

and fishing vessels. A register ton is an internationally recognized measure used to indicate the capacity of space within the hull and the enclosed spaces above the deck of a vessel. For international shipping, fishing vessels and ships not engaged in trade are excluded from the tabulations.

Freight movement through large ports includes cargoes for or from foreign countries and cargoes loaded and unloaded in the coasting trade between Canadian ports. Table 13.20 presents data by province on these freight movements.

In 1985 there were 327.5 million tonnes loaded and unloaded at Canadian ports, compared with 342.8 million tonnes in 1984. Table 13.21 shows the principal commodities loaded and unloaded in international and coastwise shipping at 10 ports handling large cargo volumes in 1985. These ports handled 68.6% of Canada's international shipping and 40.3% of cargo loaded and unloaded in the coastwise shipping. The specific commodities shown are those transported in volume, mainly in bulk.

Many ports also have in-transit movement of vessels that pass through harbours without loading or unloading or move from one point to another within a harbour. Shipping statistics, which cover traffic in and out of both customs and non-customs ports, do not include freight in transit or freight moved from one point to another within the harbour.

### 13.5.3 Ports and harbours

Canada has 25 large deep-water ports and about 650 smaller ports and multi-purpose government wharves on the East and West Coasts, along the St. Lawrence Seaway and Great Lakes, in the Arctic and on inland lakes and rivers.

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 Department of Regional Industrial Expansion.

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.

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-ft (6.096 m) and 40-ft (12.192 m) containers of various heights; special container-packing facilities; large open storage areas for containers, automobiles, lumber and bulk products such as coal; and facilities for loading and unloading rail cars and trucks.

### 13.5.4 Ferries

Ferries provide links 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 are operated by CN Marine under a fixed price contract, with the government determining service levels and rates. The CN Marine services include North Sydney-Port-aux-Basques, North Sydney-Argentia, Tormentine-Borden, Digby-Saint John, Yarmouth-Bar Harbour (Maine), and the Newfoundland coastal service.

Other government-supported services in Eastern Canada include Wood Island-Caribou, Souris-Cap-aux-Meules, Montreal-Cornerbrook-St. John's and the Grand Manan ferry. The Newfoundland and Quebec governments also receive direct grants for small provincial ferry services.

On the West Coast ferries are operated by provincial Crown corporations such as British Columbia Ferry Corp. and private companies such as Canadian Pacific Ltd. Federal grants are provided to the province under arrangements similar to those with eastern provinces. The Swartz Bay-Tsawwassen ferry is subsidized as part of the Trans-Canada Highway.