

PORT FACILITIES IN THE NY/NJ HARBOR ESTUARY

With relatively no strong currents or wave action and net mean tides less than five (5) feet, the NY/NJ Harbor Estuary provides a well protected area for ship entry and an ideal location for ports commerce. The Port of NY/NJ has over 240 miles of navigational channels and more than 50 marine terminals. It is the third largest port in the nation after the Port of Los Angeles and the Port of Long Beach, and the largest container port in the United States. Operations include container handling, cargo processing, warehousing and distribution.

The Port of NY/NJ has more cargo handling capacity than any other port on the east coast. Twenty-four hours a day ships are being loaded and unloaded (often simultaneously) at docks located within the Port's many marine terminals. The Port's terminals vary, each having been equipped to accommodate specific types of cargo. There are container terminals for unloading cargo shipped in containers and bulk cargo terminals for ships carrying loose cargo such as grain, gravel, or even cocoa. There are also general cargo terminals for cargo that is shipped on wooden pallets, fuel handling terminals for emptying or filling tanker ships, and other liquid handling terminals for products like orange juice. There is also an Auto Marine Terminal that is designed for special ships that carry automobiles and other vehicles. At this terminal, cars and trucks are delivered from foreign countries, processed and shipped off to car and truck dealers throughout the region.

Longshoremen and Longshorewomen work at these terminals. They operate the huge cranes that lift cargo off and on ships and into the terminal. Fork-lifts, tractors, and top loaders are also used for smaller loading and off-loading operations. All terminals have immediate access to the intermodal transportation system of railways and roadways that distribute cargo by train and truck to its final destination around the country. New Jersey and New York have one of the most extensive interstate highway systems in the region to accommodate the distribution of goods.

To ensure safe navigation into and out of the NY/NY Harbor Estuary, Harbor Pilots, an organization of NY/NJ Harbor navigation experts, help each ship's captain negotiate the Harbor's narrow entrance with its tough currents and shallow areas. Harbor Pilots are experts in navigating NY/NJ Harbor. Just prior to entrance to the Harbor, these pilots board each arriving ship from their own small boat. It is their job to then guide the ship through the Harbor's maze of channel markers or buoys to the proper dock. They also keep a look out for other ships, smaller boats and even wildlife. Tug boats are also used to maneuver large ships and barges into dock. All ships entering the Harbor are boarded by the Coast Guard for safety and security inspections.

Certain terminals are equipped with dry docks used to maintain and repair ships in need. Other terminals have warehousing facilities for storage, ensuring the security of the cargo until it can be transported out of the terminal. Many of these warehouses are temperature controlled for perishable or temperature sensitive products.

Marine Terminal Facilities located within the NY/NJ Harbor are the Port Newark/Elizabeth-Port Authority Marine Terminal complex (NJ), the Port Authority Auto Marine Terminal (NJ), Brooklyn Piers and Red Hook Container Terminal (NY) and New York Container Terminal (NY) these facilities handle most of the cargo and are many managed by the Port Authority of NY&NJ. In addition, there are private operators such as Global Marine Terminal, the City of New York's South Brooklyn Terminal, and a number of marine terminals operated by private oil companies along the southern New Jersey coastline to handle much of the liquid bulk crude oil imported. Many of the terminals in the Harbor are FTZ's (Foreign Trade Zones) where businesses do not have to pay duties (taxes) to U.S. customs on imported materials or products.

All terminals want ships to enter their berths and some of the terminals will compete for business. All terminals strive to provide the highest quality of safety and security to all cargo going out or coming into their terminal as efficiently as possible. Terminals perform computer generated calculations before the ship even enters the Port to plan on how to simultaneously load and unload the ship as quickly as possible. It is the goal of the shipping terminals to bring in a ship and have the ship ready to depart to its next port of call in the shortest time possible. When goods come in quickly and efficiently, shipping costs are kept low. Low costs not only benefits the owners of the terminal but also the consumers of the imported goods.