Labour Market Study

Update to the 2020 NLG — MAEST Labour Market Study

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1.0 Introduction

This report is an update to the 2020 NLG — MAEST Labour Market Study, Section 2.0. More specifically, this report seeks to understand labour market conditions in the Nass Valley and broader North Coast region in Q4 2020, and into Q1 2021. Due to data availability, we focus on a comparative analysis between the North Coast and Nechako economic region, the Northeast region, and British Columbia. The North Coast and Nechako region serves as a proxy for the Nisga'a Nation and Nass Valley.

Since the release of the 2020 study in early March 2020, the COVID-19 pandemic has spread across the world, Canada, and British Columbia (BC). As a response, federal, provincial, and First Nation governments have implemented public health measures that include lockdowns and restrictions on economic activity across sectors and industries. The pandemic has raged concurrently to the construction phase of the LNG Canada (LNGC) and Coastal GasLink (CGL) projects. These projects, approved in 2018, are anticipated to have unprecedented impacts on the labour market in the North Coast region. To date, it is still unclear how COVID-19 has and continues to impact construction and employment demand.

Labour market trends in the North Coast and Nechako economic region provide some indication that COVID-19 has not entirely offset LNGC and CGL's promise of employment for local populations. Forecasted aggregate labour demand for peak construction of LNGC and CGL is highest in NOC category 7 (trades, transport and equipment operators), which saw a net increase of 3,600 jobs in the North Coast and Nechako economic region between June and December 2020.

2.0 COVID-19 Impacts: LNG Canada & Costal Gas Link

During Q1 2020, LNGC reported¹ employing 1,520 non-resident project personnel working on rotational schedules, as well as 640 workers from local communities. Due to the effects of province-wide COVID-19 restrictions, "the original planned ramp up of the workforce in the first half of 2020 did not take place and a reduced number of workers were present at site for much of 2020 Q2." As these restrictions eased during Q3 2020, LNGC reported that "a substantive yet cautious workforce increase occurred with the opening of Cedar Valley Lodge." Toward the end of the year "workforce numbers continued to increase through October and November, followed by a seasonal ramp down" resulting in reduced activities from December 23, 2020 to January 3, 2021. CGL reporting for Q2 2020 spoke of following provincial health guidelines while continuing to make progress on construction activities.

¹ LNGC Community Level Infrastructure & Services Management Plan update (Q1 2020): https://www.lngcanada.ca/uploads/subpages/LNG-Canada-2020-Q1_SMR_Summary_Report_FINAL.pdf

Reduced project site workforces while public health measures remain in place could lead to shorter and more compressed, or longer and more dispersed, demand for labour, depending on how projects respond. Continued uncertainty around the evolving COVID-19 pandemic makes it difficult to anticipate LNGC and CGL employment demand and construction schedules.

Projections developed prior to the COVID-19 pandemic suggest that total employment for the construction phase of the LNGC and CGL projects is expected to increase through mid-2021 to a combined peak of 7,400 workers in July 2021 (see Figure 2.1). Thereafter, construction of the CGL pipeline is expected to wind down, concluding in the first quarter of 2022, while construction employment levels on the LNGC project continue to increase, reaching their peak at 7,700 workers in May 2022. Employment demand for the LNGC project will be concentrated in Kitimat, while demand from the CGL project will be more spread out along the pipeline route.

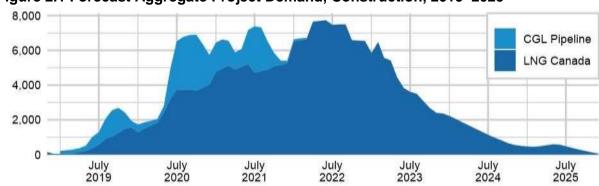


Figure 2.1 Forecast Aggregate Project Demand, Construction, 2019–2025

Source: Big River Analytics Custom Model (projection of aggregate headcount labour demand).

Figure 2.2 presents the forecasted aggregate labour demand projected for peak construction (July 2021), presented by NOC category. Demand is highest for category 7 ("trades, transport and equipment operators, and related occupations") and is projected to account for the employment of over 6,000 of 7,400 new workers.

6,000 4,000 2,000 0 1 2 3 4 6 7 8 9 NOC 2016 Broad Occupational Category

Figure 2.2: Forecast Aggregate Project Demand at Peak Construction by NOC Category, 2016 Version

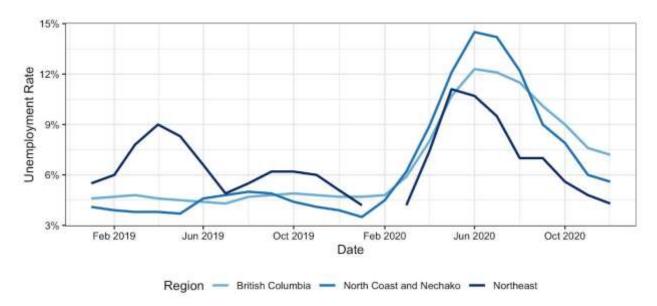
Source: Big River Analytics, modelled projection of aggregate headcount project demand.

3.0 COVID-19 Impacts: Labour Market Profile

Between the first lockdown period in March and the easing of restrictions in June 2020, employment in BC decreased by 242,000 jobs. Due to the implementation of social-distancing measures and closures of non-essential businesses, unemployment rates reached record levels across the province, including in the North Coast and Nechako economic region.

Figure 3.1 displays unemployment rates for the North Coast, Nechako, and Northeast regions, and British Columbia from February 2019 to December 2020. Unemployment in British Columbia peaked at 12.3% in June, a 7.6 percentage point increase from January. In the North Coast and Nechako region, unemployment increased to 14.5% in June, an 11 percentage point increase from January, and the number of people unemployed rose by 4,600. Comparatively, unemployment in the Northeast peaked at 11.1% in May, a 6.9 percentage point increase from January, an increase of 2,300 people unemployed. Peak unemployment in the North Coast and Nechako region was 3.8 percentage points higher than in the Northeast and 2.2 percentage points higher than in BC.

Figure 3.1: Unemployment Rate, North Coast and Nechako, Northeast, and British Columbia



Source: Labour Force Survey, Statistics Canada

Unemployment rates in the North Coast and Nechako region peaked at nearly 15% in June 2020, higher than in the Northeast region and the overall rate in British Columbia. Unemployment rates in the North Coast and Nechako region fell below the provincial rate in September, and dropped to 5.6% in December 2020. The bulk of job losses in the North Coast and Nechako region were concentrated in sales and services occupations, particularly in the first half of 2020. Jobs recovery was concentrated in trades, transport, and equipment operators and related occupations in the second half of 2020, with a net gain of 3,600 jobs.

Table 3.1 displays employment losses in Northern BC by economic region based on the NOC broad occupational categories, in order to determine the impact of COVID-19 on Northern BC's labour market. The forecasted aggregate labour demand projected for peak construction of the LNGC project is concentrated in category 7, "trades, transport and equipment operators, and related occupations" (see Figure 2.2). The net gain of 3,600 trades, transport and equipment jobs between June and December 2020 in the North Coast and Nechako region coincides with workers returning to Cedar Valley Lodge, indicating that a number of these jobs are likely due to construction activities from LNGC.

^{*}Note that the unemployment rate for February 2020 in Northeast was suppressed by Statistics Canada

Table 3.1: Employment by NOC Broad Occupational Categories, North Coast and Nechako and Northeast Regions

NOC Broad Occupational Categories	Dec. 2019	Mar. 2020	June 2020	Sep. 2020	Dec. 2020	Total Dec. 2019 to Dec. 2020
	Coast and			_		500. 2020
0 Management Occupations	3,800	3,300	2,300	2,400	2,400	-1,400
1 Business, finance, and administration						
occupations	4,100	4,300	5,000	6,000	5,900	1,800
2 Natural and applied sciences and related						
occupations	2,900	2,600	2,800	2,600	2,200	-700
3 Health occupations	2,500	2,600	2,700	3,800	3,200	700
4 Occupations in education, law and social,						
community and government services	4,900	5,000	4,700	2,200	2,700	-2,200
6 Sales and service occupations	10,200	10,400	7,900	8,700	7,800	-2,400
7 Trades, transport and equipment operators,						
and related occupations	7,800	6,600	6,900	10,400	11,400	3,600
8 Natural resources, agriculture, and related						
production occupations	2,000	1,700	2,000			*
9 Occupations in manufacturing and utilities	2,400	2,000		1,900	2,100	-300
			Columbi			
0 Management Occupations	3,200	3,300	3,700	3,400	3,400	200
1 Business, finance, and administration						
occupations	6,100	5,700	5,600	6,500	6,800	700
2 Natural and applied sciences and related						
occupations	2,300	2,100	1,800	2,800	3,000	700
3 Health occupations	1,800	2,100			1,600	-200
4 Occupations in education, law and social,						
community and government services	2,700	3,100	3,900	4,500	4,900	2,200
6 Sales and service occupations	6,800	7,700	6,300	9,100	9,200	2,400
7 Trades, transport and equipment operators,						
and related occupations	10,200	10,500	7,600	6,600	7,200	-3,000
8 Natural resources, agriculture, and related	•	•	•	-	•	·
production occupations	3,400	2,400	1,600	1,900	1,800	-1,600
production cocapations						

Source: Statistics Canada. Labour Force Survey.

Figure 3.2 explores the comparative participation rate and employment levels from March 2018 to November 2020. The participation rate is the total labour force expressed as a percentage of the population aged 15 years and over. The comparison between the North Coast and Nechako and Northeast regions shows that both regions have a high participation rate relative to BC averages. Between June and August 2020, the labour force in the North Coast and Nechako region grew by approximately 1,500 people. Comparatively, the labour force shrunk by 2,300 people between August and December of 2020. These labour market trends (which coincide with LNGCs construction activities as indicated in Section 2) suggest that geographic labour mobility

^{*}Data in categories 8 and 9, were suppressed by Statistics Canada.

may be contributing to an increase in labour supply in the North Coast and Nechako region to meet the demand of LNGC construction activities.

North Coast and Nechako 40,000 30.000 20,000 Number of Persons 10,000 0 Northeast 40,000 30,000 20,000 10.000 0 Jun 2018 Oct 2018 Feb 2019 Jun 2019 Oct 2019 Feb 2020 Jun 2020 Period Employment Labour Force

Figure 3.2: Employment & Labour Force, North Coast and Nechako, Northeast, and British Columbia, January 2018–December 2020

Source: Labour Force Survey, Statistics Canada

Between January and June 2020, there was a net decrease of 2,600 workers in category 7 in the Northeast, which was followed by a net increase of 3,600 workers in the same category between June and December 2020 in the North Coast and Nechako region. If workers from the Northeast (or elsewhere in BC) are in fact moving to the North Coast to pursue employment opportunities from LNGC's construction, the local population may not yet be experiencing labour market benefits.

Ultimately, the labour market impacts from both LNGC, CGL and COVID-19 in Northern BC are incredibly complex. In the North Coast and Nechako region, unemployment levels have nearly returned to pre-COVID-19 levels. However, employment has not risen as rapidly in the North Coast and Nechako region as it has in the Northeast, which makes it difficult to say whether LNGC is producing positive returns for Northwest BC as a whole. Given the ambitious LNG projections for the labour market in BC and commitment to "hire local first", we should expect to see a more tangible display of the positive impact of construction in Northwest BC, especially the North Coast and Nechako region.

Appendix: Additional Major Projects

Construction of the LNGC and CGL projects is underway concurrent with the construction of other major projects across British Columbia (BC). Table A1 provides an overview of all major projects in BC in Q3 2020—the most recent release of the BC Major Projects Inventory (MPI). The full effects of both the COVID-19 related economic slowdown and the volatility in energy and precious metal prices during this period may not yet be reflected in these major project estimates.

Table A1. Summary of Major Projects in BC, Q3 2020

Project Type and Status	Number of Change Since Projects Q2 2020		Estimated Capital Costs (\$B)	Change Since Q2 2020 (\$B)	
All Major Projects	979	0	\$369.84	-\$1.61	
Proposed	510	-7	\$219.67	-\$3.95	
Under Construction	391	7	\$117.76	\$2.58	
Completed	21	-1	\$2.16	\$1.38	
On Hold	57	1	\$30.24	-\$1.62	

Project Type and Status	Number of Projects	Change Since Q2 2020	Estimated Capital Costs (\$B)	Change Since Q2 2020 (\$B)
LNG & Natural Gas Projects*	31	0	\$112.10	\$0.00
Proposed	25	0	\$63.47	\$0.00
Under Construction	3	0	\$46.70	\$0.00
Completed	0	0	\$0.00	\$0.00
On Hold	3	0	\$1.93	\$0.00

^{*}Includes projects categorized as LNG, LNG - Natural Gas Pipeline, Natural Gas Pipeline, or Natural Gas Processing. **Source**: BC Major Projects Inventory, Q3 2020 and Q2 2020.

Major projects under construction in the North Coast region account for approximately 30.8% of the major projects under construction in BC by value, as illustrated in Table A2. The bulk of this current construction value in the North Coast region is derived from the LNGC construction project, which accounts for \$36bn (99.1%). In the Northeast, CGL accounts for \$6.2bn (34.3%) of the value of construction currently underway in the region. Combined, the CGL and LNG Canada projects account for approximately 35.8% of the value of major projects currently under construction in BC.

Table A2. Summary of Major Projects in BC, by Region Q3 2020

Region	Less than \$50M	\$50M to less than \$1B	\$1B to less than \$2B	\$2B or More	Total Projects	Estimated Capital Costs (\$B)
Vancouver						
Island/Coast	28 (35)	18 (21)	4 (4)	1 (1)	51 (61)	\$11.62 (\$12.07)
Mainland/Southwest	131 (158)	93 (106)	6 (8)	1 (1)	231 (273)	\$30.36 (\$36.31)
Thompson-Okanagan	19 (22)	30 (32)	4 (4)	1 (1)	54 (59)	\$12.96 (\$13.34)
Kootenay	5 (6)	13 (13)	0 (0)	0 (0)	18 (19)	\$3.55 (\$3.58)
Cariboo	3 (3)	0 (3)	0 (0)	1 (1)	4 (7)	\$4.57 (\$4.78)
North Coast	2 (2)	3 (5)	0 (0)	1 (3)	6 (10)	\$36.34 (\$48.69)
Nechako	1 (1)	2 (2)	0 (0)	0 (0)	3 (3)	\$0.30 (\$0.30)
Northeast	5 (6)	5 (6)	0 (0)	2 (2)	12 (14)	\$18.06 (\$18.67)
Total	194 (233)	164 (188)	14 (16)	7 (9)	379 (446)	\$117.76 (\$137.73)

Sources: BC Major Projects Inventory, Q3 2020.

Note: Figures in parentheses are the total number projects included in the labour gap model (i.e. projects in tender, pre-construction or under construction). Figures outside parentheses represent only those projects that are currently under construction.