18 REGIONAL ECONOMIC DEVELOPMENT

18.1 Approach

Regional economic development is the change in areas of the economy such as business competitiveness that contribute to a region's overall economy and standard of living. Expenditures made by the Project would accrue to individuals, businesses, and communities in the region, and thereby contribute to the development of the regional economy. Regional economic development is valued by communities because it represents opportunities for wealth creation and contributes to community stability and strength. Regional economic development key indicators include the regional business and contracting profile, capabilities, and capacity, including Aboriginal components.

18.1.1 Regulatory and Policy Setting

A key mandate of the B.C. Ministry of Jobs, Tourism and Skills Training is to provide economic development tools to rural communities. Programs and services focus on expanding business capabilities and capacity through business retention and expansion programs, small business financing, and support for provincial programs.

Domestic trade policy, such as the Agreement on Internal Trade and the New West Partnership Trade Agreement (NWPTA), aims to reduce barriers to the movement of persons, goods, services, and investments within Canada. The NWPTA obligates public entities to ensure:

- No obstacles: government standards and regulations cannot restrict or impair trade, investment, or labour mobility between British Columbia, Alberta, and Saskatchewan
- Non-discrimination: there will be no preferential treatment of a province's people, investments, and goods, except for justified actual cost-of-service differences and measures focused on Aboriginal peoples

BC Hydro's Aboriginal Contract and Procurement Policy is consistent with the Agreement on Internal Trade and the New West Partnership Trade Agreement, as Article 1802 states that it does not apply to any measure adopted with respect to Aboriginal peoples. This policy provides for the use of several procurement practices to increase the involvement of First Nations in economic opportunities associated with the business of the organization. This policy includes:

- Capacity building initiatives, where BC Hydro provides funding or resources in order to provide training, improve skills, or increase business capacity in Aboriginal businesses
- Directed Aboriginal procurement, such as set/asides, restricted tendering, and single-source negotiations
- Aboriginal content evaluation criteria in procurement packages
- An Aboriginal Business Directory, which is web accessible to suppliers and contractors

18.1.2 Key Issues and Identification of Potential Effects

Regional contracting and procurement opportunities were identified by the public, Aboriginal groups, agencies, and other stakeholders as a potential beneficial effect of the Project (see Volume 1 Section 9 Information Distribution and Consultation).

A portion of the Project's total capital spending for labour, equipment, goods, and services would accrue to local businesses and contractors. Procurement practices and economic conditions during the Project construction phase would affect the level of interest expressed by local supplier industries and, consequently, the extent to which the region can maximize its share of project-related benefits. Regional companies could expand (e.g., in size or in areas of service) to become more competitive, and new regional businesses could be created because of the Project. Regional companies could further benefit from the expanded capacity, new skills and innovations developed as a result of the Project, by increasing their share of the expenditures made by other sectors in the region (i.e., by displacing services from outside the region), or by exporting their services outside of the region.

The key issues for industry, as identified in Table 18.1, include a comparison of the value of contracts expected to be undertaken for the Project with the contractor capabilities in the region. The main concern of non-Aboriginal stakeholders was that local businesses have the opportunity to bid and secure contracts with the Project. A main concern of Aboriginal communities was that Aboriginal businesses and contractors in the region have a fair and equitable opportunity to obtain Project-associated contracts.

Table 18.1 Key Issues: Regional Economic Development

Key Issues	Approach to Addressing Key Issues
List of the major types of businesses and contractors, broken down at the local, provincial, and national level that will benefit from the overall project, including Aboriginal businesses	▪ This assessment provides an inventory of businesses and contractors in the local study area. The British Columbia Input-Output Model in Volume 3 Appendix A Economic Assessment Supporting Documentation, Part 2 Project Economic Impacts: BC Stats identifies industries that would benefit from project expenditures in B.C. Aboriginal capabilities and capacity are also identified. ▪ National-level businesses and contractors are not reported, due to the focus on regional effects and the British Columbia Input-Output Model's limitation to B.C. effects
Value of supply of service contracts expected for both the construction and operation phases of the project	▪ Volume 1 Appendix F Project Benefits Supporting Documentation, Project Cost Estimate identifies the value of major work packages and incorporated them into the British Columbia Input-Output Model. ▪ Discussions were conducted with economic development offices and industry associations to identify potential capabilities and capacity
Information about a local purchasing strategy	▪ Volume 1, Appendix F Project Benefits Supporting Documentation, Local Participation Strategies outlines the approach to purchasing and procurement, including Aboriginal strategies. These are recapped in the mitigation discussion of this assessment.

Key Issues	Approach to Addressing Key Issues
Inclusion of the Fort Nelson area in the local assessment area	▪ In this section, the local assessment area includes the Peace River Regional District as well as the Northern Rockies Regional Municipality, where Fort Nelson is located
Recognize regional economic development through the reduced agricultural opportunity due to the Project	▪ This issue is assessed as part of the Volume 3 Section 20 Agricultural assessment.
First Nations interest in benefits (e.g., employment, contracting opportunities, business development and capacity building) accruing to local residents, including Saulteau (SFN) [a] members	▪ Strategy for the specific practices that BC Hydro will adopt to increase Aboriginal participation in providing contract services for the Project
First Nations interest in Project benefits – concern that there is an uneven playing field between First Nations and non-Aboriginal businesses (T8TA) [b]	▪ Strategy for the specific practices that BC Hydro will adopt to increase Aboriginal participation in providing contract services for the Project

NOTES:
[a] SFN – Saulteau First Nations
[b] T8TA – Treaty 8 Tribal Association

Project interactions with VCs are ranked in Table 2 of Volume 2 Appendix A Project Interactions Matrix. A “2” ranking indicates where interactions may result in an adverse effect and the nature of the effect and/or the effectiveness of mitigation measures is uncertain. Therefore, they require analysis and evaluation in the environmental assessment.

Project expenditures would be concentrated in construction activities; consequently, that is when changes in business opportunities would be expected to occur, as noted in Table 18.2.

Table 18.2 Interactions of the Project with Regional Economic Development

Project Activities and Physical Works	Key Aspects	
	Change in Project contract opportunities as proposed by the Proponent	Change in a comparison of the Project’s contracting requirements with the regional business and contracting profile, capabilities, and capacity
Construction	✓	✓

18.1.3 Standard Mitigation Measures and Effects Addressed

A “1” ranking in Table 2 of Volume 2 Appendix A Project Interactions Matrix means that an interaction with Regional Economic Development would occur; however, standard measures to avoid or minimize the potential effect are available and well understood to be effective, and any residual effects would be minimal. The effects during operations were assigned a ‘1’ because while an interaction would occur, the approximately $8.1 million in annual expenditures would be low relative to the regional economy, and would, therefore, generate negligible effects.

Additionally, incremental effects on business contracting opportunities would also occur in relation to periodic sustaining capital expenditures, an estimated total indirect and induced

output in the region of $58.1 million. However, this effect would not begin to occur until the 40th year of operation, and it would gradually be distributed over the following 60 years (Volume 3 Appendix A Economic Assessment Supporting Documentation, Part 2 Project Economic Impacts: BC Stats). Standard mitigation measures would evolve and become more effective in avoiding and minimizing potential adverse effects.

18.1.4 Selection of Key Indicators

The key indicators for assessing Project effects on Regional Economic Development and the rationale for their selection are shown in Table 18.3.

Table 18.3 Key Indicators for Regional Economic Development

Key Aspects	Key Indicators	Rationale for Selection of the Key Indicators
Change in project contract opportunities – as proposed by the Proponent	Regional business and contracting profile Regional Aboriginal business and contracting profile	A regional profile provides an understanding of the number of businesses in the region
Comparison of the Project's contracting requirements with the regional business and contracting profile, capabilities, and capacity	Regional business and contracting capabilities and capacity Regional Aboriginal business and contracting capabilities and capacity where information is available	Regional capabilities and capacity provide a context for identifying which procurements needs might be fulfilled from within the region

18.1.5 Spatial and Temporal Boundaries

18.1.5.1 Spatial Boundaries

The Local Assessment Area (LAA) for Regional Economic Development is the Peace River Regional District (PRRD) and the Northern Rockies Regional Municipality (NRRM), which together comprise the boundaries of the B.C. Northeast Development Region (NEDR) (Table 18.4 and Figure 18.1). The NEDR is a regional economic unit with business services clustered in its southern communities of Fort St. John and Dawson Creek, and in the north in Fort Nelson. This is the geographical area where project interactions with the regional economic development VC will occur.

The borders of the Northeast Development Region and First Nations traditional territories and Indian Reserve communities do not precisely overlap. The First Nations with communities and businesses situated within the boundaries of the LAA include the Doig River First Nation, Halfway River First Nation, Prophet River First Nation, West Moberly First Nations, Blueberry First Nation, Saulteau First Nations, and Fort Nelson First Nation. Although the McLeod Lake Indian Band is located outside the boundaries of the LAA, because their businesses, (i.e., the McLeod Lake Indian Band Development Corporation and a band-owned construction business) are headquartered in Chetwynd, they are included in the LAA. Duncan's First Nation and Horse Lake First Nation are located outside the boundaries of both the LAA and RAA. Where Duncan's First Nation and Horse Lake First Nation and other First Nations outside the LAA have identified interests in potential effects on regional economic development, these are discussed in Volume 5 Section 34 Asserted or Established Aboriginal Rights and Treaty Rights, Aboriginal Interests, and Information Requirements. The baseline information for those communities is presented in

Volume 3 Appendix B First Nations Community Baseline Reports, Part 3 Community Baseline Report and EIS Integration Summary Table for Duncan's First Nation and in Part 4 Community Baseline Report and EIS Integration Summary Table for Horse Lake First Nation.

The Regional Assessment Area (RAA) is the Peace River Regional District, the Northern Rockies Regional Municipality, and the Fraser-Fort George Regional District. The Fraser Fort George Regional District abuts the LAA to the west and south and includes the City of Prince George. For reasons of proximity, projects in the Fraser–Fort George Regional District could utilize the contracting and supply services in the LAA and thus create overlaps. Figure 18.1 illustrates the LAA and RAA for Regional Economic Development VC.

Table 18.4 Spatial Assessment Areas for Regional Economic Development

Local Assessment Area	Regional Assessment Area
Peace River Regional District Northern Rockies Regional Municipality	Peace River Regional District Northern Rockies Regional Municipality Fraser–Fort George Regional District

18.1.5.2 Temporal Boundaries

The Project effects are presented for the construction phase. Construction activities, as described in Volume 1 Section 4 Project Description , would generate procurement activity. Annual construction expenditures and opportunities for business would gradually rise to a peak in Year 6 before declining and ceasing at the end of Year 8.

Conditions would not return to the base case during operations, but as noted in Section 18.1.3, ongoing expenditures would be negligible in the context of the regional economy and thus are not evaluated further in this assessment.

18.2 Information Sources and Methodology

18.2.1 Literature Review

Baseline data was obtained from Statistics Canada, BC Stats, municipalities, economic development offices, and private sector studies. Government datasets included the business registry, inventory of major projects, business formations and failures, and lists of major employers. Municipalities contributed business licence data and economic development offices made research studies and strategic plans available for review.

Sources of baseline data for Aboriginal businesses and peoples and First Nations communities included the following:

- Statistics Canada's Census of Population
- BC Hydro's Aboriginal Business Directory
- Site C Business Directory
- Industry Canada's Aboriginal Business Directory
- First Nations community baseline profiles supplied by: Treaty 8 First Nations of Doig River First Nation, Halfway River First Nation, Prophet River First Nation and West Moberly First Nations (detailed in Volume 3 Appendix B First Nations Community

Baseline Reports, Part 7 Community Baseline Report and EIS Integration Summary Table for Doig River First Nation, Halfway River First Nation, Prophet River First Nation, and West Moberly First Nations).

- Other First Nations supplied information, such as profiles of First Nations owned companies

Literature reviewed and cited is shown under Literature Cited at the end of this section.

18.2.2 Interviews

Interviews were conducted with government officials, industry organizations, and economic development offices to obtain insights on baseline conditions, economic trends, and perspectives, as well as potential beneficial and adverse project effects. Volume 3 Appendix A Economic Assessment Supporting Documentation, Part 1 Economic Assessment Interview Methodology outlines details on the interview methodology. Personal communications are listed at the end of this section.

18.2.3 Data Management, Mapping, and Modelling

Direct expenditures by the Project were provided by BC Hydro. The indirect and induced economic effects were estimated by BC Stats (Volume 3 Appendix A Economic Assessment Supporting Documentation, Part 2 Project Economic Impacts: BC Stats) based on an analysis of the Project construction expenditure.

18.2.4 Aboriginal Community and Traditional Knowledge

Aboriginal community and traditional knowledge related to regional economic development was gained through review of results of BC Hydro's consultation with Aboriginal groups and review of First Nations community baseline studies prepared by the following First Nations in the LAA:

- Doig River First Nation
- Halfway River First Nation
- Prophet River First Nation
- West Moberly First Nations

While the communities of the Blueberry First Nations and Saulteau First Nations and traditional territory and certain offices associated with the McLeod Lake Indian Band are also within the boundaries of the LAA, BC Hydro had not received community baseline information from them at the time of writing.

Baseline information and data as well as First Nations concerns and interests relevant to regional economic development are incorporated in the baseline and effects assessment sections below. The First Nations community baseline reports are provided in Volume 3 Appendix B First Nations Community Baseline Reports, Part 7 Community Baseline Report and EIS Integration Summary Table for Doig River First Nation, Halfway River First Nation, Prophet River First Nation, and West Moberly First Nations.

BC Hydro's approach to gathering community-based social and economic data with First Nations is described in Volume 3 Appendix B First Nations Community Baseline Reports, Part 1 Approach to Gathering and Integrating Community Baseline Information.

18.3 Baseline Conditions

The Northeast Development Region (NEDR) is the northwest extension of the Canadian prairie, with similar economies in agriculture, oil, and natural gas. The main economic activities in the region include energy, agriculture, forestry, mining, and tourism. Oil and gas industry activity is expanding. Three wind energy projects have recently been built or are under construction. Electricity transmission upgrades and expansions are underway. The Crown timber supply supports a diverse wood processing sector that includes lumber, panel, and pulp mills. The region has four operating coal mines, and more are in exploration or development phases. All of these activities are fuelling construction activity and population growth across the region.

18.3.1 Business Profile – General Population

18.3.1.1 Establishments and Locations

Statistics Canada compiles a monthly Business Register that identifies all businesses in Canada that produce goods and services. The Business Register lists companies by major industry as defined by Statistics Canada. The list of industries differ from the industries noted in the following economic dependency data, which only reference economic base activity (i.e., sectors that produce goods and services for export, tourism, and the public sector). All active businesses in Canada that have a corporate income tax (T2) account or a GST account with an annual gross business income of over $30,000 are tracked on a monthly basis. Note that the general or overall population includes non-Aboriginal and Aboriginal people.

As shown in Table 18.5, the growth in the number of business establishments in the PRRD from 2003 to 2011 was almost double that of the province. The NEDR was close behind, with a 16.3% increase in businesses. The rapid expansion of oil and gas activity, new investments in forest processing capacity, a growing coal industry, and related construction and support services contributed to increases. However, as is also evident from the table, the PRRD lost a higher percentage of businesses during the recession that began in 2008 than the NEDR or province as a whole.

Table 18.5 Number of Business Establishments by Location, 2003-2011

Location	2003	2004	2005	2006	2007	2008	2009	2010	2011	Change 2003–2011
PRRD	2,914	2,912	3,016	3,317	3,933	3,987	3,879	3,469	3,411	497
% change	N/A	-0.1	3.6	10.0	18.6	1.4	-2.7	-10.6	-1.7	17.1
NEDR	3,273	3,274	3,394	3,731	3,943	3,998	3,892	3,862	3,805	532
% change	N/A	0.0	3.7	9.9	5.7	1.4	-2.7	-0.8	-1.5	16.3
B.C. % change	N/A	-0.0	2.7	3.1	0.4	3.9	0.6	-0.1	-1.3	9.5

NOTE:

Includes all industries with employees, but excludes establishments of indeterminate employee size

N/A – not applicable

Source: BC Stats (2012)

A profile of businesses by industry classification and employee size for the NEDR in 2011 is shown in Table 18.6. Of the 3,805 businesses with employees, 14.6% were in construction and the majority of these had fewer than 20 workers. Other services (12.1%), transportation and warehousing (10.0%), retail trade (9.0%), and mining and oil and gas (8.6%) were the next highest industries ranked by number of businesses.

The data also demonstrates the preponderance of small businesses in the regional and provincial economies. In the NEDR, firms with less than 50 employees made up 96.2% of all establishments, identical to the B.C. percentage. The PRRD economy had no large businesses (i.e., establishments with greater than 500 workers), while only 16 businesses had more than 200 employees. Nine of the 16 businesses involve publicly funded services, such as education and health, and retail trade operations.

The NEDR had a greater proportion, compared to the province as a whole, of total establishments in primary industries, notably oil and gas extraction, transportation and warehousing, utilities, construction and other services. All other industries in the region were represented as smaller proportions compared to B.C.

18.3.1.2 Business Licences

Figure 18.2 shows the total number of business licences issued in the City of Fort St. John between 2000 and 2010. As the service and business centre for northeast B.C., Fort St. John's licence profile provides a benchmark for business capacity. The number of licences issued grew by 26% during this period. Business licences are not tracked in other communities in the PRRD.

The distribution of business licences by major industry in 2010 is shown in Figure 18.3. Trade and service businesses dominated, with 75% of total licences. The other 25% of businesses were engaged in goods production. Construction companies accounted for 252 licences, or 16% of the total licences in Fort St. John.

Table 18.6 Count of Selected Business Establishments in the Northeast Development Region, 2011

NAICS Code	Industry Sector based on NAICS Canada	Locations with No Employees	Firms with Employees in Northeast Development Region						B.C. Firms with Employees	
			Less Than 20	20 to 49	50 to 199	200+	All Sizes with Employees	% of Total	% of total	All Sizes
Total, All Industries		**3,063**	**3,392**	**268**	**129**	**16**	**3,805**	**100.0**	**100.0**	**173,589**
11	Agriculture, Forestry, Fishing & Hunting	636	241	8	0	0	249	6.5	4.0	6,932
21	Mining & Oil & Gas Extraction	166	279	26	23	1	329	8.6	0.6	1,045
22	Utilities	1	9	1	0	0	10	0.3	0.1	210
23	Construction	443	502	29	23	2	556	14.6	12.1	21,011
31	Manufacturing	39	53	5	5	1	64	1.7	4.1	7,146
41	Wholesale Trade	50	132	15	3	0	150	3.9	5.4	9,305
44	Retail Trade	119	291	30	18	3	342	9.0	11.9	20,657
48	Transportation & Warehousing	284	381	32	4	1	418	11.0	4.2	7,276
51	Information & Cultural Industries.	2	31	3	0	0	34	0.9	1.4	2,354
52	Finance & Insurance	80	51	11	4	1	67	1.8	3.8	6,667
53	Real Estate & Rental & Leasing	374	137	6	3	0	146	3.8	4.9	8,433
54	Professional, Scientific & Technical Services	236	288	19	4	0	311	8.2	11.3	19,584
55	Management of Companies & Enterprises	107	16	0	2	0	18	0.5	1.5	2,537
56	Administration & Support, Waste Management	106	164	7	3	0	174	4.6	4.9	8,523
61	Educational Services	19	30	3	1	3	37	1.0	1.3	2,289
62	Health Care & Social Assistance	43	165	11	10	3	189	5.0	9.1	15,793
71	Arts, Entertainment & Recreation	30	47	4	0	0	51	1.3	1.6	2,810
72	Accommodation. & Food Services	58	130	39	13	1	183	4.8	6.8	11,831
81	Other Services	268	443	16	2	0	461	12.1	10.5	18,288
91	Public Administration	2	2	3	11	0	16	0.4	0.5	898

NOTES:

NAICS – North American Industry Classification System

Source: BC Stats (2012)

18.3.2 Business and Contractor Capabilities and Capacity

18.3.2.1 Community Economic Dependencies

The provincial government prepares local area dependencies for 63 rural areas of the province to quantify the sources of income that make up the economies of these areas. Local area dependencies were prepared for the four census periods from 1991 to 2006. The descriptive measures use the census and other economic data to describe each local area in terms of its dependence on various basic sectors, its diversity, and its vulnerability (Horne 2009). Table 18.7 highlights the local area dependencies for the Fort St. john local area, the Dawson Creek local area, and the Fort Nelson local area between 1991 and 2006. The data reflect the structure of the economic base and contributions made by businesses and contractors in major sectors.

The Fort St. John and Dawson Creek area economies are among the most dependent in the province on the mining and oil and gas sectors (data for mining and oil and gas have been aggregated into the mining category in Table 18.7). In the Fort St. John area, oil and gas has been the main economic driver, while in the Dawson Creek area, mining still predominates, although oil and gas activity has increased since 2006. The Fort Nelson area saw a major expansion of its oil and gas industry in 2001 and 2006. Overall, the data suggest that the key resource sectors constitute the majority of the economic base in the LAA, and that these sectors are cyclical.

Table 18.7 Percentage of Income by Economic Base Sector, 1991 to 2006

% of total	FOR	MIN	F&T	AGF	TOU	PUB	OTH	TRAN	ONEI
Fort St. John									
2006	6	37	0	3	5	14	19	8	7
2001	7	32	0	4	6	19	17	10	5
1996	11	26	0	5	7	19	18	11	4
1991	8	23	0	7	4	18	19	13	9
Dawson Creek									
2006	12	20	0	3	5	21	18	12	8
2001	16	17	0	5	4	25	12	15	6
1996	14	25	0	5	6	21	10	13	5
1991	13	21	0	6	3	21	14	12	10
Fort Nelson									
2006	27	23	0	0	8	17	16	5	4
2001	31	19	0	1	8	17	14	6	4
1996	46	4	0	0	9	15	17	7	2
1991	29	14	0	1	6	19	15	13	6

NOTES:

FOR – Forestry and related manufacturing
MIN – Mining, oil and gas
F&T – Fishing and trapping
AGF – Agriculture and food processing
TOU – Tourism
PUB – Public sector including health and education
OTH – All other basic industries
TRAN – Transfer payments from government
ONEI – Other non-employment income

Source: Horne (2009)

Table 18.8 shows the percentage of community income attributable to the construction sector for 2006 in Fort St. John, Dawson Creek, and Fort Nelson, and the median value

for all 63 B.C. local areas. Construction accounts for between 10 and 11% of income in PRRD communities, versus a median value of seven for all 63 communities.

Table 18.8 Percentage of Income from the Construction Sector, 2006

Community	% of total community income
Fort St. John	11
Dawson Creek	10
Fort Nelson	4
Provincial median [a] (63 areas)	7

NOTE:

[a] Median – the middle value of a list; in this case, the middle value of 63

Source: Horne (2009)

Table 18.9 shows the BC Stats diversity index for the three local areas in the LAA. The index values range from 0 if the area was entirely dependent on one sector to 100 if it was equally dependent on each of the 12 sectors. In general, the greater the diversity, the more stable the economic base and the less susceptible it is to economic shock. However, diversity is not equivalent to prosperity, as single-industry towns with very little diversification can be comparatively wealthy. Conversely, rural communities with low incomes and no strong economic leader can appear diversified. However, the diversity indices do indicate the extent to which a local area is exposed or susceptible to setbacks in its primary industry.

The index for Fort St. John has declined over time, meaning it has become less diverse as oil and gas activity expands. In Dawson Creek, the diversity index has remained strong, particularly in 2001 and 2006 when it ranked as one of the most diversified local area economies in the province. Fort Nelson has become more diversified since 1996 because oil and gas expansion has lessened dependence on the forest industry.

Table 18.9 Change in Local Area Diversity Indices and Provincial Rankings, 1991 to 2006

Local Area	1991	1996	2001	2006
Fort St. John: Diversity Index	74	75	70	66
Provincial Rank (1–63)	22	3	19	51
Dawson Creek: Diversity Index	74	72	74	76
Provincial Rank (1–63)	22	13	4	3
Fort Nelson: Diversity Index	69	56	68	69
Provincial Rank (1–63)	45	58	31	41

NOTE:

The Diversity Index is constructed using 11 dependency values – the higher the number, the more diversified the economic base, based on a scale from 0–100

Sources: Horne (2004, 2009)

18.3.2.2 Local participation in major projects

Active projects in the environmental assessment registries presented in Volume 1 Section 10 Effects Assessment Methodology, Figure 10.3 indicate that numerous

projects, predominantly in the mining and energy sectors, are in the planning stages with combined potential budgets of more than $10 billion. Other major projects, such as Rio Tinto's Kitimat smelter expansion and the Mt. Milligan mine, are under construction and actively recruiting local businesses and contractors. There is no single source of data indicating the share of expenditures that are accruing to local businesses and contractors; however, it is believed most projects are relying on non-local suppliers for the majority of goods, services, and equipment. Examples include:

- An estimated 10% of the $1.3 billion expenditures for the construction of Mt. Milligan have accrued to businesses in the region (Initiatives Prince George, 2012 pers. comm.)
- The $600 million expansion of the Endako Mine completed in 2012 had only partial success attracting local suppliers, even though a supplier database was developed. A lack of qualified suppliers and a lack of outreach by the proponent were cited as contributing factors. (Initiatives Prince George, 2012 pers. comm.).
- Rio Tinto and Spectra Energy were also cited as having best practices in developing local supplier relationships (Initiatives Prince George, Business Retention and Expansion Consultant 2012 pers. comm.)
- There is a general lack of preparedness among local businesses and contractors for meeting the bidding and procurement requirements of major projects, which limits the potential for local benefits (NDIT, Director Business Development and Director Economic Development 2012 pers. comm.)
- The experience of the oil and gas sector indicates that major construction projects are dominated by non-local contractors, in part because local suppliers have challenges keeping skilled labour and developing relationships with non-local purchasing departments (Energy Services BC, Executive Director South 2012 pers. comm.)
- Capacity limitations among regional supplier industries, including limited contractor experience, expertise, or credentials for meeting industry bid or performance standards (NPEDC, Economic Development Officers 2011 pers. comm.)

18.3.2.3 Project Business Directory

In January 2009, BC Hydro launched the Site C Business Directory for companies interested in participating in the Project's procurement process. As of March 12, 2012, 380 companies had registered. The services provided by registrants by location are shown in Table 18.10.

Table 18.10 Location and Services Offered by Site C Business Directory Registrants, March 12, 2012

Service	NEDR	Other B.C.	Canada	International	Not Identified	Total
Engineering – General Contractors	5	7	3	1		16
Engineering – Logging	17	3	0	0	0	20
Engineering – Other	66	45	17	4	0	132
Engineering – Subcontractors	15	5	3	0	2	25
Engineering – Supplier	3	4	3	1	0	11
Business Association	5	1	0	0	1	7
Communications	7	10	0	2	0	19
Environment	13	46	6	0	1	66
Hospitality	9	3	1	0	0	13
Real Estate	6	6	0	0	2	14
Safety, First Aid, Security	7	4	1	0	1	13
Transportation	11	3	3	1	5	23
Other Services	11	4	6	0	0	21
Total	**175**	**141**	**43**	**9**	**12**	**380**

NOTE:

Source: BC Hydro (2012)

18.3.2.4 Services for Building Business Capabilities and Capacity

Communities in the NEDR have individually or collectively engaged in economic development planning and support business development. There are two development commissions and three community-based economic development offices in the PRRD:

- The North Peace Economic Development Commission (NPEDC) has an economic administrator based in Fort St. John and serves Fort St. John, Hudson's Hope, Taylor, and the rural areas north of the Peace River in the PRRD
- The South Peace Economic Development Commission (SPEDC) serves Tumbler Ridge, Chetwynd, Dawson Creek, Pouce Coupe, and the rural areas south of the Peace River in the PRRD. It is funded through an economic development bylaw, and maintains a staff relationship with Community Futures Peace Liard.
- The districts of Tumbler Ridge and Chetwynd and the Northern Rockies Regional Municipality each maintain a staffed economic development office

All organizations are providing services to enhance business and contractor capabilities and capacity. For example:

- The NPEDC is delivering Small Business B.C. seminars, and promoting Site C Business Information Sessions (NPEDC 2011)
- The SPEDC has contributed funding to Energy Services BC – Business Development Initiative, to assist businesses in northern B.C. to benefit from contract opportunities with the oil and gas industry (SPEDC 2011)

Provincial and federal government-supported economic development service agencies include the Northern Development Initiative Trust (NDIT) and Community Futures Peace Liard (CFPL). NDIT has targeted programs aimed at improving the capability and competitiveness of local contractors wishing to participate in procurement opportunities offered by major projects. A more detailed account of economic development planning and programs is provided in Volume 3 Appendix A Economic Assessment Supporting Documentation, Part 4 Economic Development Offices and Plans.

18.3.3 Outlook for Regional Economic Development

The Northeast's strong economic performance over the last five years, including employment gains well above the provincial average, are expected to continue in the future as major development projects are constructed and come on stream. Resource extraction will provide the impetus for growth, but expansion of the trade, health, and professional service sectors will also occur.

Despite low natural gas prices, interest in the Montney Basin remains high, given the prospects of export to markets outside of North America. Proposed liquefied natural gas facilities on the west coast are expected to provide an outlet to Asian markets for the province's natural gas at a higher price than the price received in North America. Without this new export capacity, slackening North American demand for northeast gas production may curtail industry growth going forward (Energy Services BC, Executive Director South 2012 pers. comm.). The wind energy and coal sectors are also expected to perform well in the years ahead, due to the province's growing energy supply needs and buoyant demand among Asian coal markets. The lineup of large development projects seeking regulatory approval in northern B.C. and the expansion programs (see Volume 2 Section 10 Effects Assessment Methodology) at the Prince Rupert and Kitimat ports will spur economic growth in the north in the years ahead (Bennett 2012).

A constraint on growth is the availability and recruitment of the skilled and semi-skilled workforce. BC Stats Regional Employment Projection Model shows the Northeast having the highest annual growth in employment demand among all of B.C.'s eight development regions, leading up to 2011. The projected growth of 3.1% is more than 50% higher than the provincial rate of 2.0% (BC Stats No date). Temporary workers from other parts of B.C., Alberta, and the rest of Canada will continue to be an important component of the future regional labour market.

Central 1 Credit Union's forecast of leading economic indicators for the Northeast for 2013 is presented in Table 18.11. Employment levels are forecast to rise by just under 2% this year, followed by a gain of 1.5% in 2013. Stronger employment prospects are expected to generate comparable gains in population and the labour force, maintaining regional unemployment rates below 5%. Building permits are expected to taper off, reflecting what is expected to be a temporary pull-back in oil and gas activity (Central 1 Credit Union 2012).

It is expected that the business and contractor profile, capabilities, and capacity would expand in line with overall economic growth for the region, but not increase its share of project expenditures, due to the following barriers:

- Limited expertise in finding and competing for procurement opportunities
- Difficulty in finding and hiring workers

- Limited ability to do the scale of work often required by project proponents
- Financial barriers, especially business costs and accessing capital (Ryser et al. 2012)

Table 18.11 Northeast Economic Development Forecast, 2009 to 2013

Indicator	2009	2010	2011	2012	2013
Labour Force, thousands	38.4	39.7	39.1	39.7	40.3
% change	-3.0	3.4	-1.5	1.5	1.6
Employment, thousands	35.8	37.0	37.2	37.9	38.5
% change	-5.0	3.4	0.5	1.8	1.5
Unemployment Rate, %	7.0	6.8	4.9	4.6	4.7
Private Non-Residential Building Permits, $ millions	76.9	67.8	93.3	85.0	80.0
% change	-9.9	-11.9	37.6	-8.9	-5.9
Public Non-Residential Building Permits, $ millions	9.9	13.7	17.9	10.0	10.0
% change	56.5	38.3	30.7	-44.3	0.0
Population, thousands	68.2	69.5	70.3	71.3	72.5
% change	0.8	1.9	1.2	1.4	1.7

NOTE:
Source: Central 1 Credit Union (2012)

18.3.4 Business Profile – Aboriginal Peoples

Businesses owned by Aboriginal persons and organizations are found in First Nations communities and non-Aboriginal communities (both incorporated and unincorporated) in the LAA. Information and data have been collected for this section from several sources to describe them.

The main source of data to assist with identifying the number, size, and industry of businesses for geographic areas in Canada is Statistics Canada's Business Register. The Business Register data for the LAA cited in Section 18.3.1.1 includes businesses owned by Aboriginal persons and organizations, as well as non-Aboriginal persons and organizations. However, there is no ownership breakdown in this data, as Aboriginal identification of ownership is not collected for the Business Register initiative. Survey data to track the basic features of Aboriginal businesses is not regularly collected in B.C. or Canada.

The small business (defined herein as a business with 20 or less employees) per capita rate (for the total adult population 25–64 years) in the LAA is approximately 0.09 (calculated with 2011 Business Register data and 2006 Census of Population data). Applying this rate to the Aboriginal population (25–64 years) in the LAA gives an estimate of approximately 330 businesses owned by Aboriginal persons or organizations in the LAA. The proportion of small businesses in the LAA that are construction, transportation, or primary industry focused (forestry for example) is 42% (based on Table 20-6 in the Business Register data). These are the types of small businesses that are likely to be interested in seeking contracts connected with the construction of the

Project. Using this parameter, there could be an estimated 140 small businesses owned by either Aboriginal persons or organizations in the LAA that would be in a position to consider seeking construction, excavation, transportation, and related contracts associated with the project.

As described in Section 18.3.2.3, BC Hydro created a Site C Business Directory for businesses to state their characteristics and capabilities for undertaking contractual work associated with the Project. As of March 12, 2012, there were 380 registrants that listed their business address; 178 are based in B.C., 48 had self-identified Aboriginal ownership, and all but four of the latter were Aboriginal businesses based in the LAA. The Aboriginal business registrants based in the LAA accounted for 12% of the total registration and 14% of the B.C. registration.

Interest and activity in business is growing within First Nations communities in the LAA. West Moberly First Nations is an example as it seeks to "…move from a reactive labour-oriented resource extraction economy involved at the front end of development (e.g., cutting seismic lines) toward value-added, higher skill and long-term revenue-generating opportunities (e.g., equity shares in resource development companies)" (T8FNs Community Assessment Team and The Firelight Group Research Cooperative 2012a:125). Sources included Volume 3 Appendix B First Nations Community BaselineReports, Part 7 Community Baseline Report and EIS Integration Summary Table for Doig River First Nation, Halfway River First Nation, Prophet River First Nation, and West Moberly First Nations.

Although interest and activity is growing, barriers and challenges for Aboriginal persons in Canada to start and grow businesses have been noted in several reports and studies (Federal–Provincial Ministers Working Group on Aboriginal Participation in the Economy 2001). It summarized the major documented barriers and challenges, including:

- Inadequate connections and linkages between Aboriginal communities and traditional economies with the mainstream economy
- Systemic barriers, misconceptions, and stereotypes about Aboriginal people
- Many Aboriginal businesses and communities lack business expertise in marketing, bookkeeping, manufacturing, and management skills
- Aboriginal businesses often lack equity and have difficulty acquiring adequate business financing
- Access to loan guarantees, and equity and debt financing are issues for both business and community development

More recent reports that surveyed Aboriginal business owners and representatives of First Nations economic development corporations noted similar barriers and challenges (CCAB 2011; CCAB and Environics Research Group 2011). The Site C Impact Pathways Report (T8FNs Community Assessment Team and The Firelight Group Research Cooperative 2012b) itemized the barriers in the context of the LAA "…barriers identified by T8FNs include: the 'old boys network', lack of interest on the part of potential joint venture partners, lack of start-up funding, high housing costs, and lack of sufficient resources to purchase equipment; there is a lack of training in business development; First Nations lack experience in many sectors; lack of knowledge among members about how to start up and operate a business; failure to properly prepare for

the next contract; limited activity and industry partnership agreements in PRFN area" (Appendix B, row 51 in T8FNs Community Assessment Team and The Firelight Group Research Cooperative 2012b).

Table 18.2 summarizes the types and range of businesses in the First Nations communities of Doig River First Nation, Halfway River First Nation, Prophet River First Nation, and West Moberly First Nations.

Table 18.12 Current Business Activity of First Nations in the LAA (2012)

First Nation	Business Activity
Doig River First Nation	Economic development function in band administration First Nation-owned businesses, including Doig River Energy, an oil and gas industry service company 2011 directory of member-owned businesses listed 13 enterprises Road building, general contractors, forestry, oilfield (maintenance, facility construction, turnarounds), seismic, first aid and safety services, reclamation
Halfway River First Nation	First Nation-owned ranch 2011 estimate of five on-reserve members with businesses Gravel excavation and sales
Prophet River First Nation	First Nation-owned Prophet River Operations Ltd. Restaurant and commercial services, camps, and catering Four or five member-owned contracting companies
West Moberly First Nations	Several First Nation-owned businesses, including Dunne-za Ventures LP (contract services for mineral development and forestry sectors), joint venture in Dokie Wind Farm, Tsay-Keh-Ne-Cheleh Ranch, partnerships in two non-replaceable forest licences with Canfor, and Dunne-Za Lodge (on Moberly Lake) Gravel extraction and sales Estimate of seven member-owned businesses Logging and backhoe contracting business

NOTE:

Source: Volume 3 Appendix B First Nations Community Baseline Reports, Part 7 Community Baseline Report and EIS Integration Summary Table for Doig River First Nation, Halfway River First Nation, Prophet River First Nation, and West Moberly First Nations)

Typically, each First Nation in the LAA has at least one First Nation-owned business that provides a range of contracting services, such as excavation, road building, vegetation clearing, and first aid, to primary resource industries in the region. Table 18.13 summarizes the sectoral focus, services, and clients of several First Nations-owned companies.

Table 18.13 First Nations-Owned Contracting Businesses in the LAA

Company	Business Activity
Dunne-za Ventures LP (West Moberly First Nations)	Sectoral focus – oil & gas, forestry and mining sectors Contracting services – right-of-way clearing, road building, reclamation, logging, trucking, bridge design, first aid, and project management Clients – such as Encana, Shell Canada Energy, Devon Canada, Canfor, West Fraser, Tembec, Pine Valley Coal, Peace River Coal, and Western Canadian Coal Operations base – Fort St. John, B.C.
Duz Cho Construction LP (McLeod Lake Indian Band)	Sectoral focus – oil & gas, wind energy, and mining sectors; a sister company, Duz Cho Logging Ltd., is a full-phase timber harvesting and forest road construction contractor Contracting services – right-of-way clearing, road building, reclamation, logging, trucking, excavation, camp and catering services, bulk fuel supply, and card lock systems Clients – such as Shell Canada, Walter Energy, Teck Resources, BC Hydro, Mortenson Canada, Arcis Corporation, and LXL Consulting Operations base – Chetwynd, B.C.
4 Evergreen Resources LP (Saulteau First Nations)	Sectoral focus – oil & gas, forestry, and mining sectors Contracting services – right-of-way clearing, road building, reclamation, logging, trucking first aid, bridge design, and project management Clients – such as EnCana, Shell Canada Energy, Devon Canada, Canfor, West Fraser, Tembec, Pine Valley Coal, Peace River Coal, and Western Canadian Coal Operations base – Moberly Lake, B.C.
Blueberry River Enterprises GP Ltd. (Blueberry River First Nation)	Sectoral focus – oil & gas, forestry, and mining sectors Contracting services – Construction, alteration, repair, and development of earthworks, including right-of-way clearing, seismic clearing, road building, and site clearing; it also provides air curtain incineration services for vegetation clearing Clients – not named, but Blueberry River Enterprises GP Ltd. was nominated by Spectra Energy for a B.C. Aboriginal Business Award in 2011 Operations base – Charlie Lake, B.C.

NOTE:

Sources: Dunne-za Ventures (2012); Duz Cho Construction LP (2012); 4 Evergreen Resources LP (No date); Blueberry River Enterprises GP Ltd. (No date)

Since 2010, and in accordance with BC Hydro's Aboriginal Procurement Policy, Site C's Engineering team provided direct award contracts to Blueberry River Enterprises (a Blueberry River First Nations company) and 4 Evergreen Resources (a Saulteau First Nations company) to carry out early season work in advance of the finalization of a competitive process for general construction services. In that process, two Aboriginal businesses were successful in receiving contracts: Renegade Construction Inc. (owned by a Doig River First Nation member) and Dunne-za Ventures (a West Moberly First Nations company). All four companies provided general contractor support for the engineering field investigation program throughout the project area.

Two regional organizations have specific mandates to support development of Aboriginal businesses: Treaty 8 Tribal Association and Northeast Aboriginal Business Centre. The latter provides small business planning and operations advisory services to Aboriginal persons and Aboriginal businesses in northeast B.C. from its office in Fort St. John (Northeast Aboriginal Business Centre No date). The former has a community and

economic planning function, which assists its First Nation members to create economic self-sufficiency (Treaty 8 Tribal Association No date). It has an economic development strategy project underway that will benefit the following Treaty 8 communities: Doig River First Nation, Halfway River First Nation, Prophet River First Nation, Saulteau First Nations, and West Moberly First Nations.

18.4 Effects Assessment

The potential to affect Regional Economic Development is assessed by taking into account the Project's potential to result in changes to the following key aspects:

- Project contract opportunities in the LAA during construction
- A comparison of Project contracting requirements with the regional and Aboriginal business and contracting profile, capabilities, and capacity

Project expenditures would occur along two separate pathways: direct expenditures by BC Hydro on major work packages that would be subject to company and project procurement practices, and spinoff business activity (i.e., indirect supplier and induced industries) that is not subject to or controlled by project procurement practices.

The Project's general requirements for business contracting during construction are associated with each of the Project Component areas, as outlined in Volume 1 Section 4 Project Description:

- Dam, generating station, and spillways
- Reservoir
- Substation and transmission lines to Peace Canyon Dam
- Highway 29 realignment
- Quarried and excavated construction materials
- Worker accommodation
- Road and rail access

Effects are not assessed for contracting during operations, as the annual expenditures for this phase would be low relative to the regional economy and would, therefore, be negligible.

The direct, indirect, and induced expenditures flowing to non-Aboriginal-owned and Aboriginal-owned businesses located in the LAA would be determined by local supplier capabilities and capacity for meeting Project supply requirements. Capacity limitations among regional supplier industries include limited contractor experience, expertise, or credentials for meeting industry bid or performance standards (NPEDC, Economic Development Officers 2011 pers. comm.). Low unemployment rates and difficulties accessing skilled labour in the LAA are also constraining factors.

Adverse effects would occur if local and Aboriginal businesses and contractors were unable to fairly participate in the Project's procurement and supply opportunities.

18.4.1 Effects Assessment – Construction – Change in Contract Opportunities in the LAA

Estimates of project expenditures that would accrue to the region are based on the results of the British Columbia Input-Output Model, which uses estimates of direct project expenditures and calculates outputs (the dollar amount of goods and services of the Project) for indirect (i.e., supplier) and induced (i.e., consumer) industries in B.C. and the LAA (see Volume 3 Appendix A Economic Assessment Supporting Documentation, Part 2 Project Economic Impacts: BC Stats).

The direct expenditures and indirect and induced output would represent opportunities for businesses in the LAA as shown in Table 18.14.

- Direct expenditures on goods, services, and wages would support local businesses that secure work with the Project. Most of the general contractors would likely be major companies based outside the region, with local services typically provided on a subcontract basis. Direct ~~non-labour~~ expenditures in B.C. are estimated to be $1.7 billion. The proportion of that spending that would accrue to companies in the LAA would be determined by their capacity, expertise, and willingness to participate in project construction, but it is expected to be in the range of 10%, or $~~170~~226 million. This is based on observations made by regional economic development offices regarding participation of local suppliers in recent major projects in the region, including the Alcan Smelter upgrade, the Endako Mine expansion, and the Mt. Milligan Mine construction.
- The effects of spinoff activity would include increased output (i.e., value of industry production) as estimated in Table 18.4 for the LAA and for B.C. During construction, it is estimated that the LAA would receive $323.9 million in output, equivalent to 10.7% of the total B.C. output of approximately $3 billion.

An indication of the interest in the Project from local businesses and contractors is the composition of the Site C business directory – approximately 50% of all registrants are from the NEDR, and of those local registrants, 25% are businesses owned by either Aboriginal persons or organizations. In terms of communities, Fort St. John would be the major beneficiary of the direct expenditures and indirect and induced output because, as the service centre for the NEDR, its business base is best positioned to serve the Project. Project expenditures would encourage the expansion of existing businesses or the establishment of new ones, including branch and subsidiary operations of major suppliers not currently in the region.

Table 18.14 Estimated Direct, Indirect, and Induced Effects During Construction

Expenditures	LAA	B.C.
Direct Project expenditures [a] ($M)	NA	1736
Indirect and Induced Output (value of industry production)		
Direct Supply ($M)	99	1,429
Other Supply ($M)	127	774
Induced ($M)	99	813
Total Indirect and Induced Output ($M)	**324**	**3,016**

NOTE:

[a] Includes wages, benefits, unincorporated business income, operating surplus, and contingencies

NA – data not available

Source: Volume 3 Appendix A Economic Assessment Supporting Documentation, Part 2 Project Economic Impacts: BC Stats

Indirect and induced business opportunities would accrue to businesses in the LAA during construction, as shown in Figure 18.4. The Year 0 cumulative output of $11.8 million would increase annually before reaching a peak of $45.9 million in Year 4. Output in the final year of construction is $7.7 million.

According to the British Columbia Input-Output Model results, some industries would be more likely to experience increased opportunities because of direct Project expenditures. Table 18.15 shows the top five industries that would experience the greatest increased output in B.C. – all of which are represented by suppliers listed in the Site C Business Directory (refer to Table 18.10). Many companies receiving expenditures would not be contracting with BC Hydro, but would be indirectly involved in the supply chain.

Table 18.15 Total Indirect and Induced Output Effects in Top Five Supplier Industries in B.C.

Supplier industry	Total indirect and induced Output ($M)
Finance, insurance, real estate, rental and leasing	636.2
Manufacturing	192.6
Professional, scientific, and technical	318.6
Operating, office, cafeteria, and laboratory supplies	213.4
Wholesale trade	212.5

NOTE:

Source: Volume 3 Appendix A Economic Assessment Supporting Documentation, Part 2 Project Economic Impacts: BC Stats

18.4.2 Mitigation Measures – Construction – Change in Contract Opportunities in the LAA

As the Project will result in new contract opportunities, benefits for Regional Economic Development are linked to access of information and avenues for communicating back to BC Hydro about capacity and capabilities. BC Hydro has a Project objective to create lasting economic and social benefits for communities, Aboriginal groups, and the province. This will include creating construction-related jobs and business opportunities; consulting with communities about regional benefits such as upgrades to infrastructure, including roads, bridges, and parks; and working with Aboriginal communities to identify opportunities for benefits, including skills training, jobs, and economic development.

BC Hydro will implement a Business Participation strategy as identified in Volume 1 Appendix F Project Benefits Supporting Documentation, which was intitiated during the Pre-Panel Stage as described in Volume 1 Information Distribution and Consultation Section Business Liaison Program. Activities such as offering a Site C Business Directory and hosting Business Information Sessions have been and will continue to be provided. These initiatives keep the business community updated on the status of the Project, and inform and engage the B.C. business community on future Site C business opportunities. The Business Directory enables interested businesses to indicate their market interest and capacity, and to receive business-relevant updates. Business information sessions are offered publicly, and are focused on providing businesses, economic development organizations, and industry associations an opportunity to build awareness about Site C contracting opportunities.

18.4.3 Effects Assessment – Construction – Comparison of the Project's Contracting Requirements with Regional Economic Business and Contracting Profile, Capabilities and Capacity

18.4.3.1 General Population

The NEDR has more businesses per capita than any other development region in the province. The NEDR has a higher percentage of its labour force in construction-related occupations (see Section 17.3 Labour Market Effects Assessment Baseline Conditions), and higher ratio of construction to total businesses (see Table 18.6) as compared to the province. In addition, the Fort St. John and Dawson Creek local areas have above

average proportions of total community income coming from the construction sector (see Table 18.8).

More than 175 local companies, all of which are small businesses, have enrolled in the Site C Business Directory (43% of all companies listed) and attendance at Business Information Sessions held as part of the market engagement process (described in the Mitigation Measures section) indicates a growing level of local business interest in procurement opportunities. Economic development offices, including NDIT, Community Futures, and industry associations, provide investment attraction and development services that help businesses take advantage of emerging opportunities.

The capacity of local companies to respond to procurement opportunities is linked to the availability of inputs such as capital, labour, and infrastructure, size of the enterprise, entrepreneurship and managerial expertise, and the strength of relationships within the supply chain. Business development indicators (e.g., number of business establishments and locations, business licence activity) for the NEDR indicate that the business community is responsive to increases in local demand, especially in sectors where there is already good capacity, such as construction.

Direct expenditures by BC Hydro during construction would amount to $1.7 billion in B.C., with an estimated 10% of this accruing to regional businesses and contractors. Another $323 million in indirect and induced output is estimated to accrue to regional business. The leading beneficiaries would be expected to be suppliers in the following industries: construction, finance, insurance, real estate, rental and leasing services, manufacturing, professional, scientific and technical services, wholesale trade and operating, office, cafeteria, and laboratory supplies. Construction companies are assumed to benefit from the direct expenditures presented in Table 18.14. Business opportunities associated with direct labour costs are not estimated. Companies in other industries in the LAA economy would have the opportunity to participate in the Project.

In summary, the Project would have positive effects on Regional Economic Development during construction, as opportunities would be created for both companies and individuals directly involved in project construction, as well as for those companies and individuals involved in industries and activities that would benefit from indirect and induced output, as discussed in Volume 1 Section 7 Project Benefits.

18.4.3.2 Aboriginal Peoples

Section 18.4.3 assessed the change in contracting opportunities in the LAA as a result of the Project. An estimated $226~~170~~ million in Project contracts or subcontracts is estimated to be awarded to contractors based in the LAA over the construction phase. This work is largely focused on construction of major project components, most requiring services such as vegetation clearing, road building, excavation, and general contracting, in which many Aboriginal businesses in the LAA have demonstrated expertise and experience, as noted and itemized in Section 18.3.4.

~~In addition, t~~The input-output modelling carried out by BC Stats estimated that the Project would generate a total of $323 million of output (gross revenues) for business suppliers, filling indirect demand, and for consumer-focused businesses (such as grocery stores) in the LAA.

The results of the assessment in Section 18.4.3 of the change in contracting opportunities in the LAA due to Project-generated spending during the construction

phase are directly applicable to Aboriginal businesses and community economic development. The Aboriginal contracting and construction products supply sectors are a segment of the overall business sector in the LAA and they seek similar contracting and product (such as aggregates) sales opportunities as does the non-Aboriginal contracting sector in the construction, utilities, renewable energy, mining, oil and gas, and forestry sectors in the LAA.

In this section, the Project's contracting demand is compared to baseline and forecast Aboriginal business sector capabilities to assess potential effects on businesses owned by Aboriginal persons and organizations that are located in either First Nations communities or in non-Aboriginal communities in the LAA.

The Aboriginal business sector, although a segment of the overall business sector in the LAA, has its own distinct attributes, including company size, access to capital, educational attainment of business owners, historical development, and social circumstances for owners and employees.

Adverse effects would occur if businesses owned by Aboriginal persons or organizations in the LAA were unable to fairly and equitably access Project contracting opportunities.

The available information and data on businesses owned by Aboriginal persons and organizations point to a significant portion offering the types of construction-related services and construction products (such as aggregates/gravel) that will be sought by the Project during its construction phase. Approximately one-quarter of the businesses from the LAA that have registered on BC Hydro's Site C Business Directory are owned by either an Aboriginal person or organization. This result communicates the high level of interest of Aboriginal business owners and managers in the Project, as the Aboriginal population is approximately 10% of the total population in the LAA.

As noted in Section 18.3.4, however, Aboriginal businesses and First Nations economic development corporations face historical, social, and systemic barriers to starting and growing businesses.

The Site C Impact Pathways Report stated a few times that 'lack of a level playing field' will limit the benefits to Aboriginal businesses, "…size of project components & lack of 'set aside' for T8FNs raises strong concerns about ability to take advantage of capital and labour-intensive construction phase; not a level playing field to start with; large contracts, specialized technology, weaker starting point for T8FNs businesses due to existing hurdles make it possible T8FNs business "capture" will be limited….Lack of level playing field between First Nations and non-Aboriginal businesses means that unless there is dedicated pre-project planning to improve T8FNs business competitiveness, little benefits are likely" (Appendix B, row 50 and 51 in T8FNs Community Assessment Team and The Firelight Group Research Cooperative 2012b).

Although the Project's construction phase will create substantial construction products supply and contracting activity and spending over an eight-year period in the LAA, businesses in the LAA owned by Aboriginal persons or organizations are unlikely to secure a commensurate portion of this activity and spending without measures to help address their specific challenges and barriers. To ensure equity in Project procurement and supply for Aboriginal businesses in the LAA, comprehensive planning is needed to identify and remove discrimination in procurement and award policies and practices. Effects of social and historical barriers and challenges need remedying through targeted

measures, and appropriate representation of Aboriginal suppliers should be planned for throughout the Project during its construction phase.

18.4.4 Mitigation Measures – Construction – Comparison of the Project's Contracting Requirements with Regional Economic Business and Contracting Profile, Capabilities and Capacity

18.4.4.1 General Population

Mitigation proposed in Section 18.4.2, focused on implementing Business Participation strategies to increase awareness in the business community about Project procurement opportunities. These strategies will similarly promote new capabilities and capacity by having flexible procurement policies, enhancing local awareness and accessibility, and enabling partnerships among local businesses and outside suppliers.

Local economic development organizations already have the role of supporting businesses to be competitive for available market opportunities, so their participation in Project business information sessions is important in enabling them to support their constituents. BC Hydro will partner with local business organizations and with economic development offices and programs to deliver business information sessions and to communicate contracting opportunities.

Mitigation proposed in the Labour Market assessment (Volume 3 Section 17.4) will also contribute to expansion and diversification of the contractor profile, capabilities, and capacity. For example, BC Hydro's contribution of $1 million to the Northern Lights College Foundation to fund trades and skills development will increase the skilled labour supply that contractors need to expand their capacity.

These mitigation measures would enhance Regional Economic Development by expanding and diversifying business opportunities, profile, capabilities, and capacity during construction of the Project.

18.4.4.2 Aboriginal Peoples

BC Hydro will continue its outreach initiatives to make Aboriginal businesses aware of Project contracting opportunities. Its targeted application to the Project of its Aboriginal Contract and Procurement Policy will facilitate the participation of Aboriginal businesses in the contracting opportunities presented by the Project. Where identified by Aboriginal groups as an interest, BC Hydro will consider commitments respecting capacity building, education, and training associated with Aboriginal participation in Project labour market opportunities.

- BC Hydro will implement a Business Participation Strategy (refer to Volume 1 Appendix F Project Benefits Supporting Documentation). BC Hydro will continue to notify Aboriginal groups of business information sessions, and about opportunities to register with BC Hydro's Aboriginal Business Directory.
- BC Hydro will continue to engage directly with the Aboriginal business community in the LAA and elsewhere in the province, including providing opportunities to sponsor and participate in Aboriginal business events and conferences
- BC Hydro's Aboriginal Contract and Procurement Policy includes a commitment to increasing Aboriginal participation in providing its goods and services. Activities to

achieve this objective include set-asides, direct awards, select tenders, and the inclusion of Aboriginal Content in bidding documents.

- BC Hydro will seek information from Aboriginal suppliers in the LAA, and from other Aboriginal groups with whom BC Hydro is engaged, about their business capacity and capabilities to provide goods and services for the Project

18.5 Summary of Effects Assessment and Mitigation Measures

A summary of potential effects and mitigation measures are shown for Regional Economic Development in Table 18.16. As stated in Section 18.4, effects are restricted to the construction phase of the Project because effects are not assessed for operations, as the annual expenditures for this phase would be low relative to the regional economy and would, therefore, be negligible.

Table 18.16 Project Effects and Mitigation Measures on Regional Economic Development During Construction

Project Phase	Potential Effects	Mitigation Measures	Mitigation Effectiveness	Responsibility
Construction	▪ Change in business opportunities ▪ Change in LAA business and contracting profile, capabilities, and capacity	▪ Implementation of business participation strategy	The Business participation strategy has proven effective in other BC Hydro capital projects, while regional and Aboriginal businesses have actively participated in ongoing business information sessions and the business directory	BC Hydro
		▪ Work with local Economic Development Commissions and business organizations to deliver business information sessions and communicate contracting opportunities	No residual adverse effects on Regional Economic Development are anticipated.	BC Hydro
		▪ BC Hydro Aboriginal procurement policy to increase Aboriginal participation in Project business opportunities ▪ Seek information on Aboriginal businesses and capabilities		BC Hydro

18.5.1 Other Mitigation Measures Considered

Some stakeholders suggest that Project procurement and contracting policies should explicitly favour regional contractors and businesses (other than Aboriginal-owned ones). In consideration of this suggestion, this action was deemed infeasible for BC Hydro for the following reasons:

- As noted in Section 18.1.1, preferential contracting would conflict with domestic trade commitments that BC Hydro must meet under the New West Partnership Trade Agreement
- Preferential contracting could lead to higher construction costs if there is a lack of competitive bidders
- It is not common practice on major development projects in Canada
- There is a general lack of research on targeted procurement programs and their effectiveness in Canada

18.6 Residual Effects

The Project is anticipated to have positive effects on Regional Economic Development during construction, as opportunities would be created for businesses and contractors directly involved in Project construction, as well as for those involved in industries and activities that would benefit from indirect and induced expenditures, as discussed in Volume 1 Section 7 Project Benefits.

With mitigation, the Project would increase business procurement opportunities for local companies during construction and operations of the Project. Direct expenditures by BC Hydro during construction would amount to $1.7 billion in B.C.~~, with an estimated $170 million accruing to regional contractors, including Aboriginal businesses in the LAA.~~ Another $324 million in indirect and induced output would accrue to regional businesses.

The leading beneficiaries would be suppliers in the following industries: construction, transport, finance, insurance, real estate, rental and leasing services, manufacturing, professional, scientific and technical services, wholesale trade and operating, office, cafeteria, and laboratory supplies. However, companies in all industries in the local economy would be affected.

As the Project effects on Regional Economic Development are beneficial, these residual effects are not characterized further.

18.7 Cumulative Effects Assessment

No cumulative adverse effects are anticipated, because no residual adverse effects are anticipated.

18.8 Monitoring and Follow-Up

Monitoring and follow-up measures are not proposed for Regional Economic Development.

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