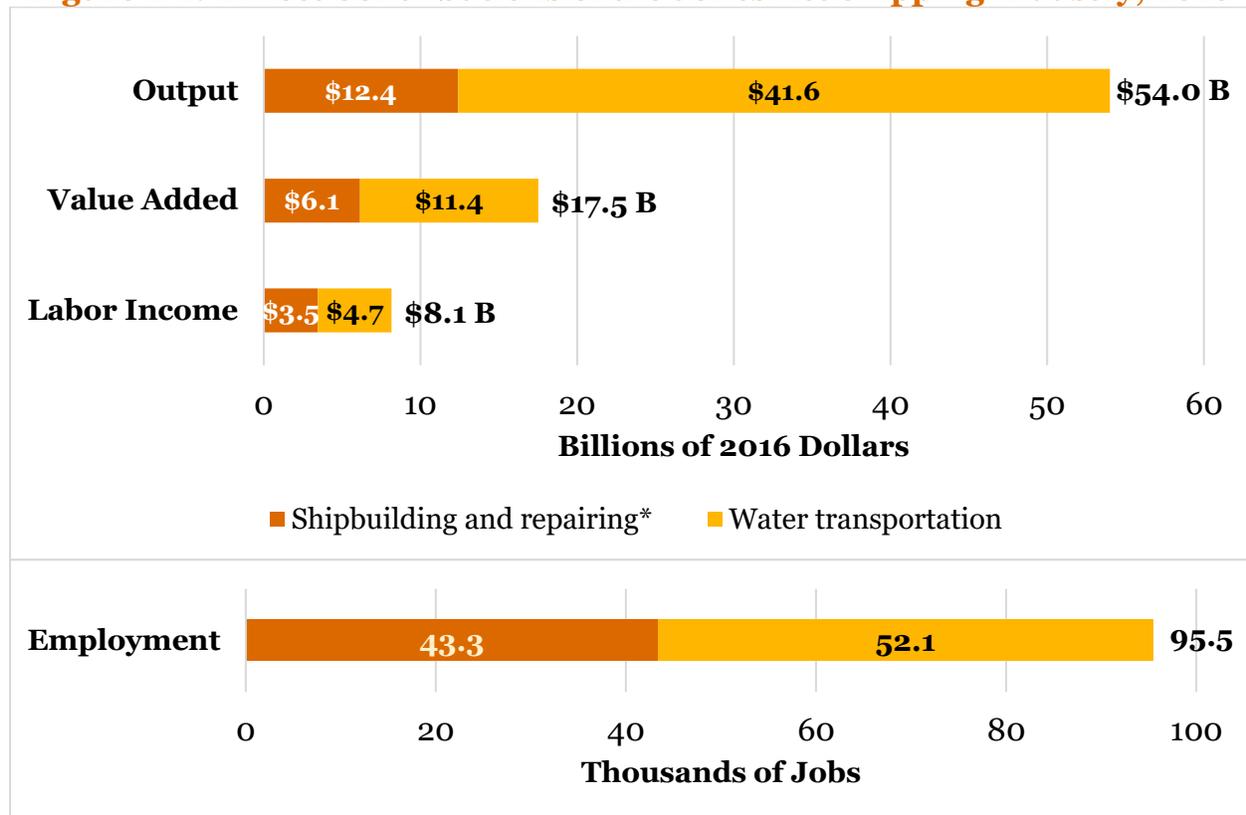
⁷ US Department of Commerce, "National Security Assessment of the US Shipbuilding and Repair Industry," May 2001, pp. 80-81. Also see David Goure, "The Contribution of the Jones Act to US Security," The Lexington Institute, October 2016, pg. 7.

⁸ General Norton Schwartz, quoted in "The History of the Maritime Industry," Transportation Institute, available at <https://transportationinstitute.org/know-our-industry/national-defense-role/history/>.

⁹ For example, see <https://www.epa.gov/beach-tech/laws-protect-our-oceans>.

economic output, \$8.1 billion in labor compensation (including wages and salaries and benefits as well as proprietors' income) and \$17.5 billion of value added (see **Figure E-1**). In addition, Jones Act businesses and their employees paid an estimated \$4.0 billion in taxes at the federal, state, and local levels.

Figure E-1. Direct Contributions of the Jones Act Shipping Industry, 2016



Source: PwC calculations.

*Includes routine maintenance and repair from floating drydocks.

In addition to the 95,470 direct jobs in the industry, the Jones Act shipping industry supported another 552,750 indirect and induced jobs in other sectors of the economy, or about 5.8 jobs for each direct job in the Jones Act shipping industry. In total, combining both **operational** and **capital investment** impacts, the Jones Act shipping industry directly or indirectly supported 648,220 jobs in 2016 (see **Table E-1**). Counting direct, indirect, and induced impacts, the industry's total impact on labor income (including proprietors' income) was \$41.6 billion. The Jones Act shipping industry's total impact on US GDP was \$72.4 billion in 2016.

Table E-1. Total Operational and Capital Investment Impacts of the Jones Act Shipping Industry on the US Economy, 2016

	Direct Impacts	Indirect and Induced Impacts		Total Impacts
		Operational Impacts	Capital Investment Impacts	
Employment*	95,470	530,180	22,570	648,220
Labor Income (\$ billions)**	\$8.1	\$32.2	\$1.3	\$41.6
Value Added (\$ billions)	\$17.5	\$52.8	\$2.1	\$72.4
Output (\$ billions)	\$54.0	\$96.7	\$4.1	\$154.8
Tax Impact (\$ billions)	\$4.0	\$12.4	\$0.5	\$16.8

Source: PwC calculations using the IMPLAN modeling system (2015 database).

Note: Details may not add to totals due to rounding.

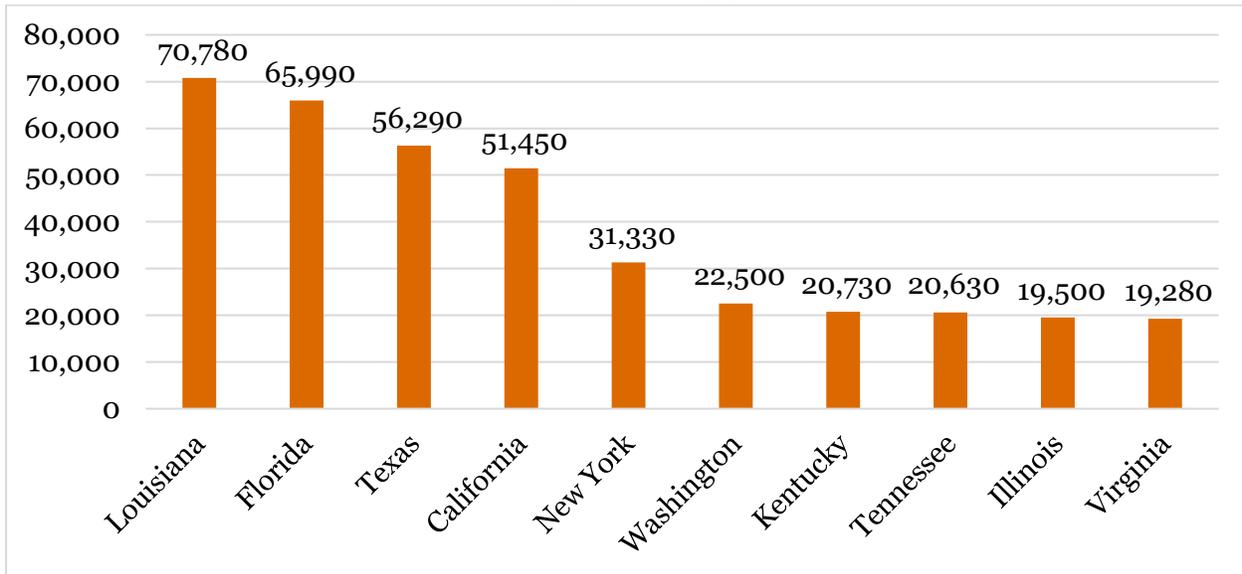
*Employment is defined as the number of payroll and self-employed jobs, including part time jobs.

**Labor income is defined as wages and salaries and benefits as well as proprietors' income.

In addition to the \$4.0 billion in federal, state, and local taxes directly paid, the industry supported an additional \$12.9 billion in taxes through its purchases of inputs and capital from suppliers and payments to labor. Including direct, indirect, and induced impacts, the Jones Act shipping industry supported a total of \$16.8 billion in taxes in 2016.

Although the Jones Act shipping industry is concentrated in coastal states and states with major inland waterways, the industry's total economic impact touches all 50 states and the District of Columbia. The total number of jobs directly or indirectly attributable to the Jones Act shipping industry's **operations** (i.e., not counting any capital investment impacts) were highest in Louisiana, Florida, Texas, California, New York, Washington, Kentucky, Tennessee, Illinois, and Virginia (see **Figure E-2**). These ten states accounted for 60 percent of all jobs attributable to the Jones Act shipping industry.

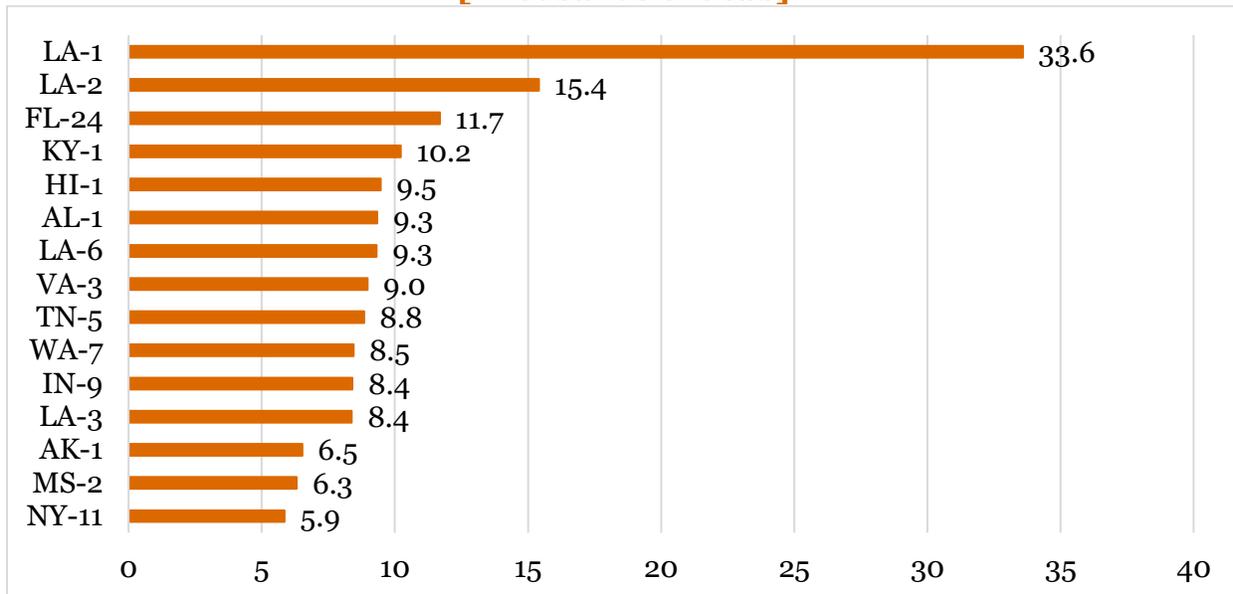
Figure E-2. States with the Most Jobs Attributable to the Jones Act Shipping Industry, 2016



Source: PwC calculations using the IMPLAN modeling system (2015 database).

Figure E-3, below, shows the 15 congressional districts in which the Jones Act shipping industry had the greatest total employment impact in 2016.

Figure E-3. Congressional Districts with the Most Jobs Attributable to the Jones Act Shipping Industry in 2016 [Thousands of Jobs]



Source: PwC calculations using the IMPLAN modeling system (2015 database).