



Fact Sheet on the Marine Transportation System

MTS Components and Functions

The Marine Transportation System (MTS) is a highly integrated system that includes 1,000 harbor channels; 25,000 miles of inland, intercoastal, and coastal waterways; 360 deep and shallow draft ports; 1,914 cargo terminals; 460,000 miles of pipeline connections; 18,000 bridges; 238 lock chambers; and 97,000 aids to navigation. It also connects 152,000 miles of rail, and 45,000 miles of interstate highways.

The MTS annually serves 147 million ferry passengers, 18 million recreational boaters, and half of the worldwide cruise ship fleet carrying 10 million passengers. In 2006 it also employed more than 8 million Americans.

Shipbuilding and Water Transportation employ 161 thousand and 64 thousand workers, respectively.^{xiv} For vessel operations, Water Transportation employs 15 thousand sailors and marine oilers, 12 thousand captains, mates, and pilots of water vessels, and 7 thousand ship engineers.^{xv}

Approximately 53 percent of waterborne commerce (value) arrives at U.S. ports in containers.

For other facts about the MTS, please visit the MTS Data Inventory at <http://marapps.dot.gov/mts/index.jsp>.

MTS Highlights

- The U.S. MTS is complex, decentralized, and made up of an array of interdependent components, including navigable waterways, ports and harbors, as well as the connecting network of railroads, airports, transit, roadways and pipelines.
- MTS was critical to the start of our nation and today remains the backbone of the country's commerce—carrying 77.1% by weight and 44.2% by value of U.S. International merchandise.^{xvi}
- When compared with other transportation modes, marine transportation is a safe, competitive, efficient and environmentally sound means of moving people and cargo. Of note is that ships use only 10% to 20% of the energy required by trucks and a ship can move a ton of freight up to 500 miles on a gallon of fuel.^{xvii} Use of the MTS by ships also alleviates road maintenance, repair, and traffic congestion, all having environmental benefits.
- The MTS is a vital and integral part of our nation's ability to trade with the rest of the world. It also supplies daily the food and materials that American citizens expect to find at their supermarkets and shopping centers

Key MTS Facts	
Miles of coastline	12,380 ⁱ
Miles of commercially navigable channels	25,000 ⁱⁱ
Commercial ports that handle over one ton of cargo per year	294 ⁱⁱⁱ
Vessel calls at U.S. ports	63,804 ^{iv}
U.S. waterborne commerce moves	2.3 billion metric tons ^v
U.S. foreign waterborne commerce	1.4 billion metric tons ^{vi}
Passenger ferries carry	147 million passengers per year ^{vii}
Recreational boats in the U.S	17 million ^{viii}
Fishing vessels	110,000 ^{ix}
Jobs generated by recreational fishing	350,000 ^x
Cruise line passengers	10 million ^{xi}
Aids to Navigation	97,000 ^{xii}
Vessel Traffic Services	11 ^{xiii}

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- The MTS is vital to national security and military mobility as the MTS enables most American military power to move around the world by ship, providing logistical support for the rapid deployment of American forces and materials.

MTS Challenges:

Capacity

The MTS is at a crossroad, with segments of the system showing signs of strain, which as projected increases in cargo and passenger traffic will intensify.

The MTS physical infrastructure is fragile and at risk. Currently the nation's ports are operating at or near capacity; infrequently surveyed channel depths are often inadequate for today's modern container vessels resulting in depth-constrained vessel calls; and many inland waterway locks having exceeded their 50-year design lives or under-sized for the traffic using them.



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MTS capacity expansion in key cargo ports is critical for U.S. economic growth. The challenge is to find ways that ports can expand their operations within available land and financing constraints to better handle increased volume and accommodate growth.

Safety and Security

The expected increase of commercial and recreational vessel traffic and the operation of U.S. military vessel traffic will place burdens on waterway and port safety and security services, and raise the risk of accidents. In conjunction with international authority, state, local, industry, and other public partners, the Federal Government is responsible for insuring the safety and security of the MTS. In 2006, the United States Coast Guard responded to 28,316 cases of mariners in distress, and 1,765 collisions, allusions, and groundings. These resulted in the death of 59 professional mariners, 15 passengers, and 703 recreational boaters and many more injured.^{xviii}

Environmental Impacts

As waterborne trade increases, stresses to port proximate sensitive marine and freshwater environments will also increase.

There is a clear relationship between environmental protection and MTS efficiency and safety. Improving MTS efficiency and safety will reduce risks to the environment.

Resilience and Reliability

An overburdened system increases the possibility of disruption and delay of the MTS freight supply-chain. Furthermore, it decreases the systems ability to recover from disruptions and delays, potentially resulting in enormous losses to the U.S. economy. For example, the Congressional Budget Office estimates that a one week shut down of the container ports of Los Angeles and Long Beach may result in losses of \$9.3 million to \$21 million per day.^{xix}

Finance and Economics

With few exceptions, Federal expenditures for MTS infrastructure maintenance and improvements have been relatively flat for years, in real terms and as a share of Agency budgets.

For-Hire Water Transportation Services contributes \$9.9 billion in U.S. Gross Domestic Product (GDP).^{xx}

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For additional information about us, please visit the Committee on Marine Transportation System website at <http://www.cmts.gov>.

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Sources

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- ^{xv} Bureau of Labor Statistics, Occupational Employment Statistics, *May 2007 National Industry-Specific Occupational Employment and Wage Estimates*, Available at <http://www.bls.gov/oes/current/oesrci.htm> as of August 1, 2008.
- ^{xvi} U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, *Pocket Guide to Transportation, 2008*. Tables 5-5: Value of U.S.–International Merchandise Trade by Mode of Transportation: 2006 and 5-6: Weight of U.S.–International Merchandise Trade by Mode of Transportation: 2006. Available at http://www.bts.gov/publications/pocket_guide_to_transportation/2008/ as of September 15, 2008.
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