



Ocean Economy Statistics

Marine Transportation Sector¹



HIGHLIGHTS (2018)

Marine Transportation is an important sector in the U.S. marine economy, accounting for **10% of its gross output in 2018²**. These figures measure the direct effects of marine transportation, but it should be noted that our nation's seaports move, freight that provides retailers, farmers, manufacturers, and others with access to international markets.

Gross Output

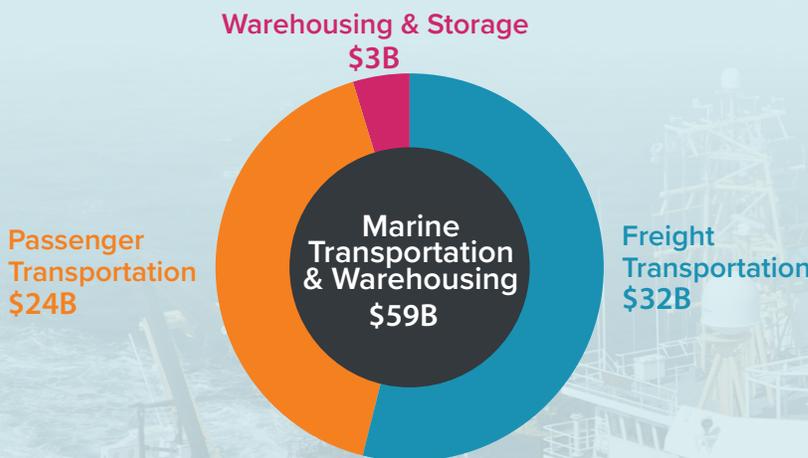
\$59 Billion

Value Added³

\$25 Billion

SECTOR OVERVIEW

Freight transportation is the largest component of this sector with gross output equal to \$32 billion in 2018, or 54% of the Marine Transportation sector's gross output. Freight transportation includes:



Warehousing associated with freight transportation accounts for another **\$3 billion** of production (4% of the Marine Transportation sector's gross output). This includes warehousing for farm products, refrigerated goods, general freight.

The final major component of this sector is passenger transportation with gross output equal to \$24 billion in 2018, or 42% of the Marine Transportation sector's gross output. This includes international and domestic passenger ferries and pleasure cruises.

TRENDS

This sector grew steadily from 2014 to 2018. **Gross output in 2018 was 17% higher than in 2014.** Passenger transportation accounted for the largest share of the growth, increasing by \$6 billion, or 32 percent. Freight transportation increased by \$2 billion over this period, but shows more year-to-year variability, declining by \$1 billion in 2016. The volume of freight transportation is affected by the domestic and international supply and demand for the products that are being shipped and thus, varies in response to a wide range of factors.⁵

Marine Transportation Sector Growth



WHAT NOAA IS DOING

Freight transportation and warehousing at U.S. seaports generate \$34 billion of gross output but the ripples of this activity extend far across the nation's economy, providing industries like agriculture, manufacturing, and retailers with access to international markets. Some specific ways NOAA supports our nation's marine transportation and warehousing sector include:

NOAA ENC® provides electronic navigational charts that are updated weekly to support all types of marine navigation, from commercial shipping to recreational boating. In addition to providing current information on navigation routes, ENC also provides real-time ship positioning, as well as collision and grounding avoidance features.

NOAA's Precision Marine Navigation tools integrate high-resolution information on channel depth with real-time and forecast data - such as winds, water levels, currents, salinity, temperature, and precipitation to provide mariners with the tailored information they need to make navigational decisions based on rapidly changing local conditions, increasing navigation safety and reducing costs.

NOAA's hydrographic survey program continuously monitors changes in the ocean floor, providing information about water depth, the shape of the sea floor and coastline, the location of possible obstructions, and other physical features of water bodies. These data provide the foundation for nautical charts and other products that are used to keep our marine transportation system functioning in a way that is safe, efficient, and environmentally sound, continuing a mission mandated by President Thomas Jefferson in 1807.

NOAA's Ship of Opportunity Program deploys and operates oceanographic instruments on cargo ships to collect data on ocean temperatures and salinity,

NOAA is **forming partnerships** with private cruise lines to conduct and share science. NOAA scientists will conduct research focused on changes in weather, climate, ecosystems and maritime heritage resources; guests will explore their destinations while also having the opportunity to engage with working scientists in the ship's laboratory or participate directly in citizen science programs.

NOAA PORTS® (Physical Oceanographic Real-Time System) is a decision support tool that improves the safety and efficiency of maritime commerce and coastal resource management through the integration of real-time environmental observations, forecasts and other geospatial information. PORTS® measures and disseminates observations and predictions of water levels, currents, salinity, and meteorological parameters (e.g., winds, atmospheric pressure, air and water temperatures) that mariners need to navigate safely.

NOAA's Marine Weather Services Program offers a broad range of marine forecast and warning products for the coastal waters along the mainland of the continental U.S., the Great Lakes and offshore and high seas waters of the North Atlantic and North Pacific Oceans. This program also produces specialized forecasts and other products that focus on tropical cyclones and sea ice.

¹ OESA results are presented in two ways: (1) with totals for the standard industry groups used by BEA to publish national statistics for gross domestic product and (2) with totals for activity groups that represent the major types of marine activity. The OESA tables use the term "Activity" instead of "Sector."

² Gross output is a measure of economic activity associated with the domestic production of goods and services including those that are sold both to final consumers and to other industries.

³ Value Added is the contribution that this sector makes to the nation's gross domestic product and reflects the value of gross output less the value of inputs used up in the production process.

⁴ Statistics for activities comprising freight transportation are not reported separately.

⁵ These values are not adjusted for inflation.