

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, and the Newfoundland coastal service.

Other government-supported services in Eastern Canada include Wood Island-Caribou, Souris-Cap-aux-Meules, Montréal-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.

Farther north the Northern Transportation Co. Ltd., a Crown corporation, operates marine transportation services on the Athabaska River and Mackenzie River, the Western Arctic Coast and in the Keewatin District of Hudson Bay.

13.5.5 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 Montréal and Lake Erie to allow navigation by vessels of 7.9 m draft. At the same time, construction of similar facilities was undertaken by the Saint Lawrence Seaway Development Corp. of the United States. The seaway was opened to commercial traffic in April 1959 and officially inaugurated in June 1959. Included in the seaway system and under the seaway authority's jurisdiction for operation and maintenance is the Welland Canal. In June 1984 the 25th anniversary of the opening of the seaway was marked at both Cornwall, Ont. and Massena, NY.

The seaway is the world's longest canal system measuring 3 769 km from the Atlantic Ocean to the western end of Lake Superior. A vessel rises 177 m as it moves from the lower St. Lawrence River to the lakehead. Nearly 100 m of that rise occurs as it bypasses Niagara Falls. This seaway enables an ocean-going ship to penetrate North America close to mid-continent.

During its first quarter-century, the seaway together with developments in water transport

changed the size and function of a number of ports on its waters. At St. Lawrence River ports such as Port-Cartier, Montréal and Québec City, grain is unloaded from lakers and loaded on other vessels for the Atlantic crossing. The port of Toronto has declined in importance. Thunder Bay is now Canada's third largest port. Much depends on a port's ability to handle wheat and other bulk cargo speedily and efficiently.

Seaway traffic. Table 13.23 provides a summary of traffic statistics for the Montréal-Lake Ontario and Welland Canal sections of the seaway for 1982, with percentage variations from 1981.

13.5.6 Canadian Coast Guard

The coast guard fleet includes icebreakers, aid and supply vessels, search and rescue vessels, specialized vessels for ship channel maintenance and submarine cable operations, and fixed-wing aircraft and helicopters.

Through its radio stations and other communications facilities linked to domestic telephone and telex lines, the coast guard provides 24-hour, ship-to-shore safety and commercial communications, and regularly scheduled weather and navigation information broadcasts to all vessels. In some areas, particularly busy harbours, this network is supplemented by local systems which monitor and direct ship movements.

On average, more than 1,700 ships a year receive icebreaker support either singly or in convoy or are routed through the ice. Since 1970, ports in the Gulf of St. Lawrence and as far inland as Montréal on the St. Lawrence River have been accessible throughout the year. During summer some icebreakers take part in the annual Arctic resupply operations. The icebreakers escort a fleet of government-chartered tankers and dry cargo vessels which deliver the bulk petroleum, building supplies, food, clothing, furniture and other products needed by the residents of remote settlements and military installations.

Other coast guard vessels are assigned to specialized operations. On the East Coast the *John Cabot*, a cable-laying and cable repair ship, supports transatlantic cable communications. Icebreakers are used for scientific projects as well as to assist commercial shipping. These are principally hydrographic and oceanographic projects for other government departments. During the summer of 1982 the *Sir William Alexander* undertook a detailed hydrographic survey of the eastern coast of Hudson Bay and the icebreaker *Labrador* continued a hydrographic program in the high Arctic, besides assisting shipping in Lancaster Sound as required. The *Camsell*, an icebreaker out of Victoria, BC assisted shipping in the Western Arctic, calling at DEW Line sites, inspecting tide gauge stations, and helping in the reactivation of the aids to navigation at Tuktoyaktuk.