

**"AN ASSESSMENT OF THE U.S. MARINE TRANSPORTATION SYSTEM (MTS):
A REPORT TO CONGRESS, SEPTEMBER 1999"**

Cargo Operations ^[1]

The U.S. annually imports and exports more than 1 billion tons of freight through its ports and waterways. The billion tons of cargo move in a wide range of vessel types, extending from barges to meg-ships capable of carrying more than 6,000 TEUs (projected to reach 15,000).

To accommodate ^[2] these ships, ports need to provide channel depths of at least 50 feet, cranes that can fully extend over their width, highly efficient terminals and superior inland connections.

Vessel Types ^[3]

In the near term, the number of container ships is expected to continue to grow at a significantly higher rate (8 to 10%) than other vessel types. The growth increases as larger containerships are introduced into the mainstream East-West trades, and as containerships continue to replace the traditional breakbulk ships in world liner trades. Approximately 40% of the new capacity on order is containerships in the 4,500 TEU+ mega-ship category. Mega-container ships were first launched in 1996 and are a growing sector of the containership fleet.

Efficiency ^[4]

--is defined as optimizing the use of transportation equipment so as to minimize costs. The development of the mega ships was largely an efficiency measure to significantly reduce the cost per container.

Dredging and Channel Design ^[5]

Task Force members indicated that current channels and anchorages cannot safely accommodate the vessels and cargo throughput expected by 2020. Task Force members recognize that safety must be a key consideration in channel project design. Safety issues should be part of the cost/benefit analysis when channels are designed, including the establishment of safe channel widths and depths relative to anticipated ship sizes and maneuverability.