**URBANISM AND IRON MINING IN LABRADOR**

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Areas rich in minerals are important for what they provide to the world, but they come with critical settlement challenges. Workers come and go, responding to changes in supply and demand, price and availability, and new technologies. The communities that grow up to house them feel these shifts as challenges. They need to accommodate not just the workers as miners, but provide for their families and develop into freestanding communities. To understand how this works, we can look at Canada’s Labrador Trough, an iron-mining region in the provinces of Labrador and Quebec.

HISTORICAL BACKGROUND

On the western edge of Labrador, along the Quebec border, in the taiga forests of the subarctic, lie the richest deposits of iron ore in North America. At the core of this mining district is the urban complex of Labrador City, founded in 1961 by the Iron Ore Company Canada (IOC)([www.ironore.ca](http://www.ironore.ca). 2019). With a metropolitan population of some 12,000, and its satellite suburbs of adjacent Wabush, Labrador, and Fermont in Quebec, Labrador City serves as the economic and cultural center of Western Labrador astride the newly completed Trans-Labrador Highway, Route 500 to Goose Bay and Cartwright on the eastern shore of Labrador. (Figure 1).

The vast expanse of western Labrador and northern Quebec has been largely vacant territory from the earliest explorations in the 16th and 17th centuries, occupied primarily byu the First Nations of Ungarva in small settlements thinly scattered across the area. While the coastal shores of Labrador had been known to Basque fishermen in the late 15th century, and shores of Hudson Bay charted by the English in the 17th century, the interior remained unknown to both the French in Quebec and the English of Newfoundland. Only in the 19th century was there any effort by missionaries and government surveyors to chart the interior tracts. In part, the ignorance resulted from the confusion of territorial claim by Quebec and Newfoundland after the Confederation of Canada in 1867. Northern Quebec province (Nord de Quebec) from Hudson Bay east was declared as the District of Ungava in 1895 including part of British Labrador, while Newfoundland, then a Dominion of Britain, claimed all the territory from coastal Labrador west to the headwaters of Atlantic rivers. The debate between Quebec and Newfoundland was not settled until 1927 with the arbitration of the British Privy Council that ruled in favor of Newfoundland for the headwaters of Atlantic coastal streams in Labrador (White 1914, Dorion 1991). While Quebec still claimed interior territory, the contention was not fully resolved until 1949 when Newfoundland and Labrador became a province of Canada (Wikipedia “Labrador” 2018). The result was a sinuous boundary line between Quebec and Labrador running through the metropolitan area of Labrador City and the iron-mining district.

The exploration of mining prospects in this First Nations area of the Canadian Shield of Labrador and Quebec began only in the mid-19th century with reports by French missionaries from Sépt-Iles, a fishing village on the north bank (Cote du Nord) of the St. Lawrence River. In 1866, Father Louis Babel reported “abundant en fer” (abundant iron) in his explorations of the interior. Later, in 1892-1895, A.P. Low working for the Geological Survey of Canada mapped the outlines of the “Labrador Trough” of iron rich ore along the Quebec-Labrador border (Bergeron 1965; Geren and McCullough 1990; Neal 2000). The iron belt extends (1000 mi/1600km) from the northern Ungava Peninsula in Quebec, through western Labrador to east-central Quebec in a sedimentary syncline of metamorphic-volcanic rocks of Proterozoic age (1.8my), one of the largest known reserves of high-grade iron ore in the world (Bergeron 1965).

Knowledge of the rich iron ore in Labrador and Quebec became critical after the Second World War with the exhaustion of the Mesabi Iron Range in Minnesota (Geren and McCullough 1990). At this point, attention turned to the potential of mining the ores of the Labrador Trough. Beginning in 1945 a consortium of American and Canadian steel companies formed the Iron Ore Company of Canada (IOC) in 1949 to explore and mark claims for open pit mining in Labrador and Quebec (Geren and McCullough 1990). The decision was made to build a railroad, the Quebec North Shore & Labrador Railway (QNS&L) north from the St. Lawrence port of Sépt-Iles (359mi/573km) to the new town of Shefferville on the Quebec-Labrador border. Construction started in 1950 and was completed to Shefferville in 1954 to transport the iron concentrate. It was the first such long distance mining railway built in North America since the 19th century (Smith and Greenwood 1960). Shefferville remained an active mining center through the 1970s with a population of 5,000 until 1982 when operations ceased and the town was dismantled (Wikipedia “Shefferville” 2018).

PLANNING THE MINING COMMUNITIES

Once established in 1950, the IOC surveyed other tracts in the Labrador Trough some 257 miles (441km) north of Sépt-Iles. Among the most promising was the Wabash and Carol Lake areas, some 36 miles (58km) west of the QNS&L railway, named Labrador West (L’Ouest du Labrador), the eventual site of Labrador City. (https://labradorwest.com. 2018). The connecting Wabush Railway was opened in 1960 with two town sites, at Wabush and Carol Lake, renamed Labrador City by Newfoundland Premier Minister Joseph Smallwood in June 1961 (Geren and McCullough 1990). The City town site was carefully planned by the Ottawa firm of Dineen, with curvilinear streets, beside Little Wabush Lake, preserving tracts of taiga woodland between street blocks. The IOC managed the housing sales and mortgage rates and established a town council in 1964. As part attracting settlers, they opened schools overseen by Newfoundland administrators by 1960; a hospital; and a Roman Catholic parish in 1962, along with Anglican and Protestant congregations (Figure 2). The neighboring town of Wabush was established in 1962 with a regional airport and a community plan on a sloping hillside by the planning firm from the Montreal Expo in 1967 (Geren and McCullough 1990).

At the same time that Labrador City was constructed, a second mining complex was located in Quebec at the southern end of the Trough at Lac Jeannine with the newly planned town of Gagnon under the auspices of The Quebec Mining Company (QMC) financed by U.S. Steel and Canadian investors. A special mining railroad, Chemin de Fer du Cartier (CFC), was built in 1960, 190 miles (306km) north from Shelter Bay, renamed Port Cartier, on the St. Lawrence River with the first iron ore shipped in 1961 (Wikipedia “Railways in Labrador” 2017). Like Labrador City, Gagnon was planned with schools, a hospital and churches. It reached a population of some 4,000 by the early 1970s as a French speaking settlement (Wikipedia “Gagnon, Quebec” 2018). However, like Shefferville to the north, the mining ore was exhausted by the late 1970s and the town of Gagnon Ville was completely dismantled in 1985. Instead, the QMC opened a new iron mine at Mont Wright and in 1972 the CFC extended its rail line 86 miles (138km) north, with the new town of Fermont (Iron Mountain) in 1974 some 15 miles (23km) from Labrador City. As with Gagnon, Fermont was settled as a French-speaking community with the town designed after the Swedish mining center of Svappavaara in modern concrete style (Figure 3) (Wikipedia “Fermont” 2018).

Further development of the Labrador Trough occurred in 1981 with the open pit mine at Fire Lake, north of Gagnon, on the Cartier Railway (Wikipedia “Fire Lake” 2018). At Labrador City an expansion of the Carol Lake mine by the IOC continued through the 1990s with the construction of the Carol Lake Railway, an automated electric line some 8 miles (13km) north of the original site. It is now owned by Rio Tinto, an Australian mining company (Wikipedia “Carol Lake” 2018). Recently, the most extensive mining development has been located at Lac Bloom (Bloom Lake) near the Mont Wright complex in 2006. A new railroad extension of the Wabush Railway was opened in 2010, 22 miles (36km) west of Labrador City across the border in Quebec by Quebec Iron Ore, Inc. (Figure 4). It was recently purchased by Champion Iron Limited (Iron Ore: Bloom Lake. 2018). Also of recent development is the reopening of mining operations at Shefferville with several new sites, although the town remains a skeleton of the original plan. To accommodate the First Nations native population, the QNS&L established a passenger operation in 2005 under the name of Tshiuetin Rail Transportation with direct service to Sépt-Iles (Wikipedia “Railways in Labrador” 2018).

URBAN CONTEXT-URBAN LINKS

Despite the ups and downs of iron mining, Labrador City looks much as it did right after its initial founding in 1961. The civic center is located within the eastern plan of the site along Hudson Drive with the Town Office, Central Fire Station, Public Library and Labrador West Arts Center, all in single story buildings, with the Basilica of Our Lady of Perpetual Help on the crest of the hill. The original residential district surrounding the civic center remains stylistically intact with single story American type ranch houses on suburban lots (Figure 5). The original retail district was developed along Avalon Drive with the Carol Lake Shopping Center, a two-story brick complex of professional offices and stores. Beyond this central axis, the outer residential district was developed with two story row houses down to Tamarack Drive along Little Wabash Lake (Town of Labrador City Street Map 2018). In the far western district, a street grid was developed for mobile homes along Bartlett Drive as the Harris Lake trailer park (Figure 6). In recent years, residential building has expanded to multi-storied apartment blocks along the Circular Road on the western edge of town (Figure 7).

The initial connector to neighboring Wabush was built as Route 503 on the eastern edge of the town plat with an industrial district for the QNS&L railway and IOC headquarters of the Carol Lake Project. The Route 503 bypass developed as a retail strip along Avalon Drive with franchise restaurants such as McDonald’s, various motels, gas stations and auto dealerships (Figure 8). The main Jackman Memorial Hospital, the Royal Newfoundland Constabulary, and the Labrador City Arena (Hockey and Curling) were all set on the eastern edge of Booth Avenue with access to Route 503.

With the opening of the Mont Wright mine and the establishment of Fermont across the Labrador border in Quebec in 1973, an interregional road network was extended west as the Trans-Labrador Highway (Route 500) in a beltway loop around the north side of Labrador City, and in 1992 extended east to Goose Bay (Brown 2018). The Quebec link to Mont Wright and south to Fire Lake and Gagnon along the Cartier Railway was opened in 1986 as Route 389, unpaved, but connected to the Daniel Johnson hydroelectric dam at Manic-Cinq and paved south to Baie Comeau on the St. Lawrence River. Route 389 thus provides a vital overland highway connection between Quebec Province and Labrador City. Once established, Route 500 became the locational axis for the expansion of retail and institutional sites, including the Gateway Centre tourist office. The most important was the building of the Labrador Mall in 1978 with a Hudson Bay Company store (now Walmart), Canadian Tire, and a Tim Horton’s restaurant (Dupré 2018). More recently the Labrador West campus of the College of the North Atlantic in 2011 and the new Labrador West Health Centre (Compass 2017) have built large complexes along the highway.

With the long winter season from September to June, the primary recreational activities in Labrador City are snow sports. A well-developed ski resort is located at Smokey Mountain near the Carol Lakes mines north of town. A variety of off-track road trails parallel the major highways and extend beyond Labrador City to Goose Bay by the White Wolf Snowmobile Club along Route 500 ([www.white-wolf.net](http://www.white-wolf.net) 2018). For the short summer months of July and August the Tamarack Golf Club is located off Route 500 at Long Lake and a recreational vehicle camp has been established at nearly Duley Lake some 7 miles (10km) west on Route 500 from Labrador City. There is also an Interfaith Cemetery located off the highway (Brown 2018). Within the town, summer recreation is provided at Tanya Lake with a swimming beach and youth activities (Town of Labrador City 2018).

The metropolitan complex of Labrador City, with adjacent Wabush and Fermont, Quebec has fluctuated in population with the economic success of the adjacent iron mining operations, from a maximum of some 22,000 in the 1970s to its present size of about 12,000 (Wikipedia “Labrador City” 2018). The urban area is unique for its divided cultural identity, the Labrador West portion speaking English within the greater province of Newfoundland, while the Quebec portion speaks French in Fermont, and the mining operations at Mont Wright and Lac Bloom. In addition, the area is divided by time zones, with Labrador City and Wabush in Atlantic Time (with Nova Scotia) and Quebec Province in Eastern Standard Time with Montreal. Thus, crossing the Labrador-Quebec border on Route 500/389 involves a change of hours and shift of languages within a short distance (Figure 9). In addition to the English/French cultural division, there has been a recent influx of Filipino migration in the service sector of franchise restaurants and motels that matches with the existing Catholic population (Shaw 2018). There is also a presence of strip bars and nightclubs that serve the predominantly male culture of the transient mining operations (Wikipedia “Fermont” 2018).

FUTURE PROSPECT

Future development of the Labrador City metropolitan area is dependent on continued expansion of mining operations in the Labrador Trough. The fluctuations of iron ore prices on the world market has both closed and opened new iron ore sites both in Labrador and Quebec. At present three active open pit mines are in operation: Carol Lake by Rito Tinto adjacent to Labrador City; Mont Wright by ArcelorMittal near Fermont, Quebec; and Lac Bloom, Quebec by Champion Iron Ltd., also near Fermont. Though quite distant from Labrador City, operations at Shefferville, Quebec have also been reopened in recent years, and there is speculation that the mine at Fire Lake, Quebec might also be reactivated in the near future (Jamasmie 2014). Thus, the prospect for continued economic viability of the Labrador City area remains positive for the near future as the opening of the Labrador West Medical Centre and College of the North Atlantic indicates. Moreover the expansion of the regional highway network, the paving of the Trans-Labrador Highway-Route 500, east to Goose Bay and the coast of Labrador, and the improvement of Quebec Route 389 south to Baie Comeau and Quebec City, will certainly ensure greater integration into the Canadian economy, keeping the Labrador City area viable as the economic and cultural core of western Labrador and northern Quebec.

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FIGURES

Fig. 1 - Regional map of Labrador City, Labrador-Quebec, showing iron mining railways, iron mining sites, regional highways and shipping ports on St. Lawrence River. Cartography Eliza McClennen.

Fig. 2 - Area map of Labrador City, Labrador-Quebec, showing major civic and commercial sites, recreational areas, and local mining operations. Cartography Eliza McClennen.

Fig. 3 - Fermont, Quebec. Municipal Fire Station in modern Swedish concrete style. Photo by author 2018.

Fig. 4 – Route 500 crossing of the Lake Bloom Railroad (2010). Photo by author 2018.

Fig. 5 – Labrador City, Labrador. Suburban ranch house in original town plat. Photo by author 2018.

Fig. 6 – Labrador City, Labrador. Mobile home in Harris Lake trailer park. Photo by author 2018.

Fig. 7 – Labrador City, Labrador. Recent apartment block on Circular Road. Photo by author 2018.

Fig. 8 – Labrador City, Labrador. McDonald’s franchise at Route 500. Photo by author 2018.

Fig. 9 – Labrador-Quebec provincial boundary, Labrador Route 500 and Quebec Route 389. Photo by author 2018.