smaller lead-zinc producers in British Columbia and Consolidated Mining and Smelting treats concentrates from most of these properties, as well as some Yukon Territory and foreign concentrates, at its Trail smelter.

Most of Saskatchewan's output of zinc came from the large base-metal mine at Flin Flon operated by Hudson Bay Mining and Smelting Co., Limited. This mine, which straddles the Saskatchewan-Manitoba boundary, was also the source of most of Manitoba's zinc and some of its lead. Hudson Bay also operated the Schist Lake and Coronation mines near Flin Flon, and the Chisel Lake and Stall Lake mines at Snow Lake, 90 miles east of Flin Flon. The Stall Lake mine was brought into production in February 1964. The ore from all company mines plus a relatively small amount of custom ore was treated at the Flin Flon metallurgical works for the recovery of zinc, copper and by-product metals.

In Ontario, Noranda Mines Limited (Geco Division) and Willroy Mines Limited, both at Manitouwadge, produced zinc, lead and copper concentrates; Kam-Kotia Porcupine Mines Limited at Timmins produced mainly copper concentrates and also a small tonnage of zinc concentrates. At Port Maitland on Lake Erie, zinc concentrates from Ontario and Quebec mines were roasted by Sherbrooke Metallurgical Company Limited and the resulting calcine was shipped to the United States for final treatment by Matthiessen & Hegeler Zinc Company, the owner of the Port Maitland plant.

Quebec's lead production was small in 1964 but its zinc output rose from 75,084 tons in 1963 to 228,580 tons in 1964. Production of zinc from the new Matagami Lake camp totalled 188,000 tons. A new producer in the Noranda district, Lake Dufault Mines Limited, came into operation in August 1964 and produced about 6,000 tons of contained zinc from copper-zinc ores. Other mines in Quebec were the Normetal (copper-zinc), Quemont (copper-zinc), Manitou-Barvue (copper-zinc-lead) and East Sullivan (copper-zinc), all in the Noranda-Val d'Or area; New Calumet (zinc-lead) at Calumet Island on the Ottawa River; Coniagas (lead-zinc-silver) at Bachelor Lake; and Solbec (copper-zinc-lead) in the Sherbrooke district.

New Brunswick's production rose substantially with the opening in March of the Brunswick No. 12 mine near Bathurst, which produced about 65,000 tons of zinc and 25,000 tons of lead during 1964. Brunswick Mining and Smelting Corporation Limited, which owns the mine, continued construction of a zinc-lead blast-furnace at Belledune Point, 25 miles north of Bathurst, where part of the output of the No. 12 mine will be smelted; the remainder will continue to be shipped to European smelters. Heath Steele Mines Limited near Newcastle, N.B., produced copper, lead and zinc concentrates. Nova Scotia's only lead-zinc producer is Magnet Cove Barium Corporation, at Walton. In Newfoundland regular lead-zinc-copper production continued at the Buchans mine of American Smelting and Refining Company. Consolidated Rambler Mines Limited opened a copper-zinc mine near Baie Verte in September, operating a 500-ton mill.

The highlight of exploration in 1964 was the discovery, announced in April, of a zinc-copper-silver deposit near Timmins, Ont. After preliminary drilling, Texas Gulf Sulphur Company indicated the reserve was 55,000,000 tons averaging 7.08 p.c. zinc, 1.33 p.c. copper and 4.85 oz. silver per ton, which it later confirmed. There was increased exploration at Pine Point in the Northwest Territories where the Great Slave Lake railway from Roma in Alberta to Hay River and Pine Point was opened for limited operation late in 1964. Test shipments of lead-zinc ore from the mine at Pine Point were made. Western Mines Limited continued development of a zinc-lead-copper deposit on Vancouver Island. Hudson Bay Mining and Smelting Co., Limited carried out exploration and development in the Snow Lake district of Manitoba, and Sherritt Gordon Nickel Mines Limited continued exploration of a copper-zinc deposit at Fox Lake in northern Manitoba. In Quebec, mine development proceeded in the Poirier-Joutel district north of Amos. Preparations were begun in New Brunswick for bringing the Brunswick No. 6 mine, the New Larder "U" mine, and the Nigadoo mine into production.