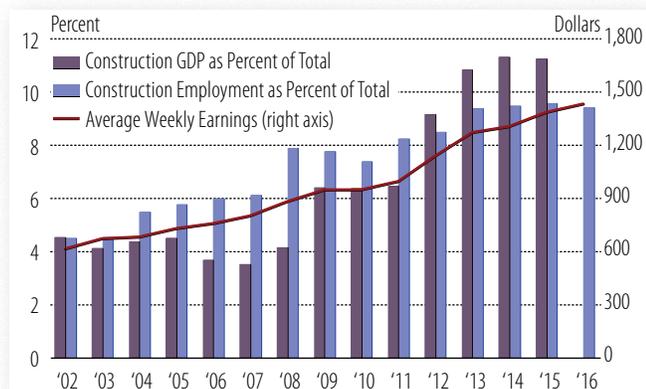


Construction

Since the beginning of the millennium, the province's construction industry has accounted for an increasing share of economic activity

Construction Industry Indicators



Source: Statistics Canada; Department of Finance

(see chart). The industry accounted for 11.3% of provincial GDP in 2015 and 9.4% of total provincial employment in 2016. Activity in the construction industry remained robust in 2016, driven by high levels of investment expenditures on several major projects including the Hebron oil development, the Muskrat Falls hydroelectric development (see discussion on next page) and Vale's nickel processing facility in Long Harbour.

Investment Expenditures

Construction activity is generated by two types of spending: non-residential spending (e.g. mine development, hospitals) and residential investment (e.g. construction of new homes, renovations of existing homes).

Muskrat Falls Project

One of the most significant construction projects in the province in 2016 was the Muskrat Falls development. The project includes construction of an 824 megawatt hydroelectric generating facility and more than 1,600 kilometres (km) of transmission lines across the province (including subsea transmission connecting Labrador to the island), being developed by Nalcor Energy. The project also includes transmission lines connecting Newfoundland and Nova Scotia (the Maritime Link) which is being constructed by Emera. The Maritime Link is expected to be completed in late 2017.

Construction on all components of the project being developed by Nalcor advanced significantly in 2016. Work continued in many areas of the province from Churchill Falls, Labrador to the Avalon Peninsula, near St. John's. Approximately two-thirds of total project construction was complete at the end of the year.

At the Muskrat Falls hydroelectric site in Labrador, progress was made on concrete placement for the powerhouse and intake structures. Mid-year, the spillway gates were successfully raised, opening the spillway and redirecting the flow of the lower Churchill River at Muskrat Falls for the first time. Advancements were also made on the construction of the temporary cofferdam and the North Spur dam.

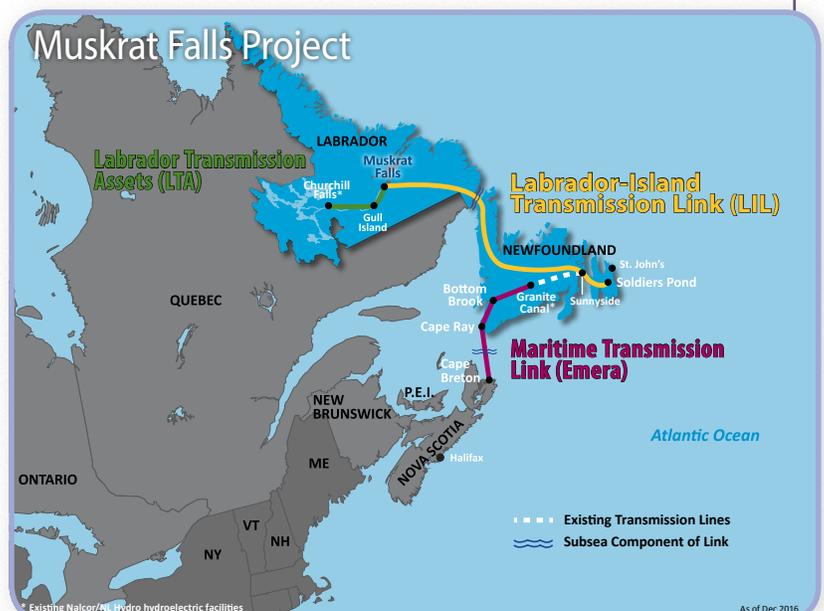
By the end of 2016, 100% of the transmission towers were installed and wire stringing was fully completed on the transmission line between Churchill Falls and Muskrat Falls. Construction on the 1,100 km Labrador-Island Link—connecting Muskrat Falls to Soldiers Pond— was roughly 91% complete in Labrador and 48% on the island. Work also progressed on the switchyards, converters and synchronous condensers for the Labrador and island portions of the transmission projects.

Another major milestone reached in 2016 was the completion of the subsea cable installation which will connect the Labrador and island power grids. All three cables for the Strait of Belle Isle marine cable crossing have been laid on the seafloor of the Straits and protective rock berms installed. This marks the first-ever connection between Labrador and the island.

Construction on the Muskrat Falls Project is generating significant benefits for businesses and labour in Newfoundland and Labrador. It is estimated that approximately \$12 million is spent in the provincial economy every week by the project. In 2016, project employment peaked in September with 5,990 persons working in the province, of which 4,970 (83%) were residents of Newfoundland and Labrador.

Total project construction cost is estimated at \$9.4 billion, with \$6.1 billion spent as of December 31, 2016. Major construction activities in 2017 for the generation project include the start of the main dam, continued concrete placement in the powerhouse and intake and the start of installation of the turbines and generators. For the transmission projects, work will continue on the erection of transmission towers and line stringing, as well as continued work on the installation of the electrical equipment required at the Muskrat Falls and Soldiers Pond sites. Construction of the transmission infrastructure is expected to be completed in mid-2018 and first power generation is expected in summer 2019.

Completion of the Muskrat Falls Project will mean long-term, clean, renewable power (98% sustainable energy) and a link to North America's electricity grid to allow for the sale of excess power to markets.



Construction-Related Investment



e: estimate; f: forecast
Source: Statistics Canada; Department of Finance

Non-residential construction-related expenditures totalled \$7.6 billion in 2016, down 8.0% from 2015 but remained high in a historical context (see chart). The majority of these expenditures were attributable to the mining/oil and gas and utilities industries which accounted for 43% and 32% of total non-residential construction in 2016 respectively. Investment in the oil and gas industry included both the expansion of the Hibernia South Extension project and construction related to the development of the Hebron project. Investment in the utilities industry primarily reflects work on the Muskrat Falls Project.

Investment in residential construction declined by 9.6% to \$1.3 billion in 2016. Expenditures decreased for both renovations (-4.9%) and new dwellings (-16.1%). The decrease in expenditures for new dwellings is consistent with fewer housing starts (see *Real Estate*).

Employment and Wages

Construction employment and wages have more than doubled over the past 15 years and remain at very high levels. Despite a 3.1% decline in 2016, employment in the construction industry was still the fourth highest level on record. In 2016, construction industry employment averaged 21,900,

down 700 relative to 2015 and only moderately lower than the historical peak of 22,800 set in 2013.

The surge in labour demand over the past decade has translated into rapid wage growth in the construction industry. In 2016, average weekly wages (including overtime) in the industry were \$1,432, in comparison to \$762 in 2006, representing an annual average increase of 6.5% over this period. Among provinces, only Alberta recorded a higher average weekly wage than Newfoundland and Labrador in 2016.

Ongoing major project development, public sector infrastructure spending and a number of new commercial and industrial projects have been the primary drivers of the recent historically high levels of construction activity in Newfoundland and Labrador.

2017 OUTLOOK

- Construction activity is expected to decline, but remain high in a historical context.
- Capital spending and employment levels related to major projects are expected to decrease due to reduced construction spending on the Hebron project and the Long Harbour nickel processing facility.
- Total construction-related capital spending is expected to decrease by 6.4% to \$8.5 billion.
- In March 2017, the Province announced a five-year, \$3 billion plan for new and existing public infrastructure (e.g. schools, roads, healthcare facilities). Approximately \$570 million is expected to be spent during fiscal year 2017/18.
- \$35.7 billion in project spending is planned or underway in the province according to the *Inventory of Major Capital Projects* (see page 57).