Value before accumulated depreciation of fixed assets administered by the board was \$648 million at December 31, 1978, decreased from \$665 million at December 31, 1975. These figures include expenditures for developing berthing and terminal facilities, grain elevators and harbour buildings and equipment. The net book value after deducting accumulated depreciation was \$363 million. During 1978, the board had capital expenditures of \$30.6 million. Included in this was \$6.7 million at Halifax, \$4.5 million at Saint John, \$8.1 million at Montreal, \$4.0 million at Churchill and \$2.4 million at Vancouver.

Canada's major multi-purpose harbours are administered by the National Harbours Board or by harbour commissions. The commissions are corporate federal bodies, operating semi-autonomously under the general supervision of the department. The harbour commissions which include municipal as well as federal appointees, are responsible for general administration, operations and maintenance, and for liaison with the department and with the provincial, regional and local interests they serve.

More than 300 public harbours are directly administered by CMTA. Most harbourmasters and wharfingers at these ports are fees-of-office employees appointed by the minister of transport.

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.

Transport Canada establishes and collects fees from users of port facilities. 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, for 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 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 such as coal; and facilities for loading and unloading mail cars and trucks.

## 15.4.3 Ferries

Ferries provide an important link between Canada's mainland and island areas. For constitutional and historical reasons, Transport Canada provides direct financial support to ferry and coastal shipping services in Eastern Canada and indirect support to a number of services in other regions.

In Eastern Canada, these services have been operated by Canadian National, with government subsidization. Increasing traffic in the early 1970s led to increasing deficit payments. To resolve this situation Transport Canada and CN agreed to establish a subsidiary corporation, CN Marine Inc., to handle the operations under a fixed-price