Many of the government wharves for which CMTA is responsible are located within public harbours and are used for commercial traffic including auto and truck ferries. Some major interprovincial federal ferry terminals are administered by the Canadian Surface Transportation Administration. Provincial governments administer intraprovincial ferry wharves.

Transport Canada is responsible for planning and providing adequate public port facilities to serve commercial interests and for improving or phasing out facilities in response to economic growth or changes in traffic patterns resulting from new industries, new types of ships and new developments in cargo handling. Specialized deep-water terminals for bulk commodities, particularly coal and oil, are also provided when needed under long-term full cost-recovery agreements with individual shippers. These often complement related development programs sponsored by the regional economic expansion department.

The department establishes and collects fees from users of port facilities, and all rates assessed by ports under federal jurisdiction are subject to departmental approval. Harbour dues, cargo rates, wharfage, berthage and other charges on goods and vessels are subject to some regional and local variation.

In addition to public facilities, there are extensive wharf and associated cargo handling facilities owned by private companies, usually for handling coal, iron ore, petroleum, grain and pulpwood.

The continuing trend to larger ships has resulted in increased investment in ports for facilities farther from shore, channel dredging, larger turning basins and more complex systems of aids to navigation and traffic control. Also, environmental considerations often require expensive terminal construction.

Increasing use of containers has brought significant changes in cargo routing and handling. Container ships travel at high speeds and port turnaround time is critical. Port facilities have to be more efficient and specialized; they include special ramps for roll-on roll-off vessels; large container cranes which can handle 20 or more 14-tonne containers an hour; special container packing facilities; large open storage areas for containers, automobiles, lumber and bulk products like coal; and rail and truck loading and unloading facilities.

15.4.3 The St. Lawrence Seaway

The St. Lawrence Seaway Authority, constituted as a corporation by act of Parliament in 1951, undertook the construction (and subsequent maintenance and operation) of Canadian facilities between Montreal and Lake Erie to allow navigation by vessels of 8.23 metres draft. At the same time, construction of similar facilities in the International Rapids section of the St. Lawrence River was undertaken by the Saint Lawrence Seaway Development Corporation of the United States. The seaway was opened to commercial traffic on April 1, 1959 and officially inaugurated on June 26, 1959. A portion of the third Welland Canal and the Canadian lock at Sault Ste Marie are also under the seaway authority's jurisdiction for operation and maintenance.

Seaway traffic. Tables 15.26 and 15.27 give combined traffic statistics for the St. Lawrence and Welland canals in 1975 and 1976. Duplicate transits are eliminated so that the figures show actual shipments through the St. Lawrence Seaway.

In 1976, 3,454 ships carrying about 28.5 million tonnes of cargo moved upbound through the seaway and 3,478 vessels carrying 36.6 million tonnes moved downbound. Ocean-going ships carried 20.4% of the total cargoes and lakers 79.6%. Of the total tonnage carried upbound in 1976, 23.3 million tonnes were domestic cargo, 5.2 million tonnes were foreign traffic; downbound, 28.5 million tonnes were domestic freight and 8.1 million tonnes were carried to and from foreign ports.

On the Montreal-Lake Ontario section, upbound traffic amounted to 26.2 million tonnes in 1976 and downbound traffic to 23.2 million tonnes, an increase of 13.2% over 1975. Almost 71.2% of the former was accounted for by iron ore shipped from St. Lawrence ports to Hamilton and Lake Erie and the downbound traffic consisted largely of overseas shipments of grain. There were 73 more upbound transits and 82 more downbound transits in 1976 than in 1975, indicating a slight increase in the number of