Canada Limited operates a multi-purpose terminal to service their smelter operations. There are also many industry owned and operated marine facilities on the Great Lakes and other interior waterways required for Canadian and international movements of ores, coal, petroleum products, limestone and other bulk materials.

Administrative developments. The National Ports Council, an advisory body to the Marine Transportation Administration, met in March and October 1973 to discuss the views of federal and provincial governments, the National Harbours Board and the harbour commissions with respect to a form of administration for the major ports of Canada which would provide a large measure of local responsibility. Studies of submissions are continuing and a report is expected.

Shipping. The continuing trend to the use of larger ships has resulted in increased investment in ports to provide 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.

Deep-water oil terminals capable of handling tankers of 350,000 tons deadweight and larger, drawing 90 ft of water or more, operate at Port Hawkesbury, NS in the Strait of Canso, Mispec Point, NB near Saint John and at Come By Chance, Nfld. New proposals under intensive study include other sites on the Strait of Canso, Lorneville, NB and on the lower St. Lawrence River. New facilities at Sept Îles, Que. permit loading of ore carriers up to 250,000 tons.

Increasing use of containers brings significant changes in cargo routing and handling. Saint John, Halifax, Quebec, Montreal, Toronto, Vancouver and New Westminster have major container terminals. Both CP Rail and Canadian National operate fast container trains between these ports and inland centres in Canada and the United States.

Container ships travel at speeds up to 33 knots and port turnaround time is critical to the economics of operating them. 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 15-ton containers in 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. Increasing container storage space rather than handling or ship movement has become the critical factor.

## 15.4.3 The St. Lawrence Seaway

Events leading up to the beginning of the St. Lawrence Seaway project and the progress made during the years of its construction are covered in earlier editions of the *Canada Year Book*. The 1956 edition (pp 821-829) gives detailed information on Great Lakes–St. Lawrence waterway traffic immediately before construction began on the project and the *1960 Canada Year Book* (pp 851-860) relates the story of the Seaway during the second year of its operation. The first decade of Seaway development and operations is discussed in the 1969 edition (pp 841-845).

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 27-ft 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. With its opening, certain ancillary canals were transferred to the Seaway Authority's jurisdiction for operation and maintenance purposes. These include Lachine (closed in 1971), a section of the Cornwall Canal (closed in 1968), a portion of the third Welland Canal and the Canadian lock at Sault Ste Marie. Tolls are not assessed against vessel movements on these waterways and traffic data for them are not included in this Section. Major construction undertaken in 1967 on the channel to bypass the city of Welland was completed for the 1973 navigation season.

Seaway traffic. Tables 15.19 and 15.20 give combined traffic statistics for the St. Lawrence and Welland canals in 1972 and 1973. Duplicate transits are eliminated so that the figures show the actual movement of goods through the St. Lawrence Seaway.

In 1973, 4,160 ships carrying about 30.3 million tons of cargo moved upbound through the Seaway and 4,124 vessels carrying 44.9 million tons moved downbound. Ocean-going ships carried 23.9% of the total cargoes and lakers 76.1%. Of the total tonnage carried upbound