

Appendix 5.1-A Socio-economic Baseline Report



Tenas Project

Socio-Economic Baseline Report

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VERSION 0.3

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EXECUTIVE SUMMARY

TCL is proposing to develop the Tenas Project (the Project), a proposed surface metallurgical coal mine designed to produce approximately 15.0 million tonnes of washed metallurgical coal product, at about 0.750 to 0.825 million saleable tonnes per year, to be used in the manufacture of steel. The mine life of the Project is expected to be approximately 26.5 years, including Construction, Operation, and Decommissioning and Reclamation phases. This is followed by the Post-closure Phase, which is expected to last 25 years but is dependent on regulatory approvals.

The proposed Project located in the Regional District of Bulkley-Nechako (RDBN) in northwest British Columbia (BC), approximately 25 kilometres (km) south of Smithers, and seven (7) km southwest of the village of Telkwa. The Project is located on provincial Crown land and private land held by TCL.

TCL acknowledges the unceded rights of the Wet'suwet'en to 22,000 square kms of traditional territory within which the Project sits. The Wet'suwet'en territory includes much of the Bulkley River drainage. TCL have and will continue to engage with the Office of the Wet'suwet'en (OW) in respect of all Project activities.

This report describes the existing socio-economic conditions for four communities (Telkwa, Smithers, Houston, and Witset [formerly Moricetown]) and the RDBN that comprise the socio-economic Local Study Areas (LSA) study areas and Regional Study Areas (RSA), respectively.

Economic development in northwest BC, including the LSA and RSA, stems largely from development of the area's abundant natural resources. Populations in LSA communities have stayed relatively consistent over the past 15 years, with exception to Houston that was hit hardest by forestry and mining downturns. The retail and service sub for LSA communities is Smithers, and includes a full range of hospital, educational and other community services, as well as resource services including logistics and transportation.

A relatively high proportion of the RSA identify as Indigenous in comparison to the provincial average; meaning Indigenous people comprise a relatively large proportion of the population of communities near the proposed Project. Population data and trends for LSA communities indicated that they have relatively young populations and low rates of population growth, in comparison to the province.

Witset includes seven reserve communities, Moricetown 1, Babine 17, Babine 18, Bulkley River 19, Coryatsaqua 2, Oschawwinna 3, and Jean Baptiste 28. These communities are located about 60 km north of the minesite. These communities have relatively small populations (in the range of 80 to 300 people). Although Witset does have local education, employment, and health services, it is typical for residents to travel to Smithers for additional services.

LSA communities have a diverse workforce, as they support Smithers' role as the regional service centre. Smithers hosts a variety of government offices that service natural resource projects, which produces a balance in the workforce between the public sector and primary industry. Based on this, industry trends range from retail trade, health and social assistance, to manufacturing. Correspondingly, employment in trades, transport and equipment operations as well as sales and services were generally higher in LSA communities.

Community access to health, social, and emergency services is predominantly based on Smithers, which requires residents in other LSA communities to travel to access services. This is challenging for communities like Witset which are located 30 km from Smithers, however they have developed programs

suited to the needs of these communities and incorporating traditional approaches to healing and wellness. Programs include home care services, a travelling community health nurse, and addictions, trauma and mental health counselling.

Tenas Project

Socio-Economic Baseline Report

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ABBREVIATIONS AND ACRONYMS

Abbreviation or Acronym	Long Form of Abbreviation or Acronym
AANDC	Aboriginal Affairs and Northern Development Canada
ACL	Allegiance Coal Limited
AIR	Application Information Requirements
ALR	Agricultural Land Reserve
ASX	Australia stock exchange
BC	British Columbia
BC EAO	British Columbia Environmental Assessment Office
BCAFN	British Columbia Assembly of First Nations
BC MCDF	British Columbia Ministry of Children and Family Development
BC MFLNRORD	British Columbia Ministry of Forests, Lands, Natural Resource Operations and Rural Development
BC MECCS	British Columbia Ministry of Environment and Climate Change Strategy
BC MEMLI	BC Ministry of Energy, Mines and Low Carbon Innovation
BC MOTI	British Columbia Ministry of Transportation and Infrastructure
BC NREB	British Columbia Northern Real Estate Board
BVDH	Bulkley Valley District Hospital
BVLC	Bulkley Valley Learning Centre
CAFS	compressed air foam system
CCP	Comprehensive Community Plan
CDN	Canadian
CGL	Coastal GasLink Project
CMC	Coast Mountain College
CMHC	Canada Mortgage and Housing Corporation
CNR	Canadian National Railway
COHI	Children's Oral Health Initiative
CPP	Coal Processing Plant
CRNBC	College of Registered Nurses of British Columbia
CSI	crime severity index
CWB	community well-being
DFO	Department of Fisheries and Oceans
EA	Environmental Assessment
EAC	Environmental Assessment Certificate
ELMS	English Language and Multicultural Services
ESL	English as a Second Language
FNIGC	First Nations Information Governance Centre
FSR	Forest Service Road
GDP	gross domestic product
INAC	Indigenous and Northern Affairs Canada
KDC	Kyah Development Corporation

Abbreviation or Acronym	Long Form of Abbreviation or Acronym
KWES	Kyah Wiget Education Society
LGA	<i>Local Government Act</i>
LHA	Local Health Area
LNG	liquefied natural gas
LSA	Local Study Area
MBDLP	Moricetown Band Development Limited Partnership
MRI	magnetic resonance imaging
NGO	non-governmental organization
NVCSI	non-violent crime severity index
OCP	Official Community Plan
OW	Office of the Wet'suwet'en
PYLL	Potential Years of Life Lost
RCCBC	Rural Coordination Centre of British Columbia
RCMP	Royal Canadian Mounted Police
RDBN	Reginal District of Bulkely Nechako
ROM	run-of-mine
RSA	Regional Study Area
SCSA	Smithers Community Services Association
TAC	Tenas Access Corridor
TCL	Telkwa Coal Limited
UCEP	University College Entrance Preparation Program
USA	United States of America
VCSI	violent crime severity index
WHIMIS	Workplace Hazardous Materials Information System

1. INTRODUCTION

1.1 Project Proponent

Telkwa Coal Limited (TCL) is a joint venture partnership of Allegiance Coal Limited (ACL) and the Itochu Corporation. ACL is a publicly listed company on the Australia stock exchange (ASX: AHQ) with headquarters in Sydney, Australia. In addition to the Project, ACL owns two other coal mining projects located in central Queensland, Australia: the Kilmain and Back Creek projects, and recently acquired the New Elk metallurgical underground coal mine in Colorado, United States of America (USA), and the Black Warrior Minerals metallurgical surface coal mine located in Alabama, USA. ACL does not own or operate any other projects in British Columbia (BC). ITOCHU Corporation is a Japanese trading house founded in 1858. Today, ITOCHU has offices in 100 cities in 62 countries engaged in various commodities including textile, machinery, metals, minerals, energy and communications technology. Its market capitalization is approximately 4,799.8 Billion Yen. ACL currently owns 90% of the Project with ITOCHU owning the remaining 10%, with an option to increase their ownership stake to 20% and further in the future with support of the Project.

The Project is the company's flagship project. TCL has offices in Telkwa and Vancouver, BC. The company was registered in BC on September 10, 2014 (BC1013154). The ACL website is: <http://www.allegiancecoal.com.au> while the TCL website is <http://www.telkwa.com>.

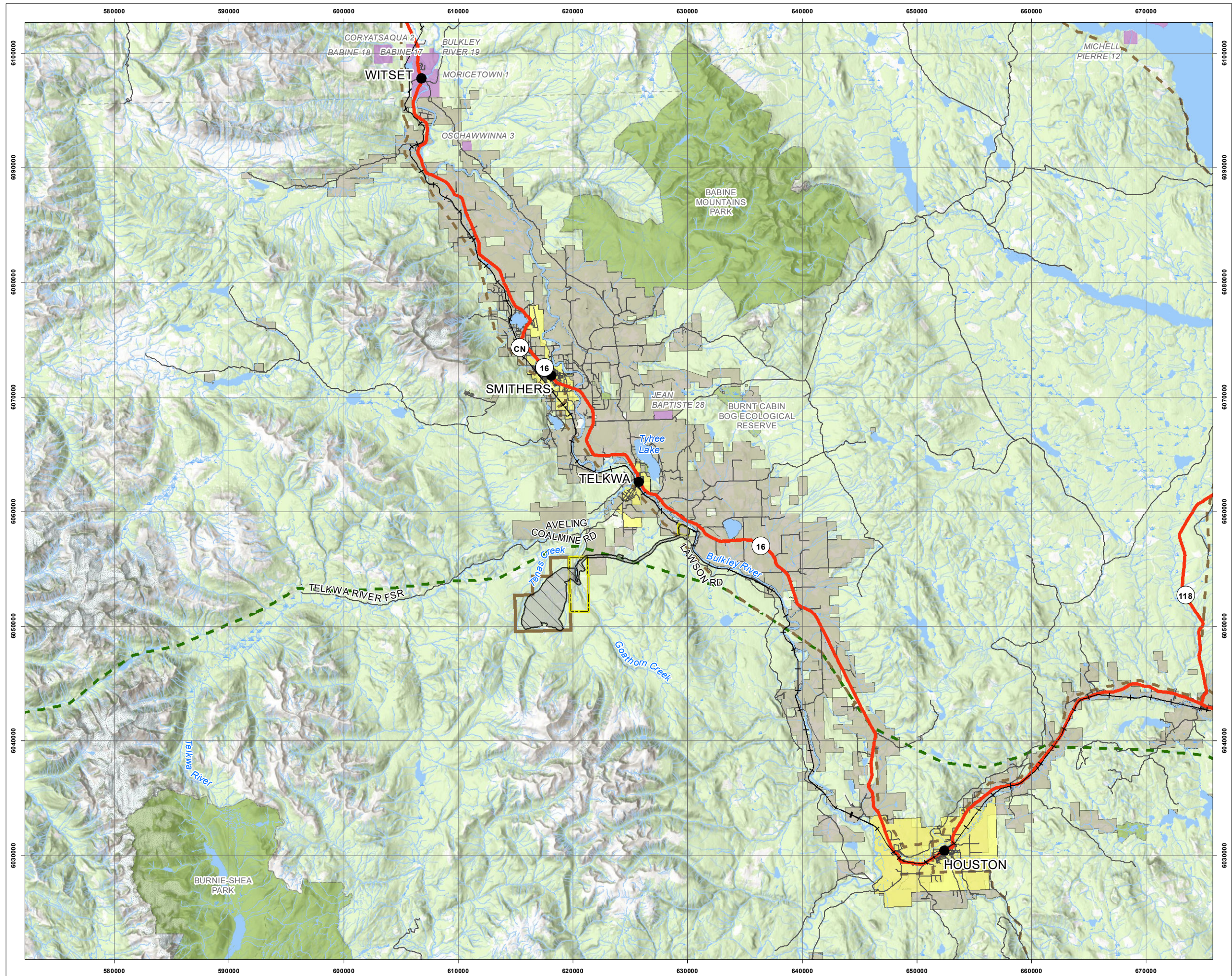
1.2 Project Description

TCL is proposing to develop the Tenas Project (the Project), a proposed surface metallurgical coal mine in northwestern BC. The Project is in the Regional District of Bulkley-Nechako (RDBN), approximately twenty-five (25) kilometers (km) south of the Town of Smithers and seven (7) km southwest of the Village of Telkwa (**Figure 1.2-1**). The Project is within Wet'suwet'en traditional territory, specifically the Gitdumden and Laksilyu clans.

The proposed Project will produce metallurgical coal at a production rate of between 775,000 and 825,000 metric tonnes of processed coal with a maximum daily production rate of 2,500 metric tonnes of processed coal per day. The mine life of the Project is expected to be approximately 26.5 years, including Construction, Operation, and Decommissioning and Reclamation phases. This is followed by the Post-closure Phase, which is expected to last 25 years but is dependent on regulatory approvals. The metallurgical coal produced from the mine will be exported to the Asian marketplace.

The Project's estimated initial capital cost is CDN\$123.5 million(2018 Dollars). The Project is anticipated to generate 125 person-years of direct employment during construction. The Project is anticipated to require between 55 and 145 full-time employees during operation and generate approximately 3,125 person-years of employment over the life of the Project excluding the Construction Phase.

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Tenas Project

Project Location

Legend

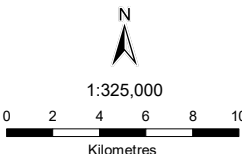
- City/Town
- +— Rail Line
- Highway
- Road
- 138 kV Transmission Line
- 500 kV Transmission Line
- Watercourse
- Wetland
- Waterbody
- Park or Protected Area
- First Nation Reserve
- Municipal Area
- General Private Property
- Tenas Coal Licenses
- Telkwa Coal Limited Private Property
- Project Area

Notes

1. All mapped features are approximate and should be used for discussion purposes only.
2. This map is not intended to be a "stand-alone" document, but a visual aid of the information contained within the referenced Report. It is intended to be used in conjunction with the scope of services and limitations described therein.

Sources

- Project Area: Allegiance Coal, April 21, 2021
- Basedata: Government of British Columbia
- Basemap: World Topo Base



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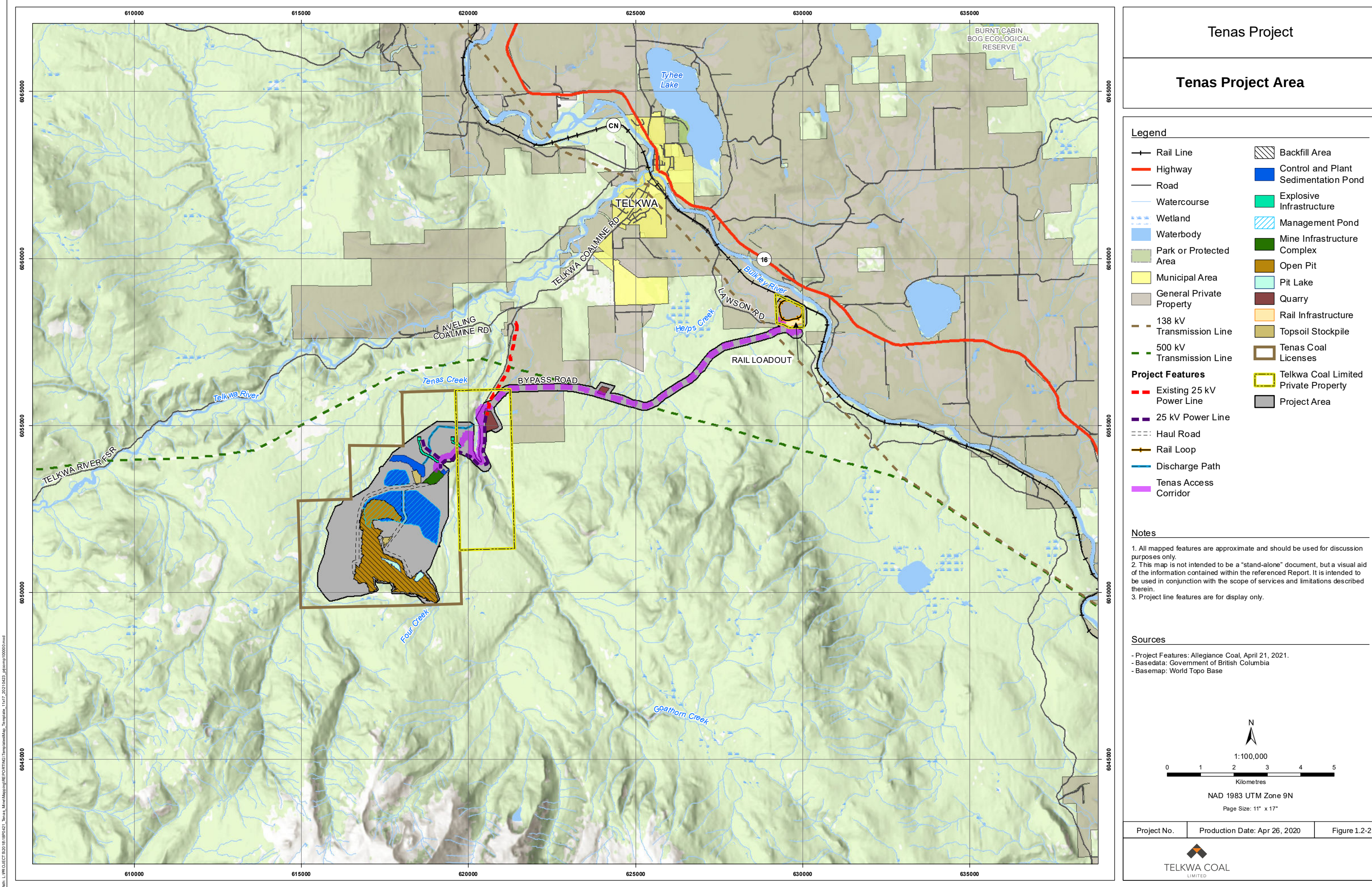
Production Date: April 29, 2020 Figure 1.2-1



The Project will include the following major components:

- ▶ open pit;
- ▶ Coal Processing Plant (CPP);
- ▶ coal handling systems for (run-of-mine) ROM coal, processed rock, and processed coal (including plant conveyors, storage bins, and stockpiles);
- ▶ storage piles for rock, processed rock, and overburden and stockpiles for growth media, processed coal, and processed rock;
- ▶ administration, first aid, maintenance/warehouse, mine dry, laboratory, light vehicle, mine rescue, and warehouse buildings;
- ▶ surface water management infrastructure (including ditches, sedimentation, control, management, and storage ponds);
- ▶ water supply wells, storage, and distribution network;
- ▶ fuel and lubricant storage facilities and distribution network;
- ▶ Explosives Magazine, storage silos, and vehicle wash and maintenance facilities;
- ▶ propane storage facilities and distribution network;
- ▶ solid waste management systems including landfill, recycling and composting facilities;
- ▶ haul roads and service roads within the Minesite;
- ▶ Tenas Access Corridor (TAC) which encompasses the 11 km newly constructed Bypass Road and improvements to approximately 5.0 km of an existing Forest Service Road (FSR);
- ▶ a 3.5-km long 25 kilovolt (kV) powerline and a 25 kV to 600 volt (V) substation adjacent to the CPP;
- ▶ Rail Infrastructure consisting of processed coal stockpiles, scales, dust control facilities and a 2.5 km Rail Loop connected to the Canadian National Railway (CNR) track; and
- ▶ a permanent bridge over Goathorn Creek.

Figure 1.2-2 shows the location of the Project's components.



1.3 Regulatory and Policy Framework

The Project is subject to the BC *Environmental Assessment Act*, SBC 2002, c. 43 (Government of British Columbia [GovBC] 2002) as the production capacity of metallurgical coal per year is above the 250,000 tonne threshold. This report has been prepared to support TCL's application for an Environmental Assessment Certificate (EAC Application) under the provincial environmental assessment (EA) process. Information from this report will be incorporated into the relevant EA chapters of the EAC Application.

The EA process ensures that any potential environmental, economic, social, cultural and health effects that may occur during the lifetime of a major project are thoroughly assessed. Environmental Assessments are managed by the BC Environmental Assessment Office (BC EAO), a neutral regulatory agency within the provincial government that works with and seeks input from scientific professionals, Indigenous groups, proponents, the public, local governments, and federal and provincial agencies to ensure that no adverse effects are missed (BC EAO 2018).

As part of the EA process, an Advisory Working Group (working group) is formed. The working group advises the EAO about issues related to the proposed Project's assessment, provides advice on the information required to be in the proponent's application, and reviews and provides comments on the EA Application (BC EAO 2018). The working group is comprised of local, provincial and federal government agencies, and potentially affected Indigenous groups.

A key part of the EA process is the Application Information Requirements (AIR). The AIR sets the information a proponent is required to provide in their EA Application for a certificate to support both Indigenous and provincial decision makers. The requirements provide clear direction to the proponent on what to assess and how to assess it (EAO 2018).

The BC EAO seeks to engage with Indigenous governments according to their jurisdictions and authorities through collaborative approaches to assessing proposed projects in support of Indigenous and provincial decision-making. Respectful of the nation's own Indigenous laws, traditions and right of self-determination, the EA process is designed to ensure that any decision taken on the question of consent by an Indigenous nation is free, prior and informed (EAO 2018). It is an objective that all EA Participants should be working to achieve, by working together in good faith and making best efforts to achieve mutually acceptable solutions that are built upon consensus.

1.4 Objectives

The objective of this report is to document the existing regional and local socio-economic conditions in the communities that may be affected by development of the proposed Project, in order to support the assessment of potential economic and social effects that will be presented in the EAC Application.

Specific objectives of this report are to:

- ▶ Present information about past and current social and economic conditions and context within the local and regional area of the Project;
- ▶ Describe local and regional community dynamics and trends; and
- ▶ Identify current and future community interests and concerns about the changes to the social setting in which people live.

This report is not intended to consider the past effects of resource development or colonization apart from describing how past events have contributed to shaping current conditions. This report describes the social

and economic contexts of areas and communities that characterize the socio-economic setting of the Project (as defined in **Section 2.0** below). Topics of focus include governance, population and demographics, labour force and economy, business activity, income, housing, community health and well-being, health and social services, community infrastructure, crime, education facilities and services, and educational attainment.

2. METHODOLOGY

2.1 Study Areas

Local and Regional Study Areas (LSAs and RSAs, respectively) are established to provide a spatial boundary for the purposes of social and economic assessment and are reflected in the presentation of baseline information. Study areas were selected based on their proximity to the proposed Project, and their anticipated interaction with Project development and operation. Consideration was given to the potential economic and socio-community effects of the Project, noting that Project-induced changes to employment and other economic conditions (e.g., labour supply, demand, and production systems) are often pathways to related social effects.

2.1.1 Regional Study Area

The RSA comprises the RDBN and the community of Witset¹ (**Figure 2.1-1**). The RSA reflects a regional dependency on natural resources, resource development, agriculture and tourism for employment and economic opportunities. The RSA includes LSA communities and the rural electoral areas of Smithers (A), and Houston (G), as well as Burns Lake (B), Fort St. James (C), Fraser Lake (D), Francois/Ootsa (E), Vanderhoof (F). Wet'suwet'en traditional territory is also located within the RSA.

The RDBN is located in northwest BC, spanning 73,419 square kilometers. The RDBN is situated in between Prince George and Prince Rupert, and includes seven Electoral Areas, representing the rural areas of Smithers (A), Burns Lake (B), Fort St. James (C), Fraser Lake (D), Francois/Ootsa (E), Vanderhoof (F), and Houston (G). The RDBN's population in 2016 was 37,896, a 3.3% decrease from 2011. 19.6% of the RDBN's population identifies as aboriginal. The median age of residents of the RDBN is 41.1, The median total income of RDBN residents was \$34,688, which is below the provincial median of \$40,370. 75.1% of RDBN receive their income via employment, whereas 12.2% rely on government transfers.

Provincial Highway 16 is the key transportation route that runs through the RDBN, connecting Vanderhoof, Burns Lake, Houston, and Smithers. The Canadian National Railway (CNR) follows the Highway 16 corridor from Prince George to Prince Rupert, with service through the RDBN. There are six airports within the RDBN. Smithers is the regional air travel provider, with smaller airports in Vanderhoof, Burns Lake, Fort St. James, Fraser Lake and Houston (RDBN 2014a).

The RSA's economy relies heavily on natural resources, primarily forestry and mining. In recent decades, forestry has waned. In the summer of 2019, mills in Fraser Lake and Smithers were temporarily shutdown, and the Houston mill saw production cuts. The community of Fort St. James mill declared a financial crisis following the closure and sale of its largest sawmill, which employs about 1600 people locally. In recent years, northwest BC has seen an increase in exploration and mining activities (Kamloops Matters 2019).

¹ The community of Witset is located outside of the RDBN, in the Kitimat-Stikine Regional District.

Brucejack and Red Chris mines are currently operational, while Red Mountain and KSM have received their EAC's (Link 2019).

Due to geographic location, Electoral Area A and G are expected to be the most impacted Electoral Areas within the RDBN, as they represent the rural areas surrounding most of the LSA communities. The Project is located within RDBN Electoral Area A, the most populated Electoral Area in the RDBN with 5,256 people. Electoral Area A represents the rural areas surrounding Smithers and Telkwa. Electoral Area G includes the rural area surrounding Houston and is the least populated Electoral Area with 903 people.

2.1.2 Local Study Area

The LSA comprises the Village of Telkwa, Town of Smithers, the District of Houston, and Witset (formerly Moricetown) (**Figure 2.1-1**). These communities were chosen for the LSA, as they are expected to be directly involved and/or influenced to varying degrees by the Project during the construction, operation, and closure and reclamation phases of the Project. Based on their physical location to the Project, it is anticipated that these communities may encounter socio-economics impacts, as it relates to labour and employment, business and industry, community services and infrastructure, and community well-being to name a few.

- ▶ The Village of Telkwa (Telkwa) is located along the provincial Highway 16, approximately 15 km southeast of the town of Smithers and 350 km west of Prince George. Telkwa is a small bedroom community to Smithers (refer to 2.1.2 below). Telkwa is the closest community to the Project, located about seven (7) km to the northeast.
- ▶ The Town of Smithers is located directly on provincial Highway 16, approximately halfway between the cities of Prince Rupert and Prince George, and approximately 25 km from the Project. Smithers is the regional service and retail center for the Bulkley Valley, including all LSA communities (RDBN 2014b). As the regional service center, Smithers hosts a variety of government services that compliment natural resource Projects (Northern Development Initiative Trust 2010; ERM 2015). Smithers has a diverse economy that is driven by the public sector, primary industry, specifically mining, agriculture, and forestry, as well as recreation and tourism.
- ▶ The District of Houston (Houston) is situated on Highway 16 approximately 64 km southeast of Smithers and 80 km northwest of Burns Lake. Houston is an industrial centre dependent on the natural resource sector, specifically forestry and mining. Like many natural resource dependent communities, Houston has weathered changing economic conditions over the last few decades with the closure of local mining and forestry ventures. However, in recent years Houston has slowly seen an upturn in the local economy, based primarily on the Coastal GasLink (CGL) Project that is currently under construction (District of Houston 2017).
- ▶ The community of Witset is located outside the RDBN. Witset (formerly Moricetown) comprises four (4) occupied and adjacent reserves of the Witset First Nation, a member of the Wet'suwet'en Nation as represented by the Office of the Wet'suwet'en (OW). Statistical data for Witset is based on data for Moricetown 1, Coryatsaqua (Moricetown) 2, Bulkley River 19, and Babine 17 as those Reserves have residences; however, the Witset First Nation also has two (2) other Reserves, Oschawwinna 3 and Jean Baptiste 28, that are mostly undeveloped and forested areas, with some land used for agricultural uses (Witset First Nation 2018).

Tenas Project

Local and Regional Study Areas

Local and Regional Study Areas

Legend

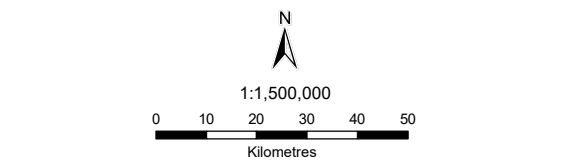
- ★ Tenas Project
 - Labour Market Local Study Area Community
 - Labour Market Regional Study Area
 - Regional District of Bulkley-Nechako (RDBN)
 - Electoral Areas

NOTES

1. All mapped features are approximate and should be used for discussion purposes only.
2. This map is not intended to be a "stand-alone" document, but a visual aid of the information contained within the referenced Report. It is intended to be used in conjunction with the scope of services and limitations described therein.

Sources

- Project Area: Allegiance Coal, 2020
- Basedata: Government of British Columbia
- Basemap: World Topo Base



NAD 1983 BC Environment Albers

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2.2 Information and Data Sources

The provincial EA process requires the production of separate social and economic effect assessment chapters within the EAC Application. The aim of a combined socio-economic baseline report is to capture the multiple, and often interacting, social and economic conditions that shape the lives of people and communities in the area. This integrated approach will provide a complete and more meaningful basis for the assessment of social and economic effects and will reduce the redundancy inherent in producing separate social and economic baseline reports.

This report is based on the review, analysis, and summary of multiple sources of data and information collected between January and August 2019, including official government statistics and other data from provincial, regional, and local organizations and government agencies. Public and unpublished reports, media analyses, and the results of public engagement activities are also considered. The collection of baseline information focused on generating a profile of key social characteristics for communities within the LSA communities.

2.2.1 Secondary Sources

Desk-based research consisted of reviewing previously conducted studies and provincial databases to identify and compile available information. Sources include publicly available statistics from government agencies, government reports, private sector and non-governmental organization (NGO) reports, and internet publications. Socio-economic reports related to other resource development proposals in the Project area were reviewed. Data for the study was also informed by Health Canada's Canadian Handbook on Health Impact Assessment, which promotes a holistic approach to health and well-being, and recognizes the inter-connected relationships between communities and the physical environment (Health Canada 2004).

2.2.2 Fieldwork

Additional context is provided by information obtained through Project-specific fieldwork and interviews conducted from June 25 to August 19, 2019 in LSA communities. Key informant interviews were carried out with community leaders, administrators, and managers responsible for a range of social and economic issues, programs, and/or facilities. Notes and other information gathered during interviews are predominantly qualitative and were primarily used to supplement statistical information and to contextualize understanding of existing issues and concerns in the communities.

2.3 Limitations and Assumptions

2.3.1 Census Data

This report relies on data from the 2016 Census of Canada, either as a direct source of socio-economic statistics or indirectly as a key source of information within other cited references. Caution is necessary with respect to drawing specific conclusions about the LSA communities' current characteristics and outlooks based on data that is four years out of date. At the same time, there is an element of continuity and stability in social and economic conditions such that it is reasonable to assume that while things are likely to have changed, they have not changed so much as to render the data useless for the purposes of the social and economic assessments.

2.3.2 Geographic and Temporal Comparison

For certain data sources and statistics, direct comparisons between areas or across time periods may be problematic because of variations in both geographical and statistical definitions. The areas included within the borders of these regions and categories rarely coincide with one another and often change over time. Furthermore, the cultural linkages and traditional territories of relevant Indigenous Groups transcend many of these contemporary or administrative boundaries. Efforts have been made to note inconsistencies and/or data limitations throughout this document.

2.3.3 Availability and Completeness of Data

Availability of information varies significantly from one community to the next. Larger communities tend to have more complete datasets than small villages, and incorporated municipalities tend to have more information than unincorporated settlements. Statistical information, particularly for the smaller communities, may be limited or intentionally suppressed by Statistics Canada to help protect the confidentiality of personal information of people living in small communities. Statistics Canada's practice of random rounding (also to protect confidentiality) can also affect the accuracy of census data for small communities, particularly when used to derive percentages or summed totals.

Canada Mortgage and Housing Corporation (CMHC) does not provide data for LSA communities. It does however provide data for nearby communities such as Terrace, Prince George, and Prince Rupert. When presenting housing vacancy rates in Section 5.6, these larger communities were used to illustrate trends in vacancy rates in the northwest. It was established that this data does not represent LSA communities entirely, and instead describes regional trends.

2.3.4 Indigenous Data

2016 Census data is only available for the reserve communities of the Witset First Nation (Moricetown 1, Babine 17, Babine 18, Bulkley River 19, Coryatsaqua 2, Oschawwinna 3, and Jean Baptiste 28), and not the village of Witset (formerly Moricetown). Therefore, the socio-economic information for Witset First Nation draws primarily on Statistics Canada Census and Crown-Indigenous Relations and Northern Development Canada² statistics. Due to a lack of alternative, publicly available information, sections of this report rely on data from government statistics; however, statistical data describing Indigenous communities should be interpreted with caution and with an understanding of the limitations of this data. It is widely acknowledged that the socio-economic conditions of Indigenous communities are often not adequately characterized by national census data due to small sample sizes, incomplete enumeration, higher-than-average non-response rates, data suppression, and random rounding. To address this, additional data sources are used (where available) to provide a more accurate socio-economic context, such as Indigenous community websites.

As noted, Witset First Nation is made up of seven reserve communities, Moricetown 1, Babine 17, Babine 18, Bulkley River 19, Coryatsaqua 2, Oschawwinna 3, and Jean Baptiste 28. Based on the limitations of Indigenous data described above, 2016 census data was only available for the communities of Babine 17, Bulkley River 19, Coryatsaqua 2, and Moricetown 1. To provide a clear presentation of census data for Witset, Babine 17, Bulkley River 19, Coryatsaqua 2, and Moricetown 1 data was averaged to represent the overall community of Witset. Income data was only available for Moricetown 1 (excluding median household

² Formerly Indigenous and Northern Affairs Canada (INAC)

income). For this section, it was noted that the data presented only represented Moricetown 1 and none of the other Witset communities.

3. GOVERNANCE, ADMINISTRATIVE, AND PLANNING

3.1 Federal and Provincial Context

The provincial government is based in Victoria and is represented by regional offices across the province, including Terrace, Smithers, and Prince George. Provincial ministries and services underwent extensive restructuring in the mid-1990s that included a centralization of many government employees and services in regional centers.

Provincial ministries are responsible for delivering services within provincial jurisdiction. The following ministries have offices in Smithers:

- ▶ BC Ministry of Environment and Climate Change Strategy (BC MECCS);
- ▶ BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development (BC FLNRORD);
- ▶ BC Ministry of Transportation and Infrastructure (BC MOTI);
- ▶ BC Ministry of Energy, Mines and Low Carbon Innovation (BC MEMLI); and
- ▶ BC Ministry of Children and Family Development (BC MCFD).

One federal ministry, the Department of Fisheries and Oceans (DFO) is located in Smithers.

As the regional health authority under the BC Ministry of Health, Northern Health is responsible for health care services across northern BC, including acute (hospital) care, mental health and addictions services, public health services, and home and community care. Within Northern Health, the LSA and RSA are located in the Northwest Health Service Delivery Area. The BC Ambulance Service, under BC Emergency Health Services, provides emergency response and ambulance services.

The federal government provides mail services (Canada Post) as well as policing (Royal Canadian Mounted Police [RCMP]). In Aboriginal communities, the federal government is also engaged in community affairs through Aboriginal Affairs and Northern Development Canada (AANDC) (formerly called Indigenous and Northern Affairs [INAC]) and Health Canada.

3.2 Local and Regional Context

Local governments in BC include municipalities and Regional Districts (RDs). Community services are largely the responsibility of local governments as empowered through the *Local Government Act*, RSBC 2015, c.1 (GovBC 2015) (*LGA*) and the *Community Charter*, SBC 2003, c. 26 (GovBC 2003). The *LGA* is the primary legislation for RDs and Improvement Districts, setting out governance and structure as well as the main powers and responsibilities. Certain municipal provisions remain in effect for matters not covered by the *Community Charter*. The *LGA* sets out statutory requirements for elections, planning, and land use. The *Community Charter* identifies broad powers for municipalities relating to taxation, financial management, and bylaw enforcement.

Community services are largely the responsibility of local governments as empowered through the *LGA* and the Community Charter. Key community services under local jurisdiction include fire protection (under the *Fire Services Act*, RSBC 1996, c. 144 [GovBC 1996a]); engineering services (including water supply, waste management, and transportation); parks and recreation; and housing as affected by zoning, Official Community Plans (OCP), and other plans. Local governments are also empowered to form committees and task forces to address specific community issues. Several community services are the responsibility of regional-level local governance, including health care services (Health Authorities under the *Health Authorities Act*, RSBC 1996, c. 180 [GovBC 1996b]), education (School Districts under the *School Act*, RSBC 1996, c. 142 [1996c]), services provided by a RD in the absence of a municipality, and housing as affected by regional planning initiatives (ERM 2015).

Municipalities are only required to provide a very small number of services such as local emergency planning or in some cases policing, depending on the size of the community. Typically, municipal services include water, wastewater and sewer, garbage collection and recycling programs, road maintenance (GovBC 2019a).

RDs are obligated to provide very few services, including emergency management, planning for regional solid waste management, and governance for electoral areas. RDs have no role in roads and policing, as these services are municipal or provincial responsibilities (GovBC 2019a).

RDs can choose to provide a broad range of services with the support of the electors or taxpayers. It is often said that RDs can provide the services that their participants are prepared to pay for. The breadth of services therefore varies with each RD according to its circumstances and local opinion. This is possible because the geographic boundaries of each service can be customized to match the area that benefits with the area that pays (GovBC 2019a).

RDs are able to regulate land use and development in electoral areas using generally the same planning and land use management processes and tools available to municipalities, including zoning and official community plans. RDs differ from municipalities as regional districts do not have a direct role in approving subdivision of land (a Provincial responsibility in non-municipal areas) (GovBC 2019a).

3.3 Indigenous Governance

Indigenous governments operate in a number of ways in BC. As outlined in the *Indian Act*, RSC., 1985, c. I-5 (Government of Canada [GovCan] 1985), Indigenous governments can follow hereditary, Indigenous reserve communities, and bands systems. It is common for hereditary and band governance systems operate in parallel, although sometimes they operate independently of one another.

Since the introduction of the *Indian Act*, R.S.C., 1985, c. I-5 (GovCan]1985), there have existed two parallel and overlapping network structures and systems governing Wet'suwet'en society. Governance of Wet'suwet'en members has traditionally been the responsibility of the hereditary House and Clan system. This system and its leadership are represented by the OW and is organized into five hereditary clans and 13 houses with 38 house territories. The band-level system, comprised of the Witset, Hagwilget, Nee Tahi Buhn, Skin Tyee, and Wet'suwet'en First Nation bands, are governed by elected band councils. Both, the OW, as well as the elected band-level system, are able to enter into agreements with the provincial and federal governments for the purposes of self-determination and self-governance (Budhwa 2005; GovBC 2018).

The OW is the central office for the Wet'suwet'en focusing on the management of their lands and resources, fisheries and wildlife, human and social services, and treaty negotiations. The OW is governed by the Wet'suwet'en Hereditary Chiefs residing throughout their traditional territories. One of the OW's mandates

is to represent the Wet'suwet'en's interest in treaty negotiations and working to foster solidarity among the Nation. They are also important intermediaries in the consultation processes related to resource development in Indigenous Groups traditional territories (OW 2019a).

3.3.1 Wet'suwet'en Hereditary System

The overarching hereditary system of the Wet'suwet'en follows matrilineal descent in which members belong to one of five clans (OW 2019b):

- ▶ Gil_seyhu (Big Frog);
- ▶ Laksilyu (Small Frog);
- ▶ Gitdumden (Wolf/Bear);
- ▶ Laksamshu (Fireweed); and
- ▶ Tsayu (Beaver Clan).

Within each clan, a hereditary Chief and subsidiary wing Chiefs hold responsibility for individual House territories on behalf of their kin-based Yikhs (or House groups), with each house holding authority over their respective geographical territories (OW 2019a). This system of governance is continually conferred through the Baht'lat. Bah'lat's, or feasts, are the primary form of governance and central to Wet'suwet'en government, law, social structure and worldview.

3.3.2 Wet'suwet'en Bands

Aboriginal reserve communities are typically governed by an elected chief and council, following rules and conventions set out in the *Indian Act*, RSC., 1985, c. I-5 (GovCan 1985). Within the Wet'suwet'en traditional territory there are five bands with reserve lands:

- ▶ Witset First Nation (formerly Moricetown Band);
- ▶ Wet'suwet'en First Nation (formerly Broman Lake Indian Band);
- ▶ Hagwilget Village Council;
- ▶ Nee-Tahi-Buhn Band; and
- ▶ Skin Tyee Band

These bands were created under the *Indian Act*, RSC., 1985, c. I-5 (GovCan 1985), which prescribes the governance operations of these groups. As per TCL's Section 11 Order (BC EAO 2019a), TCL is to engage with the Wet'suwet'en through the OW Wet'suwet'en Hereditary Chiefs and provide notification to the Wet'suwet'en First Nation.

Witset First Nation (formerly known as the Moricetown Band) is governed by a Chief and 10 councillors elected under the *Indian Act*, RSC., 1985, c. I-5 (GovCan 1985). There are seven reserves governed by Witset First Nation (Moricetown 1, Babine 17, Babine 18, Bulkley River 19, Coryatsaqua 2, Oschawwinna 3, and Jean Baptiste 28), with the primary reserve community being Moricetown 1, located approximately 30 km north of Smithers. Witset First Nation and Hagwilget Village Council make up the Wet'suwet'en treaty group, which is engaging with community members as part of a multi-year Treaty Related Measure on governance and constitutional development within the BC treaty process (GovBC 2018).

Wet'suwet'en First Nation, is governed by a Chief and two councillors elected under a custom electoral system (Wet'suwet'en First Nation 2018). In addition to membership in the OW, Wet'suwet'en First Nation

is a member of the Carrier-Sekani Tribal Council. In 1960, the members of the Francois Lake Tribe (Skin Tyee Band, the Decker Lake Band, Francois Lake Band, and Maxim Lake Band) merged to form the Omineca Band. The Omineca Band then divided into the Broman Lake Band (now Wet'suwet'en First Nation) and Nee-Tahi-Buhn Band in 1984. The Skin Tyee Band separated from the Nee-Tahi-Buhn Band in 2000 (OW 2019c). The Province has been negotiating land and resource agreements with Wet'suwet'en First Nation outside the treaty process (GovBC 2018).

The Hagwilget Village First Nation is a First Nations band government of the Wet'suwet'en subgroup of the Dakelh (Carrier) people, located at Hagwilget, which is just east of Hazelton, BC (BCAFN 2019). Hagwilget Village is governed by a Chief and council elected under the *Indian Act*, RSC., 1985, c. I-5 (GovCan 1985). The primary reserve community is located at Hagwilget 1, adjacent to New Hazelton. The band has a total registered population of 798 peoples, 190 of whom live on their own reserve (GovBC 2018).

The Nee-Tahi-Buhn Band is governed by a Chief, Deputy Chief and two councillors elected under a custom electoral system. The primary reserve community of Uncha Lake 13A is located approximately 33 km south of Burns Lake. The band has a total registered population of 151 peoples, 38 of whom live on their own reserve. The Nee-Tahi-Buhn band is engaged with the Province in discussions associated with land and resource use within its asserted traditional territory outside of the BC treaty process (GovBC 2018).

The Skin Tyee band is governed by a Chief and two councillors under a custom electoral system. The primary reserve community of Skins Lake 16B is located approximately 27 km southwest of Burns Lake. The band has a total registered population of 186 peoples, 54 of whom live on their own reserve. The Skin Tyee Band is engaged with the Province in discussions associated with land and resource use within its asserted traditional territory outside the BC treaty process (GovBC 2018).

3.3.3 Wet'suwet'en Reserves

Indigenous and Northern Affairs Canada (INAC) data states that there are 3,421 registered Wet'suwet'en members; 1,165 on-reserve and 2,256 off-reserve (INAC 2019). **Table 3.3-1** identifies the area of each of the thirty-one reserves (GovBC 2019b). Together these reserves total approximately 3,013 hectares (ha). Moricetown 1 and Hagwilget 1 are the most populated reserves (INAC 2019, OW 2018).

Table 3.3-1: Wet'suwet'en Communities and Reserves

Community	Reserve	Hectares
Witset	Babine 17	64.80
	Babine 18	259
	Bulkley River 19	242.80
	Coryatsaqua 2	126.40
	Jean Baptiste 28	129.50
	Moricetown 1	539.50
	Oschawwinna 3	65

Community	Reserve	Hectares
Wet'suwet'en First Nation	Duncan Lake 2	78
	Felix George 7	94.40
	Foxy Creek 6	16.20
	Gaichbin 8	97.90
	Klagookchew 9	62.70
	Maxan Creek 5	15.60
	Maxan Lake 3	64.70
	Maxan Lake 4	67.20
	Palling 1	70.70
	Tatla West 11	56.50
	Tsichgass 10	76.90
Skin Tyee	Skins Lake 15	183.70
	Skins Lake 16A	64.70
	Skins Lake 16B	64.70
	Tatlat't East 2	56.10
	Uncha Lake 13a	24.10
	Western Island 14	3.30
Hagwilget Village	Bulkley 1	34.80
	Hagwilget 1	123.80
Nee-Tahi-Buhn	Eastern Island 13	7.70
	Francois Lake 7	153.80
	Isaac (Gale Lake) 8	85
	Omineca 1	58.70
	Uncha Lake 13 A	24.10 3

Source: GovBC 2019b.

4. SOCIO-ECONOMIC OVERVIEW

4.1 National and Provincial Context

Canada's natural resources sector is a notable component of national and provincial economies and contributes to high standards of living for Canadians (Natural Resources Canada 2018a). In 2017, the natural resources sector accounted for 17% of nominal gross domestic product (GDP), including 924,000 direct jobs and 896,000 indirect jobs (Natural Resources Canada 2018b). In 2018, Canada's minerals and metals sector provided 634,000 direct and indirect jobs and contributed 5% to Canada's GDP. This includes 16,500 jobs for Indigenous Peoples (Natural Resources Canada 2019). In 2017, BC's minerals and metals sectors employed 38,440 people, representing 1.4% of the provinces employment. BC's economy accounted for 13.2% of Canada's GDP in 2017 (**Table 4.1-1**) (GovBC 2019c).

Table 4.1-1: BC's mineral and metal sectors employment

Industry	Jobs
Metal mining	3,420
Coal mining	4,475
Industrial minerals + construction aggregates	1,345
Exploration	4,125
Total direct exploration and mining employment	13,635
Mineral refining and smelting	4,990
Downstream mineral processing	19,815
Total direct minerals economy employment	24,805
Total sector employment	38,440

Source: GovBC 2019c

In 2017, mineral production in Canada totaled approximately \$43.9 billion, with coal representing \$6.2 billion of the total (Natural Resources Canada 2019). During this time, natural resources companies invested \$89 billion within the country, representing 38% of total non-residential capital investment in Canada. Of this, \$12 billion was invested in minerals and metals in 2017 (Natural Resources Canada 2018b). In 2017, the minerals and metals sector accounted for 19% of Canada's total domestic exports (Natural Resources Canada 2019).

BC's economy has historically relied on natural resource industries. Mining and forestry were major economic drivers throughout the early twentieth century. Over the course of the last few decades, the provincial economy has increasingly diversified. Natural resource industries have remained important within the province, although the balance has shifted to include value-added manufacturing and services. At the same time, BC has become increasingly urbanized, and more socially and economically diverse.

BC's mining industry remains upbeat, as prices of most metals and minerals produced in the province continue to steadily recover from multi-year lows. In recent years, both northwest and northeast BC have experienced an increase in exploration and mining activities. Strong market demand, particularly from Asia, as well as a surging mineral and coal prices have attracted considerable investment in exploration, helping to position BC as a globally important source of production. As of 2018, there were 108 minerals and metals projects under construction and planned over the next 10 years in Canada, amounting to \$72 billion. During 2012-2016, Governments across Canada derived an average of \$22 billion annually from the natural resource sector (Natural Resources Canada 2018b).

Gross mining revenue from BC operations were \$11.7 billion in 2017, a 26% increase from 2016's revenue of \$8.7 billion. Metallurgical coal saw the largest year-over-year price surge in 2017, increasing 50% from 2016. Metallurgical coal revenue in 2017 was \$5.2 billion, rising 42% from \$3.0 billion in 2016. Coal was the main mineral extracted, representing approximately 51% (\$5.2 billion) of the total value of BC solid mineral production, followed by copper, which accounted for 19%. The total payment to governments in 2017 was \$859 million, a 22% increase from the \$650 million paid to governments in 2016 (PwC 2018).

Federal, provincial, and municipal tax revenue from mining provides economic benefits that are felt outside the area of operations. Tax revenues are used by governments to fund social, health, education, and other programs and services for residents nationally, provincially, and within local communities. The mining industry contributed \$859 million in government payments in 2017, a 22% increase from the \$650 million in 2016. Direct government revenues from mining include a mineral tax levied on mine operators under the *Mineral Tax Act*, RSBC 1996, c. 291 (GovBC 1996d), a mineral land tax on freehold mineral rights holders

under the *Mineral Land Tax Act*, RSBC 1996, c. 290 (1996e), and an annual mine health and safety inspection fee (BC Ministry of Finance 2012).

4.2 Regional Context

Economic development in northwest BC, including the LSA and RSA, stems largely from development of the area's abundant natural resources. Forestry, fisheries, and mining all have rich histories in the region. Notwithstanding the changes and fluctuations in resource industries in northwest BC, mining remains an important employer and the economic lifeblood of many of LSA communities. Nevertheless, primary industry is increasingly complemented by tourism, especially tourism markets such as guide outfitting, hunting, fishing, and backcountry recreation (RDBN 2014a).

In recent years, development of infrastructure, transportation, power generation and transmission, mining, and natural gas have created new jobs, businesses, and investment opportunities. As of Q1 2019, there were a total of 20 proposed major projects proposed for the Nechako region (not including Prince Rupert, Terrace, or Prince George), with 12 being mining and oil and gas projects and four utilities projects. The 20 proposed projects had a combined estimated value of \$7.1 billion, a 1.6% increase from Q1 2018 (BC Ministry of Advanced Education, Skills, and Training 2019).

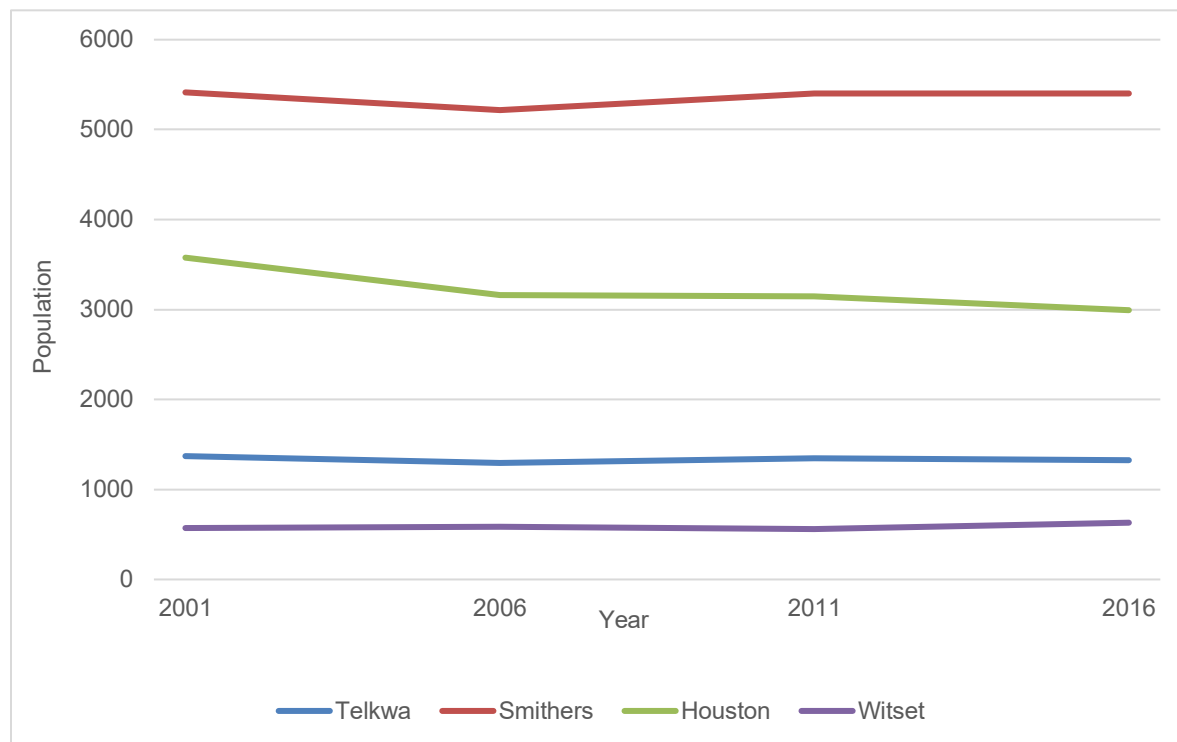
In recent years, there has been a growing global demand for natural gas, particularly liquefied natural gas (LNG), driven by rising consumption in Asia. There are currently a number of energy-petroleum and natural gas projects proposed in the Skeena region including: Cedar LNG, Kitimat Clean Refinery, Pacific Future Energy Refinery, and Vopak Pacific Canada. Several pipeline projects have also been proposed, including Pacific Northern Gas Looping, Westcoast Connector Gas Transmission, and the Coastal GasLink (CGL) Pipeline (BC EAO 2019b). Construction began on the CGL Pipeline in 2019.

The rise in LNG opportunities comes during a time of decline and uncertainty in BC's forestry industry. Between 2018 and 2019 there were over two dozen mill shutdowns or curtailments within the province, putting hundreds out of work in communities like Quesnel, Vavenby, Fraser Lake, Chasm, 100 Mile House, Williams Lake, Chetwynd, Kelowna, Smithers, Mackenzie, Fort St. John, 70 Mile House and Prince George (Boynton & Palma 2019; Petersen 2019).

5. RESULTS

5.1 Population and Demographics

The populations of the study area communities between 2001 and 2016 are illustrated in **Figure 5.1-1**. Of the LSA communities, Witset has the smallest population (631 in 2016) and Smithers has the largest population (5,401 in 2016). Populations have stayed relatively consistent over the past 15 years, with Houston having the greatest population decline of 4.9%. BC's population increased by 5.6% from 2001 to 2016, and the median age in 2016 was 43 years old (Statistics Canada 2017a).



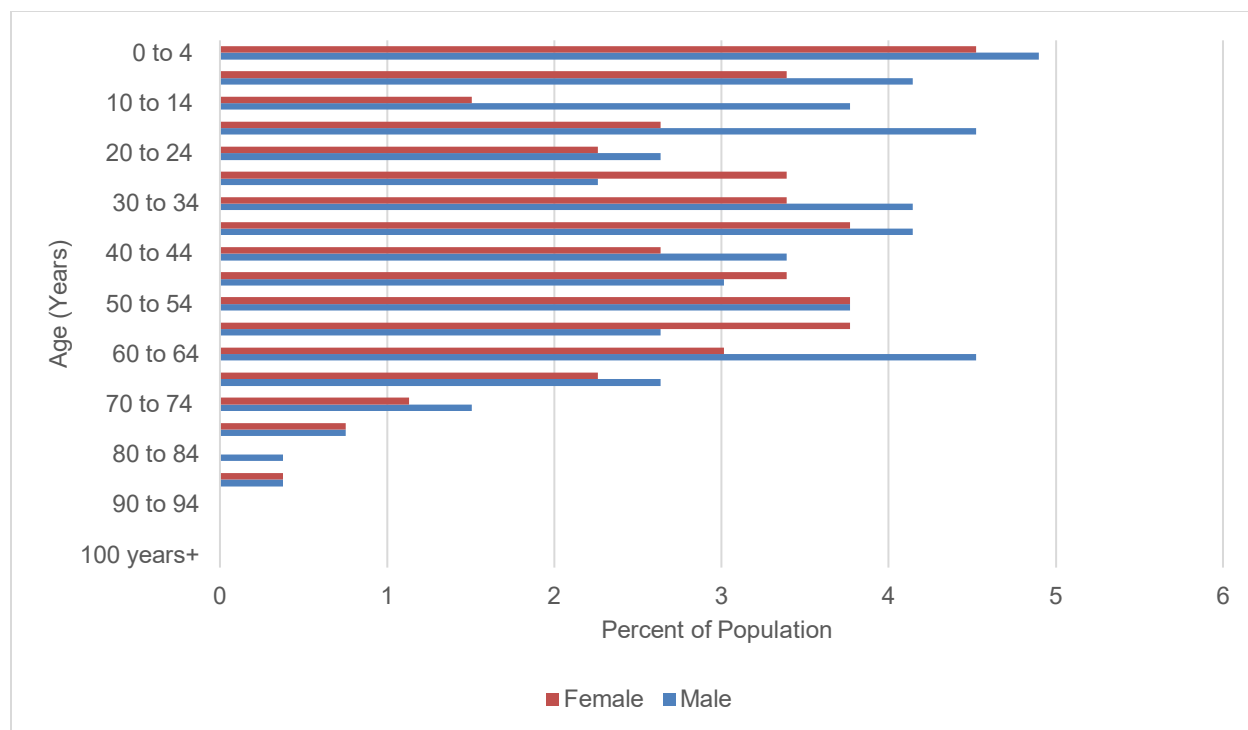
Source: Statistics Canada 2017b, 2016c, 2017d, 2017e

Figure 5.1-1: Local Study Area Population Change 2001-2016

5.1.1 Telkwa

Telkwa had a population of 1,327 in 2016, a 1.7% decrease from the 2011 population of 1,350 (Statistics Canada 2017b). This decrease contrasts past trends, as Telkwa experienced a 4.2% increase in population from 2006-2011 (Statistics Canada 2012a).

Telkwa is a relatively young municipality, with the median age of 36 years old in 2016 (**Figure 5.1-2**). The age structure reveals that Telkwa has the highest youth population amongst LSA communities, with 22.6% of the population ranging from 0-14 years old. Telkwa is known as a stable family-oriented community however, Telkwa had the highest percentage of residents that had moved from one residence to another in the past year (46.3%) amongst LSA communities. (Statistics Canada 2017b; Village of Telkwa 2019b).



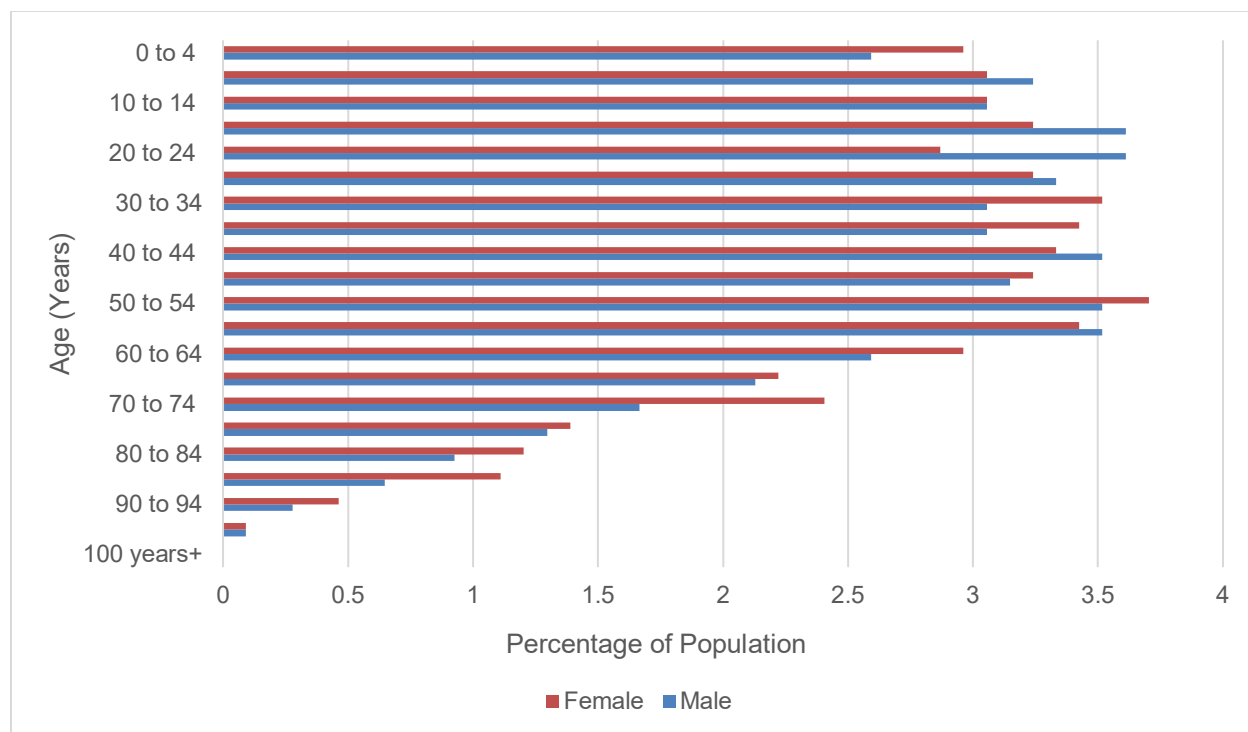
Source: Statistics Canada 2017b

Figure 5.1-2: Telkwa Population by Age, 2016

5.1.2 Smithers

The Town of Smithers has the largest population amongst LSA communities. Smithers had a population of 5,401 in 2016, a 0.1% decrease from the 2011, which is the with lowest population decrease amongst LSA communities (Statistics Canada 2017c). From 2006-2011, Smithers experienced a 3.6% increase in population (Statistics Canada 2012b).

In 2016, the median age in Smithers was 39 years old (**Figure 5.1-3**). As previously noted, Smithers had the largest senior population amongst LSA communities, with 15.8% of the population over the age of 65, and 2.6% of the population over the age of 85 (Statistics Canada 2017c).



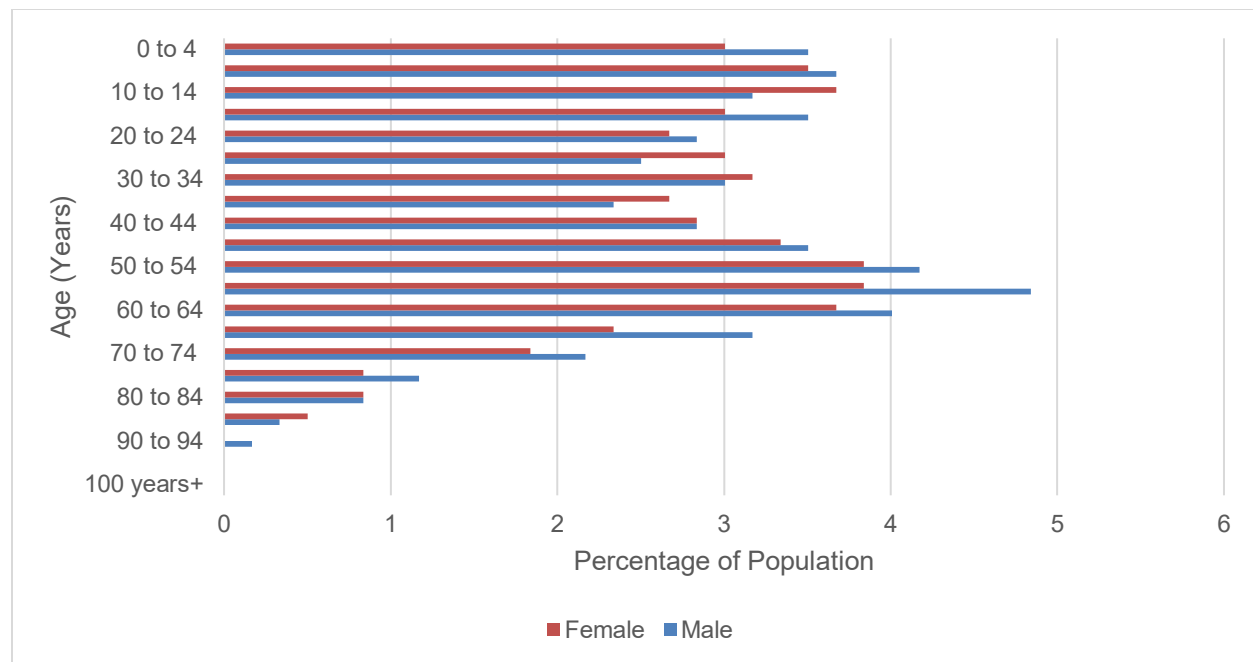
Source: Statistics Canada 2017c

Figure 5.1-3: Smithers Population by Age, 2016

5.1.3 Houston

In 2016, the District of Houston had a population of 2,993 (Statistics Canada 2017d). Houston had the greatest population decrease (-4.9%) in 2016 amongst LSA communities, a stark contrast from the population decrease of 0.5% between 2006-2011 (Statistics Canada 2012c, 2017d). This population decrease was likely attributed to the economic downturn in 2014 based on the closure of Houston Forest Products, as well as Endako Mine and Huckleberry Mine being placed into care and maintenance. After Houston Forest Products closed in 2014, 40 families left Houston (Houston Chamber of Commerce 2019).

The median age in Houston in 2016 was 41, which is the oldest amongst LSA communities. Houston also has the second highest proportion of youth (ages 0-14) that represents 20.7% of Houston's total population (**Figure 5.1-4**) (Statistics Canada 2017d).



Source: Statistics Canada 2017d

Figure 5.1-4: District of Houston Population by Age, 2016

5.1.4 Witset

In 2018, Witset First Nation reported a total membership population of 2,040 members, of which approximately 32% lived on Witset reserves, with the rest living on other reserves or off-reserve throughout BC and Canada (Witset First Nation 2018). The 2016 census includes 635 Indigenous persons living on-reserve in Witset (Statistics Canada 2017e, 2017f, 2017g, 2017h), including 305 Indigenous persons in Moricetown 1 IR (Statistics Canada 2017e). The OW indicates that Witset is home to approximately 661 on-reserve and 1129 off-reserve members, for a total population of 1,790. **Table 5.1-1** provides Witset First Nation population data and projections, as described in the community's Comprehensive Community Plan (CCP) (Witset First Nation 2018).

Table 5.1-1: Witset First Nation Population and Projections

	2006	2011	2018	2028 (forecast)	2038 (forecast)
Total Registered Membership*	1,787	1,921	2,040	2,281-2,550	2,550-3,188
% Members Living On-reserve	37%	36%	33%	33% (assumed)	33% (assumed)
On-reserve Members	660	693	660	753-842	842-1,052
Off-reserve Members	1,127	1,228	1,380	1,528-1,709	1,708-2,136

Source: Witset First Nation 2018

Note: %=percent

*Total Registered Membership includes members living off-reserve or a non-Witset First Nation reserve.

5.2 Labour Force and Employment

Labour force characteristics for LSA communities in 2016 compared to the province as a whole are outlined in **Table 5.2-1**.

Table 5.2-1: Labour force characteristics, 2016

	Telkwa	Smithers	Houston	Witset	BC
Population over 15	1,015	4,315	2,355	485	3,870,375
In the Labour force	735	2,965	1,615	285	2,471,665
Employed	660	2,700	1,435	220	2,305,690
Unemployed	75	265	185	55	165,975
Not in Labour force	280	1,355	740	210	1,398,710
Participation Rate (%)	72.4	68.7	68.6	59.2	63.9
Employment Rate (%)	65.0	62.6	60.9	46.3	59.6

Source: Statistics Canada 2017a, 2017b, 2017c, 2017d, 2017e, 2017f, 2017g, 2017h

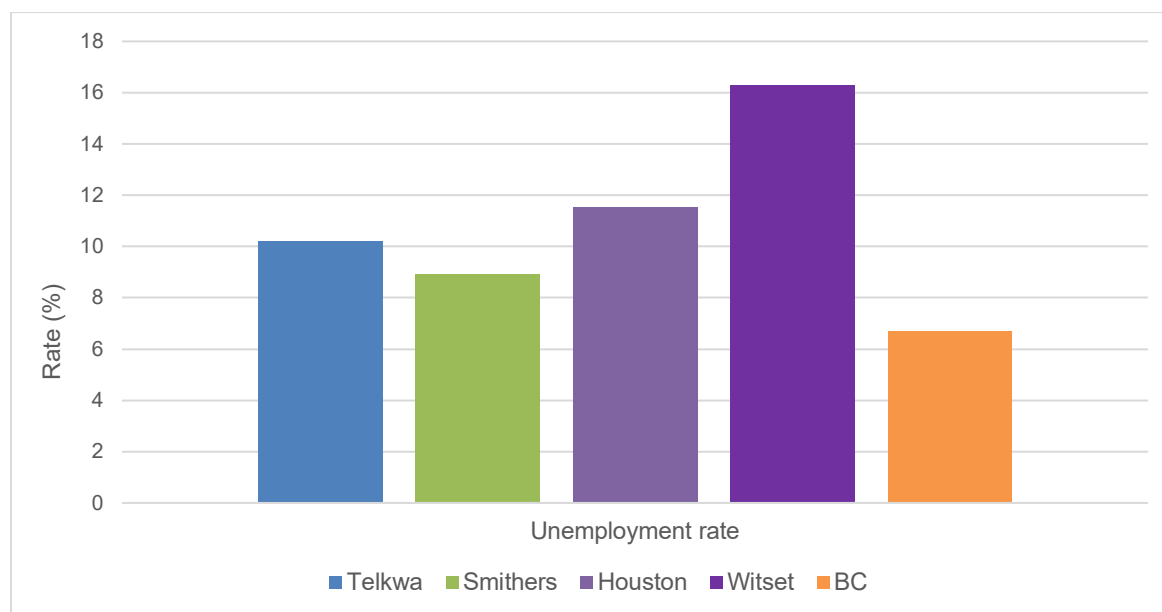
Employment trends for LSA communities, as well as across the province, in 2016 are illustrated in **Figure 5.2-1 and Figure 5.2-2**. Telkwa has the highest participation rate (72.4%) and Witset has the lowest (58.2%), with the provincial average being 63.9%. Telkwa has the highest employment rate (65.0%) and Witset had the lowest (44.9%), with the provincial average being 59.6% (**Figure 5.2-1**).



Source: Statistics Canada 2017a, 2017b, 2017c, 2017d, 2017e, 2017f, 2017g, 2017h

Figure 5.2-1: Participation and Employment Rate for LSA Communities and BC 2016

Figure 5.2-2 demonstrates the unemployment rates for LSA communities as well as BC in 2016. The highest unemployment rate is Witset (16.3%) and the lowest unemployment rate for LSA communities is Smithers (8.9%). The unemployment rate for the province in 2016 was 6.7%, which is lower than all LSA communities.



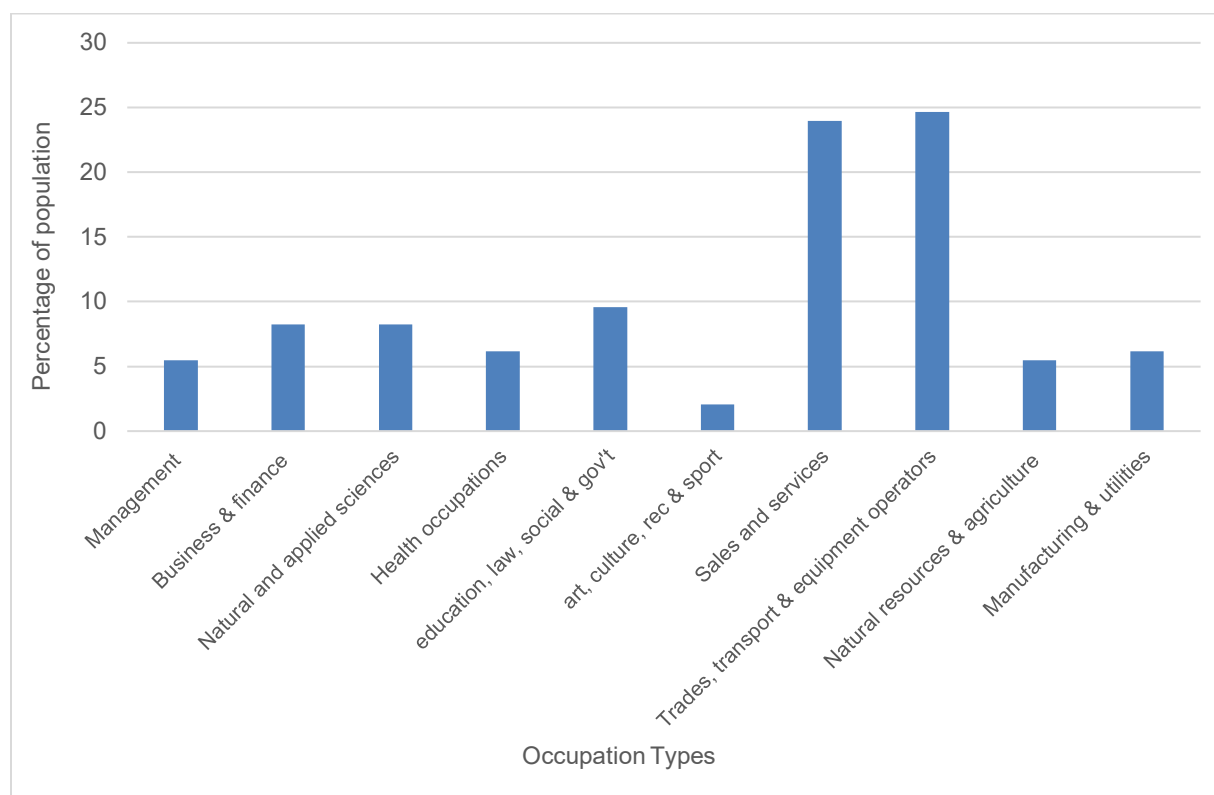
Source: Statistics Canada 2017a, 2017b, 2017c, 2017d, 2017e, 2017f, 2017g, 2017h

Figure 5.2-2: Unemployment Rate for LSA/RSA Communities and BC 2016

5.2.1 Telkwa

In 2016, Telkwa had 1,015 people 15 years of age and older, with 735 in the labour force. Amongst LSA communities, Telkwa had the highest participation rate of 72.4%. Telkwa also had the highest employment rate at 65.0%. Of the 735 people in Telkwa's labour force, 75 (10.2%) were unemployed (**Figure 5.2-2**) (Statistics Canada 2017b). It is common for Telkwa residents to work seasonal or part-time jobs, like at nearby nurseries or tree planting (Village of Telkwa 2019b).

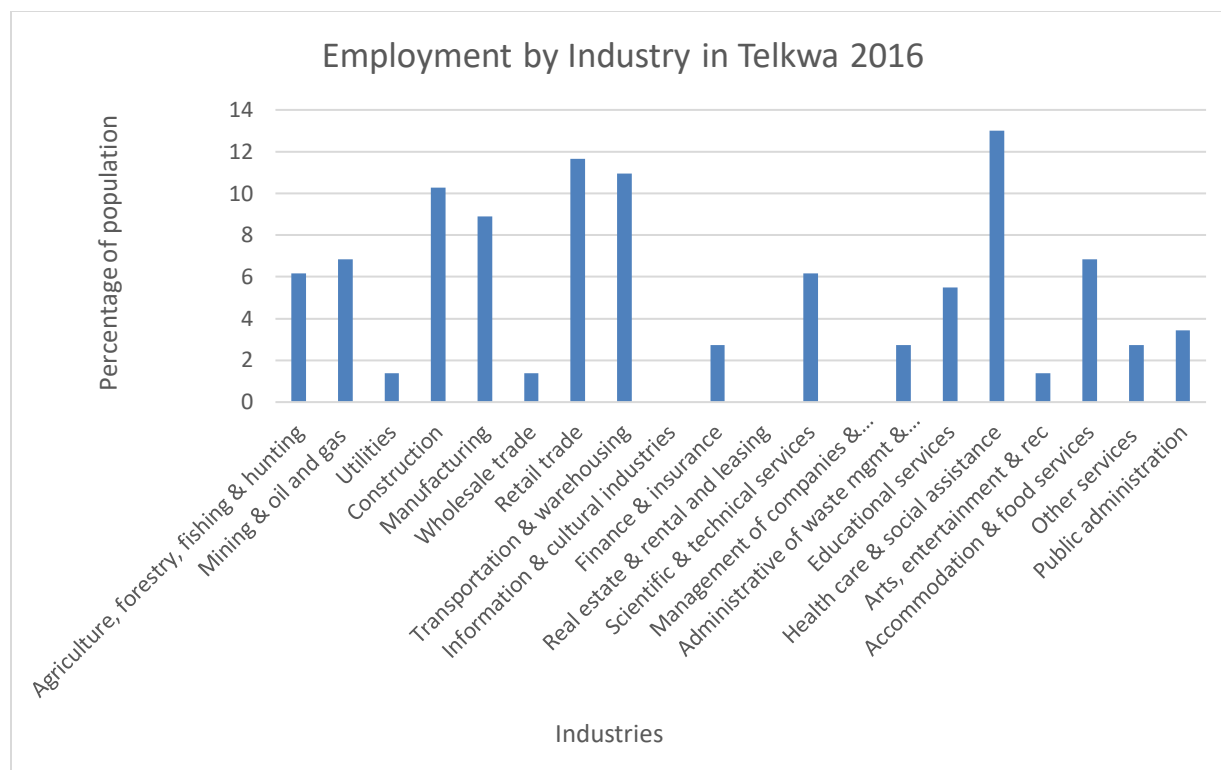
Telkwa's labour force is dominated by employment associated with trades and sales, with the majority of residents (85.7%) travelling to Smithers or Houston for work (Village of Telkwa 2019b; Statistics Canada 2017b). In 2016, the most prevalent occupations in Telkwa were trades; transport and equipment operators and related occupations (24.6%), sales and service occupations (23.9%), education; law and social; community and government services (9.5%), business; finance and administration occupations (8.2%), and natural and applied sciences (8.2%) (**Figure 5.2-3**). It should be noted that 86% of Telkwa residents do not work in Telkwa, and commute outside of Telkwa for work (Statistics Canada 2017b).



Source: Statistics Canada 2017b

Figure 5.2-3: Occupations by Industry in Telkwa, 2016

Similar trends are identified by industry, with transportation and warehousing, retail trade, manufacturing, and construction being the greatest employers. Health care and social assistance is also a key local industry (**Figure 5.2-4**) (Statistics Canada 2017b).



Source: Statistics Canada 2017b

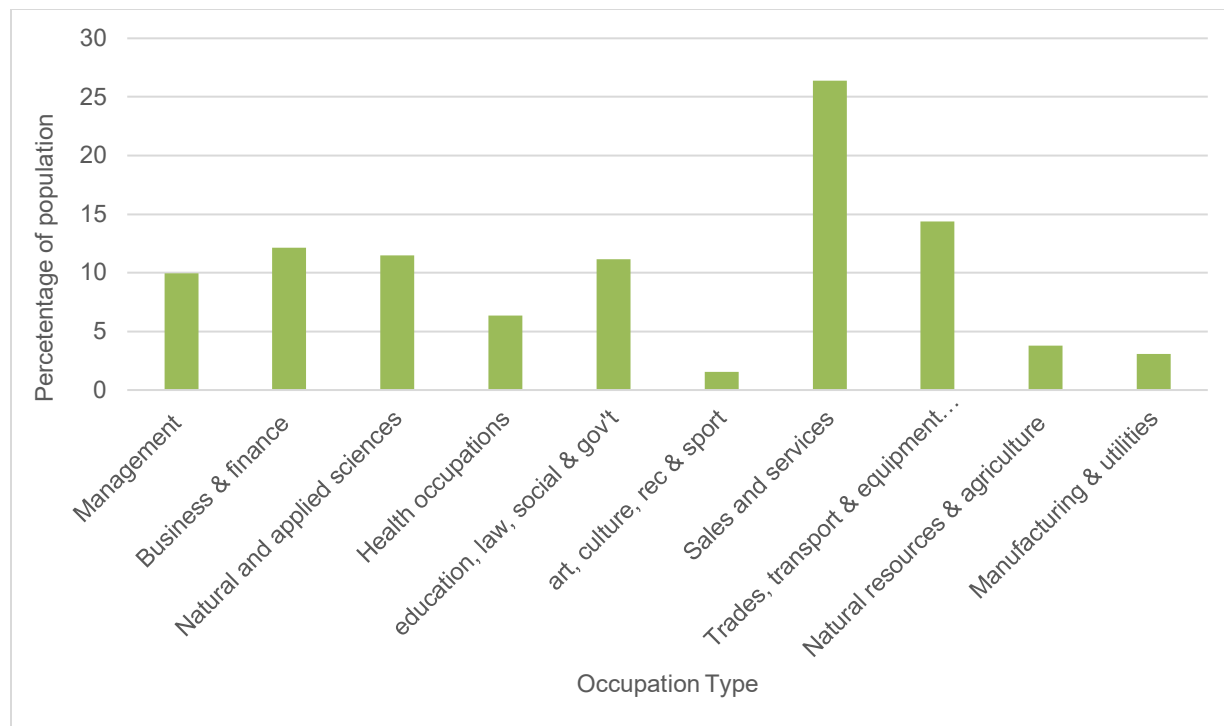
Figure 5.2-4: Employment by Industry in Telkwa, 2016

5.2.2 Smithers

In 2016, there were 4,315 people 15 years of age and older in Smithers, with 2,965 working in the labour force (**Table 5.2-1** above) (Statistics Canada 2017c). Of the 2,965 in the labour force, 265 (8.9%) were unemployed, which is the lowest unemployment rate amongst LSA communities. In 2016, Smithers had a participation rate of 68.7%, the second lowest amongst LSA communities, closely following Houston with 68.6% (Statistics Canada 2017d). Smithers low unemployment rate and high participation rate is reflective of the amount of elderly people not participating in the workforce, as well as Smithers high volume of homeless people. Smithers likely has the greatest homeless population amongst LSA communities as it is the retail and services hub of the Bulkley Valley (Town of Smithers 2019).

Two key employment trends were identified through interviews: a lack of housing availability is limiting outside talent from accepting employment opportunities in Smithers, and a difficulty finding and maintaining entry level positions. Baseline interviews identified instances where non-residents had been hired for a position in Smithers but had to reject the offer based on a lack of housing availability (Smithers Community Services Association 2019; Smithers Chamber of Commerce 2019; Town of Smithers 2019). Employers have also expressed difficulty obtaining entry level positions. It is common for individuals that typically occupy entry level retail positions in Smithers to travel for work in the natural resource sector due to higher wages (Smithers Chamber of Commerce 2019). This trend is creating a gap in the chain of employment and also threatens the local retailers and business owners.

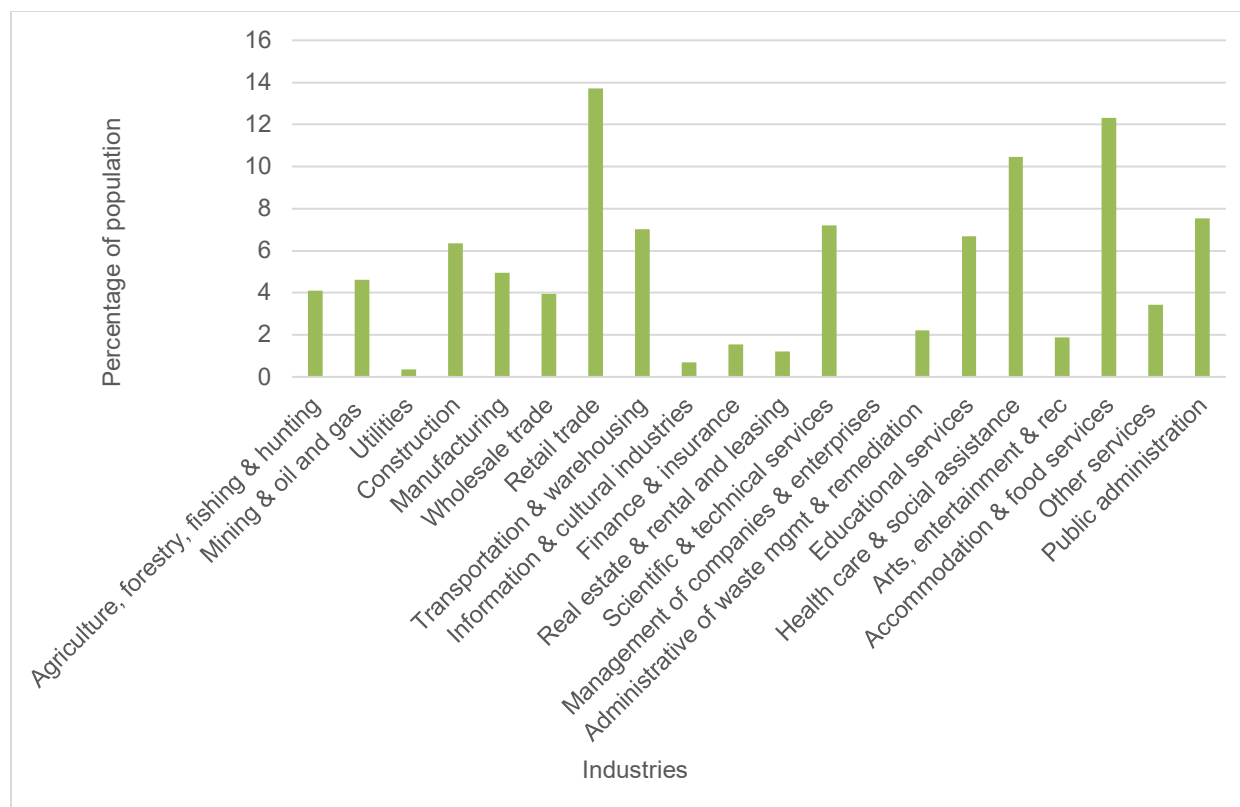
The Smithers economies current employment gaps are truck drivers and contractors, and employers are working to fill those workforce gaps (Smithers Chamber of Commerce 2019).



Source: Statistics Canada 2017c

Figure 5.2-5: Occupations by Industry in Smithers, 2016

73.9% of local residents live and work in Smithers. As Smithers is the retail hub of the LSA communities, sales-related occupations drove employment trends. In 2016, Smithers work force was comprised of sales and service occupations (26%), trades; transport and equipment operators (14.1%), business; finance and administration occupations (11.9%), and natural and applied sciences (11.3%) (**Figure 5.2-5** and **Figure 5.2-6**) (Statistics Canada 2017c).



Source: Statistics Canada 2017c

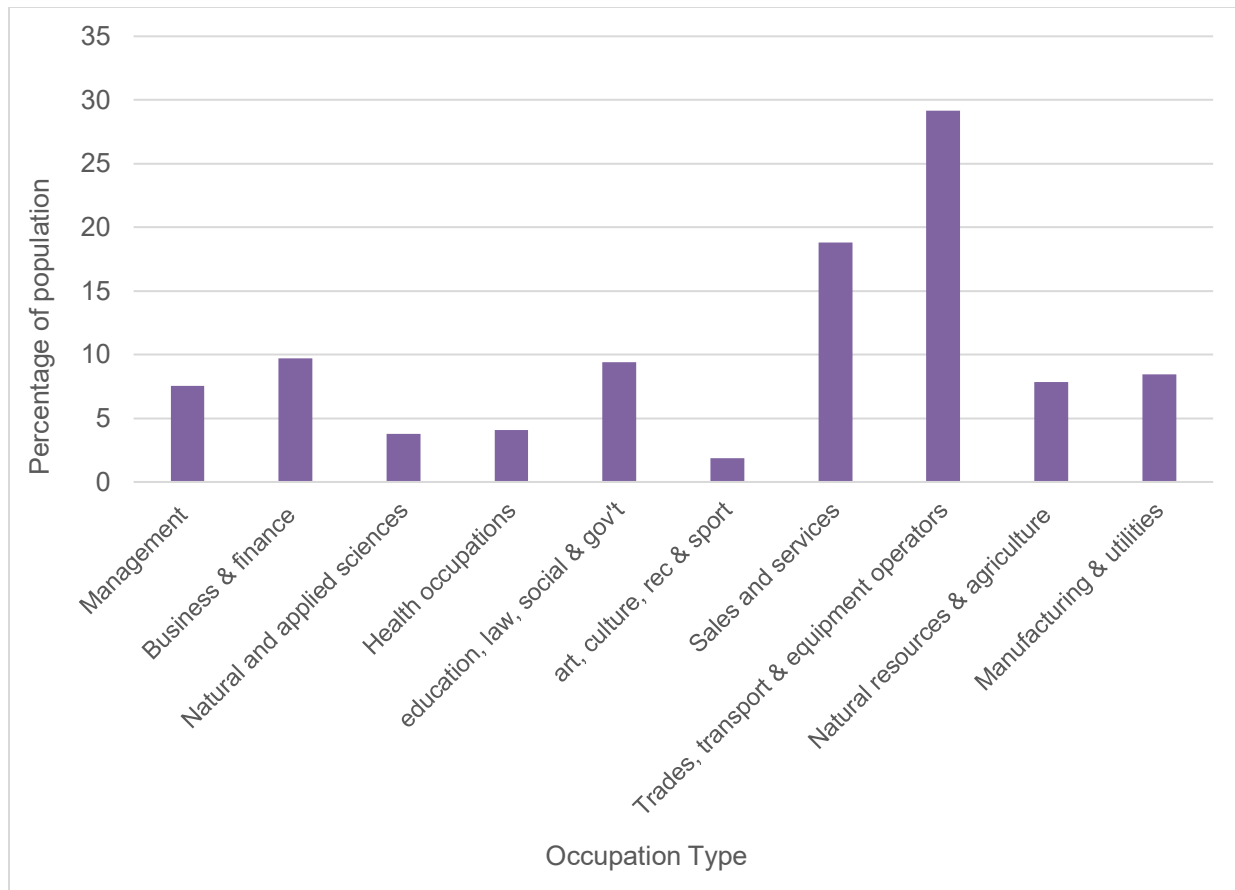
Figure 5.2-6: Employment by Industry in Smithers, 2016

5.2.3 Houston

In 2016, there were 2,355 people 15 years of age and older in Houston, with 1,615 people in the labour force. Amongst LSA communities, Houston has the highest unemployment rate (11.5% or 185 people), as well as the lowest participation rate (68.6%) (**Table 5.2-1** above) (Statistics Canada 2017d). As previously noted, the closure of Houston Forest Products, as well as Endako Mine and Huckleberry Mine being placed into care and maintenance has likely attributed to a growing unemployment rate (Houston Chamber of Commerce 2019). Another contributing factor may be Houston's lack of retail establishments; the two main retail employers in Houston are Buy Low Foods and A&W. The lack of retail establishments means there is a limited number of local entry level jobs for those new to the workforce or with limited educational attainment (Dze L K'ant Friendship Centre 2019b).

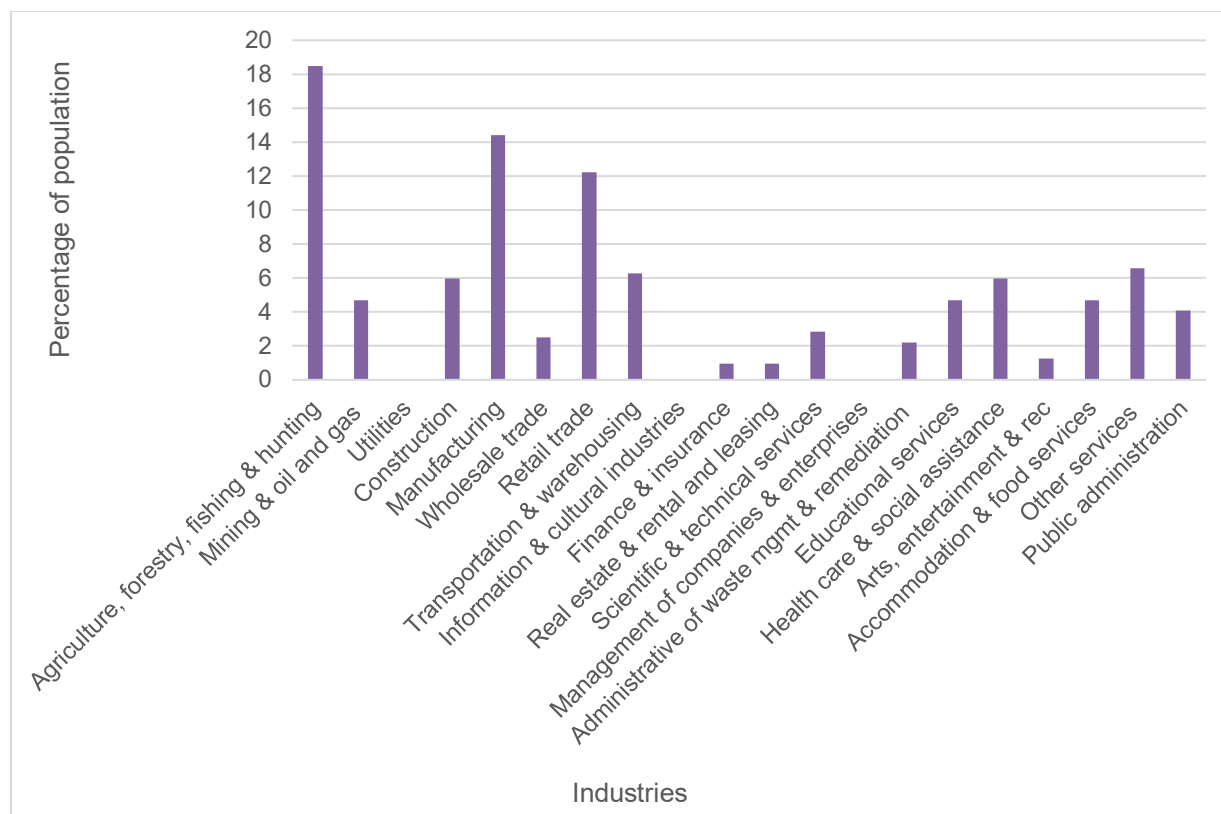
Residents of Houston are known for their hard-working attitudes, with 68.2% of residents travelling to other locations for work, such as Smithers, as well as fly in fly out mining Projects (Houston Chamber of Commerce 2019; Dze L K'ant Friendship Centre 2019b; Smithers Community Services Association 2019; Statistics Canada 2017d). In 2014, Houston Forest Products, operated by West Fraser Timber closed, which led to an economic downturn that included 225 direct jobs lost and about 75 indirect jobs lost (Hyslop and Grabowski 2014). In 2014, Endako Mine entered into care and maintenance, resulting in 300 jobs lost, and in 2016, Huckleberry Mine also entered into care and maintenance, which saw about 200 jobs lost (Nienow 2016; Nienow 2017).

Houston's workforce is dominated by opportunities associated with industrial activity, such as trades and equipment and sales and services. In 2016, the most prevalent occupations in Houston were trades; transport and equipment operators and related occupations (28.8%), sales and service occupations (18.6%), business; finance and administration occupations (9.6%), and education; law and social; community and government services (9.3%) (**Figure 5.2-7** and **Figure 5.2-8**) (Statistics Canada 2017d).



Source: Statistics Canada 2017d

Figure 5.2-7: Occupations by Industry in Houston 2016



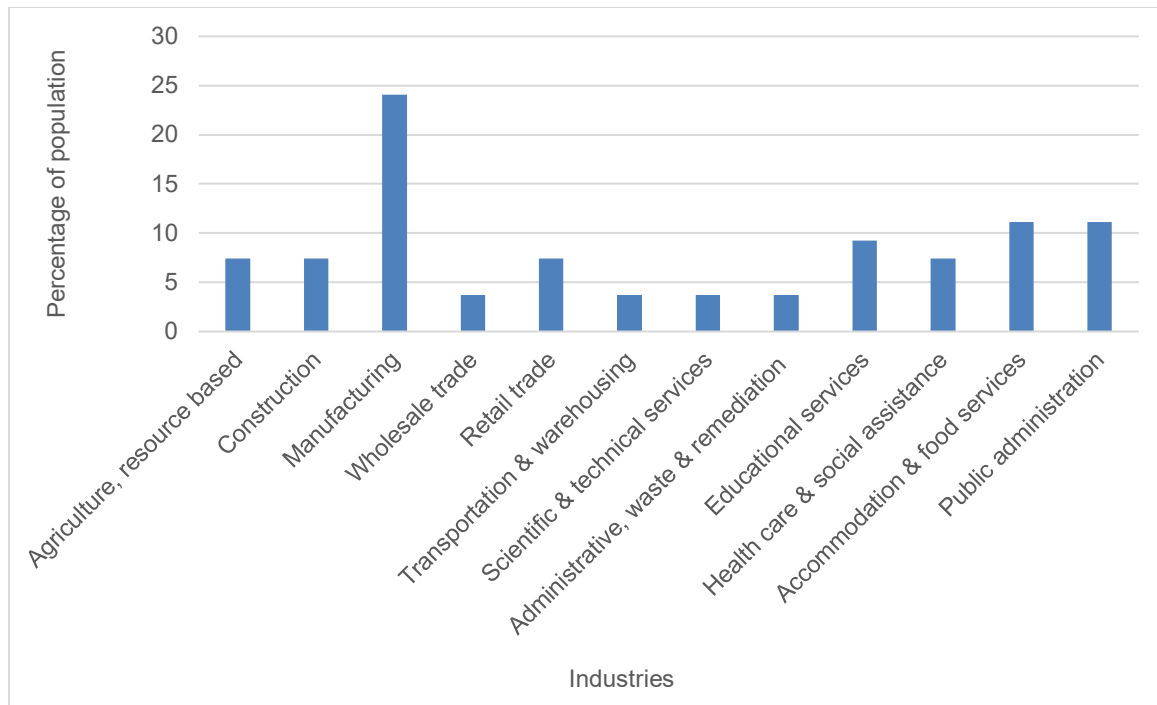
Source: Statistics Canada 2017d

Figure 5.2-8: Employment by Industry in Houston 2016

5.2.4 Witset

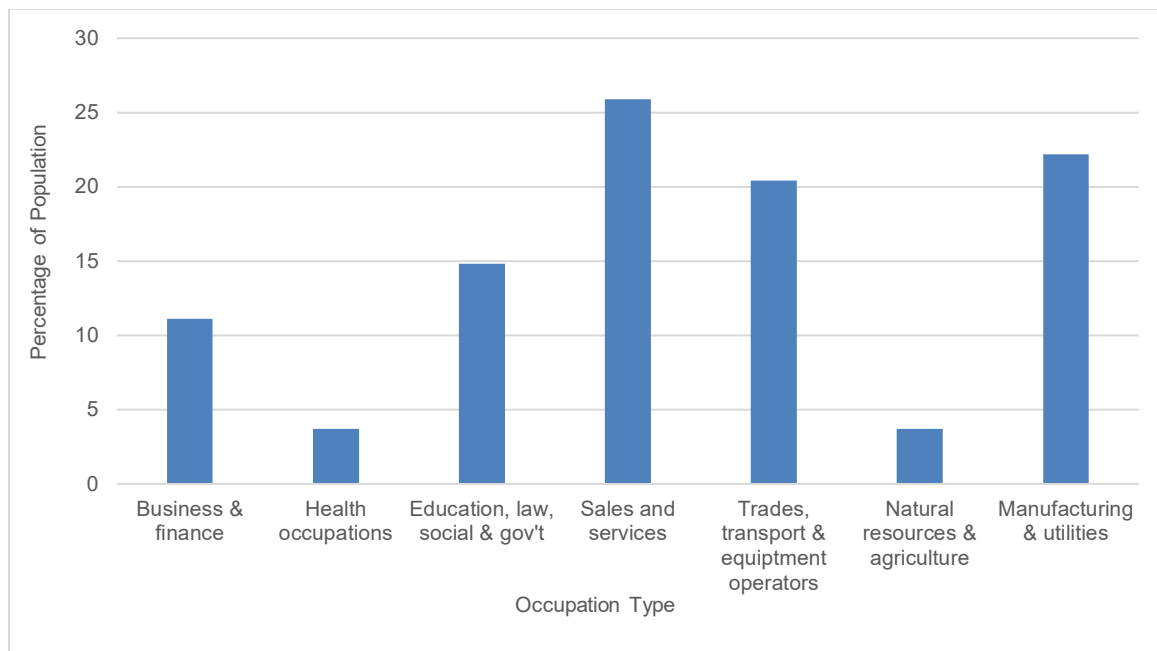
In 2016, 485 people in Witset were 15 years and over, with an employment rate of 46.3% Witset had an unemployment rate of 16.3% and a participation rate of 59.2% in 2016 (**Table 5.2-1**) (Statistics Canada 2017e, 2017f, 2017g, 2017h).

The predominant industries of employment for Witset are manufacturing and construction (24.1%), accommodation and food services (11.1%), and public administration (11.1%) (**Figure 5.2-9**). In 2016, the most common occupations in Witset were sales and services (25.9%) and trades (20.4%) (**Figure 5.2-10**). 50.0% of Witset's workforce travels to other communities for employment (Statistics Canada 2017e, 2017f, 2017g, 2017h).



Statistics Canada 2017e, 2017f, 2017g, 2017h

Figure 5.2-9: Employment by Industry in Witset, 2016



Statistics Canada 2017e, 2017f, 2017g, 2017h

Figure 5.2-10: Occupations by Industry in Witset, 2016

5.3 Income

In 2015, Houston had the highest average annual income total at \$49,813. It should be noted that Telkwa, and Smithers had higher median individual annual incomes than Houston. The lowest annual income in 2015 amongst LSA communities was Witset (**Table 5.3-1**). This can likely be attributed to 49.1% of Witset's population that works part time or only during specific times of the year (Statistics Canada 2017e, 2017f, 2017g, 2017h).

Table 5.3-1 also demonstrates pay disparity amongst sexes, regardless of communities. Amongst LSA communities, women in Smithers (\$36,613) had the highest annual income but were still below the provincial average.

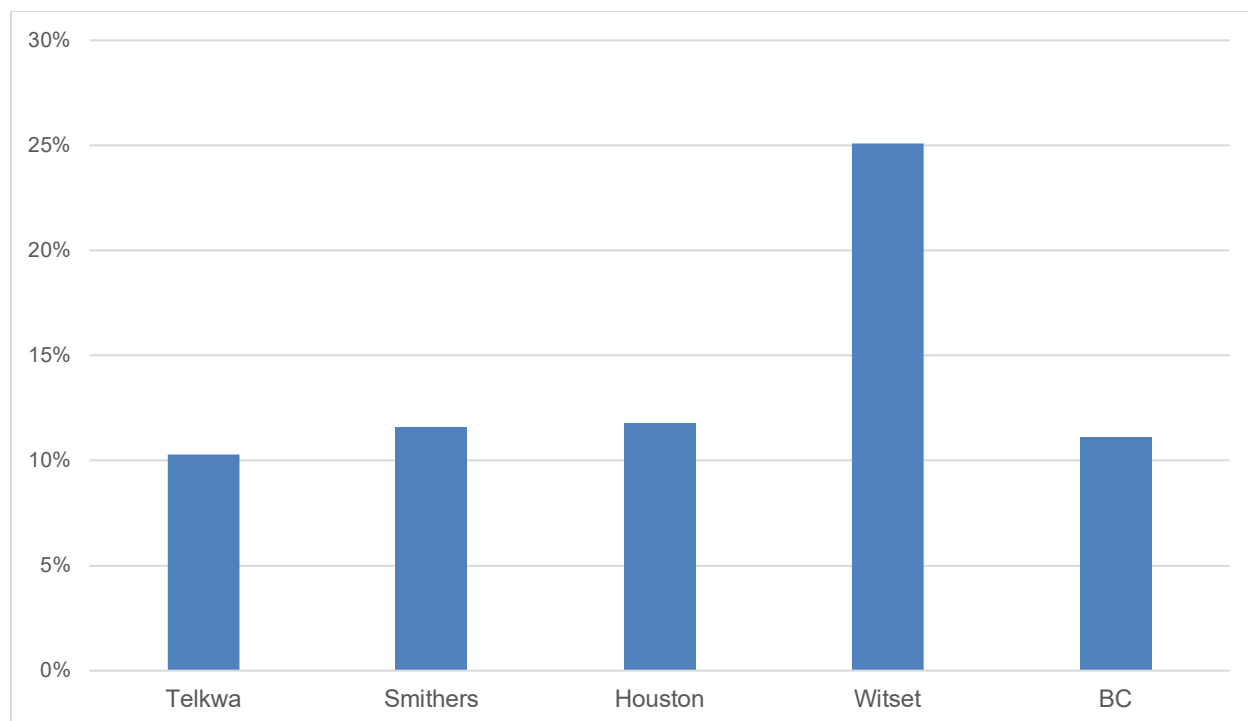
Table 5.3-1: Income for LSA communities and the province, 2015

Area	Median Annual Income for Individuals			Average Annual Income for Individuals			Median Household Income	Average Household Income
	Total	Male	Female	Total	Male	Female		
Telkwa	\$39,131	\$54,500	\$27,456	\$46,415	\$58,138	\$33,949	\$87,936	\$94,834
Smithers	\$37,120	\$50,926	\$30,162	\$46,132	\$56,199	\$36,613	\$74,610	\$84,461
Houston	\$36,309	\$58,752	\$23,168	\$49,813	\$64,662	\$32,584	\$80,477	\$89,908
Witset*	\$17,856	\$19,008	\$17,344	\$24,229	\$25,166	\$23,048	\$42,528	\$59,311
BC	\$33,012	\$40,370	\$27,543	\$45,616	\$54,797	\$36,901	\$69,995	\$90,354

Source: Statistics Canada 2017a, 2017b, 2016c, 2017d, 2017e, 2017f, 2017g, 2017h

Note: * Witset income data is only available for Moricetown 1, excluding median household income, which is averaged across Babine 17, Bulkley River 19, Coryatsaqua 2, and Moricetown 1.

Government transfers are cash benefits received from federal, provincial, territorial, or municipal governments. The most common form of government transfer to Canadians are pension plans, employment insurance, and child benefits. Per the 1867 British North America Act, "Indians and land reserved for Indians" is a federal jurisdiction and therefore the federal government is responsible for providing programs and services to reserve communities (Statistics Canada 2009). Because of this, government transfers are very common for on-reserve communities to fund education, housing, and health, social, and community services (Schwartz 2013). Government transfers amongst LSA communities in 2016 is highest in Witset (25.1%) and Telkwa had the lowest (10.3%) (**Figure 5.3-1**) (Statistics Canada 2017a, 2017b, 2016c, 2017d, 2017e).



Source: Statistics Canada 2017a, 2017b, 2016c, 2017d, 2017e

Note: Witset government transfer data was only available for Moricetown 1

Figure 5.3-1: Government Transfers for LSA communities and the Province, 2016

5.3.1 Telkwa

In 2015, the individual median income of residents over 15 years of age in Telkwa was \$39,131, where the individual medium income for men was \$54,500 and women was \$27,456. Telkwa has the highest individual median income amongst LSA communities (**Table 5.3-1**). Employment income represented 81.5% of income, and 10.3% was via government transfers (Statistics Canada 2017b). Telkwa also has the highest employment income percentage of the LSA communities.

5.3.2 Smithers

Smithers individual median income of residents over 15 years of age in 2015 was \$37,120, where the individual medium income for men was \$50,926 and women was \$30,162, which is the highest median income for women amongst the LSA communities (**Table 5.3-1**). In 2015, Smithers employment income represented 75.3% of income, and 11.6% came from government transfers (Statistics Canada 2017c).

5.3.3 Houston

In 2015, the individual median income of residents over 15 years of age was \$36,309 (**Table 5.3-1**). Individual median income for men in Houston was \$58,752, and for women it was \$23,168 (Statistics Canada 2017d). This gender disparity can potentially be attributed to Houston's traditional values, where men are typically considered the breadwinners, travelling to remote locations for high-paying natural resource related jobs (Hyslop and Grabowski 2014). Houston had the highest individual medium income and average incomes amongst LSA communities. Government transfers represented 11.8% of employment income in Houston transfers (Statistics Canada 2017d).

5.3.4 Witset

Income data for Witset was only available for Moricetown 1 reserve. In 2016, 74.6% of persons over the age of 15 living in Moricetown 1 were collecting earnings, and 25.1% were receiving government transfers. The average earnings of residents over 15 years of age in Moricetown 1 was \$24,977 and the average total income was \$24,229 (**Table 5.3-1**) (Statistics Canada 2017e).

5.4 Business and Industry

5.4.1 Telkwa

Telkwa's local economy is dependent on natural resources, primarily forestry and mining. The economy is currently stable, however potential changes to nearby forestry operations Canfor and/or Pacific Island Resources in Smithers would negatively affect the local economy. Telkwa is also susceptible to the spill-over effects of industry in neighbouring communities. If Smithers or Houston are thriving, then it is likely Telkwa will capture some of those economic opportunities as well (Village of Telkwa 2019b).

Telkwa is a bedroom community to Smithers, and therefore relies on Smithers for most retail needs and community services (Village of Telkwa 2019b; SD 54 2019b). A bedroom community is a small community with no major industries, where people live but commute to another town or city to work. Telkwa is also a bedroom community to Houston as well, but at a lesser scale (Village of Telkwa 2019b; SD 54 2019b). Telkwa has 81 businesses and seven (7) seasonal businesses. A sizable number of these businesses are home-based. Local businesses in Telkwa are specialized in natural resource contracting, tourism, accommodation, food and hospitality, health and fitness, and esthetics (Love Telkwa 2019).

The largest local employer in Telkwa is Pro-Tech, a forestry company that has about 40 staff (Village of Telkwa 2019b). Castle Building, West Fraser Concrete, and the Village of Telkwa are other major employers (Town of Smithers 2019; Village of Telkwa 2019b).

5.4.2 Smithers

Smithers has traditionally had a stable and diverse economy balanced between the public sector and primary industry, specifically mining, agriculture, and forestry (Town of Smithers 2019; Smithers Chamber of Commerce 2019). As the regional service center, Smithers hosts a variety of government offices that service natural resource projects, such as BC MFLNRORD, BC MEMLI, BC MECCS, and BC MOTI. Smithers economy is also driven by tourism, primarily as a result of year-round recreation activities available locally, including downhill skiing at Hudson Bay Mountain Resort, snowmobiling, hunting, fishing, and hiking. Many of the local employers are mid-sized entities, which also mitigates against volatility if they were to close or leave the community (Town of Smithers 2019).

A range of businesses operate in Smithers, including a variety of retail stores, gas stations, restaurants, health services, and wholesale trade. The community has a shopping mall, a number of banks, apparel and sporting and recreation shops, and key support service businesses, including tool and die companies, machine shops, welders, office equipment firms, and transportation related businesses (Tourism Smithers 2019a). Baseline interviews indicated that the major gaps in retail are mid-ranged apparel stores for children and men (Smithers Chamber of Commerce 2019; Town of Smithers 2019). It was also reported that proportionally, Smithers has too many liquor stores and restaurants (Smithers Chamber of Commerce 2019). The number of restaurants, in conjunction with higher paying project work elsewhere, create challenges securing and maintaining skills locally (Smithers Chamber of Commerce 2019; Town of Smithers 2019).

As previously mentioned, major employers in Smithers are balanced between private and public sectors, and are listed below (RDBN 2014b; Smithers Chamber of Commerce 2019; Town of Smithers 2019):

- ▶ School District No. 54
- ▶ Provincial Government of British Columbia
- ▶ Pacific Inland Resources
- ▶ Hy-Tech Diamond Drilling
- ▶ Bulkley Valley Credit Union
- ▶ Safeway
- ▶ Town of Smithers
- ▶ Canadian National Railway (CN Rail)

In addition, Smithers has various infrastructure services that support the regional economy, including the Smithers Municipal Airport, which is an important hub for the movement of goods and people into the northwest. Air Canada, Central Mountain Air, Northern Thunderbird Air operate out of the airport (Town of Smithers 2013a).

5.4.3 Houston

Houston is an industrial centre that is dependent on the natural resource sector, specifically forestry and mining. Because of this, Houston has weathered changing economic conditions over the last few decades. In 2014, Houston Forest Products, operated by West Fraser Timber closed, which led to an economic downturn that included 225 direct jobs lost and about 75 indirect jobs lost (Hyslop and Grabowski 2014). Two nearby mines also entered into care and maintenance. In 2014, Endako Mine entered into care and maintenance, resulting in 300 jobs lost, and in 2016, Huckleberry Mine also entered into care and maintenance, which saw about 200 jobs lost (Nienow 2016; Nienow 2017). During this time, the housing market also took a hit, with prices dropping dramatically.

Houston has slowly seen an upturn in the local economy, based primarily on the CGL Project. Activities are currently underway to construct one of 14 work camps for the Project, Huckleberry Camp, located about 40 km outside of Houston (Barker 2019a). Each camp is expected to accommodate 500-800 workers in the height of construction.

The recent economic upturn as a result of the CGL Project has led to a number of positive indirect economic opportunities. Local suppliers and service providers have seen an increase in business activity. Restaurants and other retail establishments have also reported positive economic trends as a result of local industrial activity (Houston Chamber of Commerce 2019). The Houston Chamber of Commerce noted that every local business or operation seems to be adding positions. Although there has been a surge in economic activity, Houston is not considered a retail hub, which means it lacks entry level positions (Dze L K'ant Friendship Centre 2019b).

Since 2017/2018, there have been a number of new businesses that have opened in Houston. After a year without having a local full-service grocery store, Buy Low opened a franchise in Houston (Houston Today 2017). Prior to this, residents would have to travel up to 120 km to nearby communities to shop for their groceries (Houston Today 2017). The Buy Low has also provided a considerable amount of employment opportunities for local residents. Three other businesses have opened in Houston in the past year, a clothing store, a comic book/game store, and a pet store (Houston Chamber of Commerce 2019).

Currently, Houston's major employers include:

- ▶ Canadian Forest Products
- ▶ Wilson Bros Enterprises
- ▶ DH Manufacturing
- ▶ School District 54
- ▶ Groot Bros Contracting Ltd.
- ▶ Tom Neufeld Trucking
- ▶ Sullivan Motor Products
- ▶ Buy Low (RDBN 2014c; Houston Chamber of Commerce 2019)

5.4.4 Witset

Kyah Development Corporation (KDC) was incorporated on September 19, 2006. The Witset First Nation owns 100% of the issued shares of the company. KDC was formed with intention of managing the Band's portfolio and investments in businesses and other ventures. KDC acts as the General Partner for the Moricetown³ Band Development Limited Partnership (MBDLP), which owns the shares and assets of the Band's business ventures. In Addition, KDC was formed with the view to enhancing and promoting the Band's vision for economic development and diversification (KDC 2020).

MBDLP owns the following assets:

- ▶ Kyahwood Forest Products including the mill assets, plant and equipment;
- ▶ Owns the lease on Lot 53-1 CLSR 77829; and
- ▶ Kyah Industries Ltd. the logging company (KDC 2020).

Kyahwood Forest Products is a lumber remanufacturing company located in Witset and is 100% owned by the Wistet First Nation (Northern Development Initiative Trust 2019). Kyahwood Forest Products is a 58,000 sq ft value-added wood and lumber plant. The plant can employ over 75 local residents producing up to 26 million bfm lumber when operating at peak capacity (Moricetown Band Economic Development 2014c).

Kyah Resources Inc. has grown from a mid-sized forestry operation to a full-service civil contractor. Kyah Resources is majority-owned by the Witset First Nation in partnership with Indigenous-owned Roga Contracting Ltd. To date, Kyah Resources Inc. has onboarded over 100 First Nations individuals from the Witset First Nation and neighboring communities, building an economy for people and families (Kyah Resources Inc. 2020).

Outside the MBDLP umbrella, the Witset First Nation owns:

- ▶ 10% of Houston Pellet Limited Partnership
- ▶ Kyah Food and Fuel

Kyah Food and Fuel is a full-size convenience store and gas station located off Highway 16, that also sells essential household products, clothing, gas, tobacco and select groceries (KDC 2020).

³ Witset was formerly called Moricetown.

The Witset Band has also signed agreement with the BC Government relating to economic development and its involvement in the forest industry. These include:

- ▶ A Forest Consultation and Revenue Sharing Agreement; and
- ▶ Logging revenues (KDC 2020).

The KDC is always interested in new business opportunities and is currently exploring:

- ▶ Micro-hydro project development potential
- ▶ A Tourism Strategy
- ▶ A Retail Strategy
- ▶ Environmental Monitoring and Response
- ▶ A Business Incubator for Witset Band members (KDC 2020).

5.5 Education, Training, and Skills

5.5.1 Attainment

Table 5.5-1 illustrates 2016 educational attainment amongst the LSA communities based on population size. Smithers had the highest proportion of residents with a university degree at a bachelor level or higher (17%), which is lower than the provincial average of 24.6%. In 2016, Witset had the highest proportion (48%) of residents with no certificate, diploma or degree.

Table 5.5-1: Educational Attainment Amongst the LSA Communities Based on Population Size

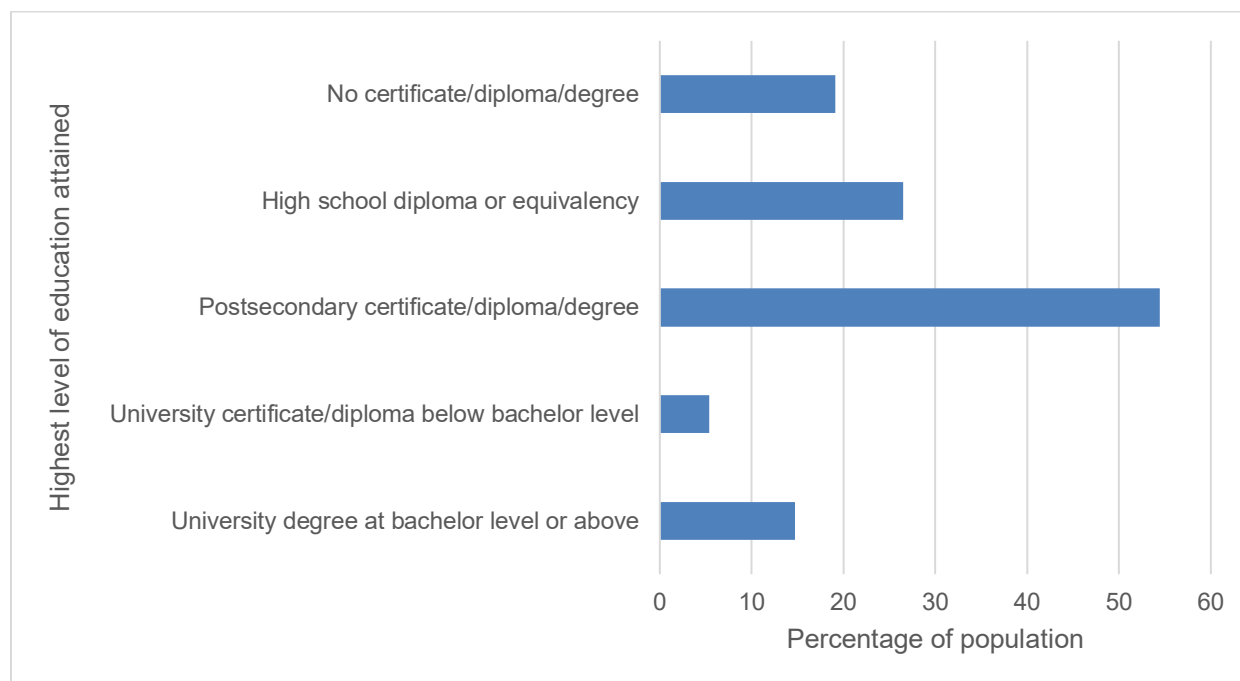
Education	Telkwa	Smithers	Houston	Witset	BC
No Certificate, Diploma, or Degree	19.1%	19.1%	23.8%	48.5%	15.5%
High School Certificate or Equivalent	26.5%	28.4%	34.4%	26.2%	29.4%
Postsecondary Certificate, Diploma, or Degree	54.4%	52.4%	42.0%	24.2%	55.0%
University Certificate or Diploma below Bachelor Level	5.4%	3.5%	2.5%	4.0%	2.6%
University Degree at Bachelor level or above	14.7%	17.0%	7.6%	4.0%	24.6%

Source: Statistics Canada 2017a, 2017b, 2016c, 2017d, 2017e, 2017f, 2017g, 2017h

5.5.1.1 Telkwa

In 2016, 19.1% of Telkwa residents did not have a high school diploma or degree, 26.5% had received a high school diploma or equivalency certificate, and 54.4% had completed post-secondary education (**Figure 5.5-1**). Of the 54.4% that completed post-secondary education, 39.6% completed a college or other non-university certificate or diploma, 27% had a university certificate, and 22.5% had a trades certificate or

diploma. The most popular fields of studies for Telkwa residents was architecture, engineering and related technologies (28.8%), agriculture (13.5%), and education (13.5%) (Statistics Canada 2017b).

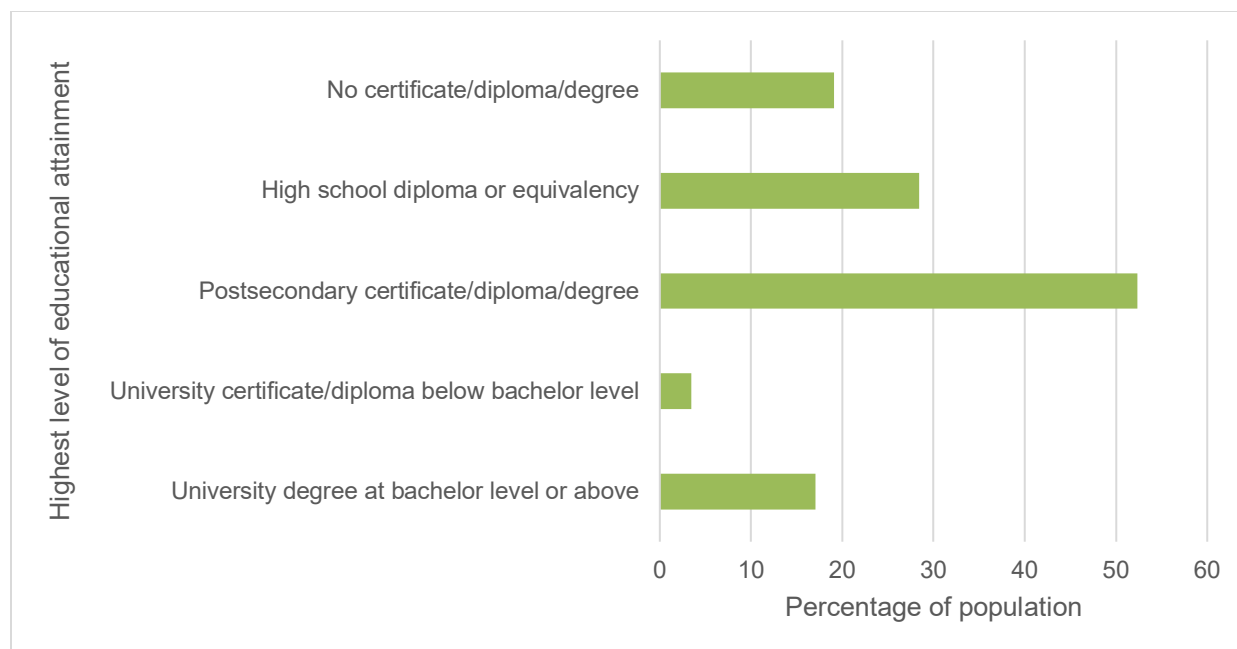


Source: Statistics Canada 2017b.

Figure 5.5-1: Education Attainment for Telkwa Population aged 15 and over, 2016

5.5.1.2 Smithers

In 2016, 19.1% of Smithers residents 15 years and older did not have a high school diploma or degree, 28.4% had received a high school diploma or equivalency certificate, and 52.4% had completed post-secondary education (**Figure 5.5-2**). Of those that completed post-secondary education, 37.4% completed a college or other non-university certificate or diploma, 32.5% had a university certificate, and 23.9% with a trades certificate or diploma. Major fields of study for Smithers residents were architecture, engineering, and related technologies (22.3%), health and related services (18%), and business (17.7%) (Statistics Canada 2017d).

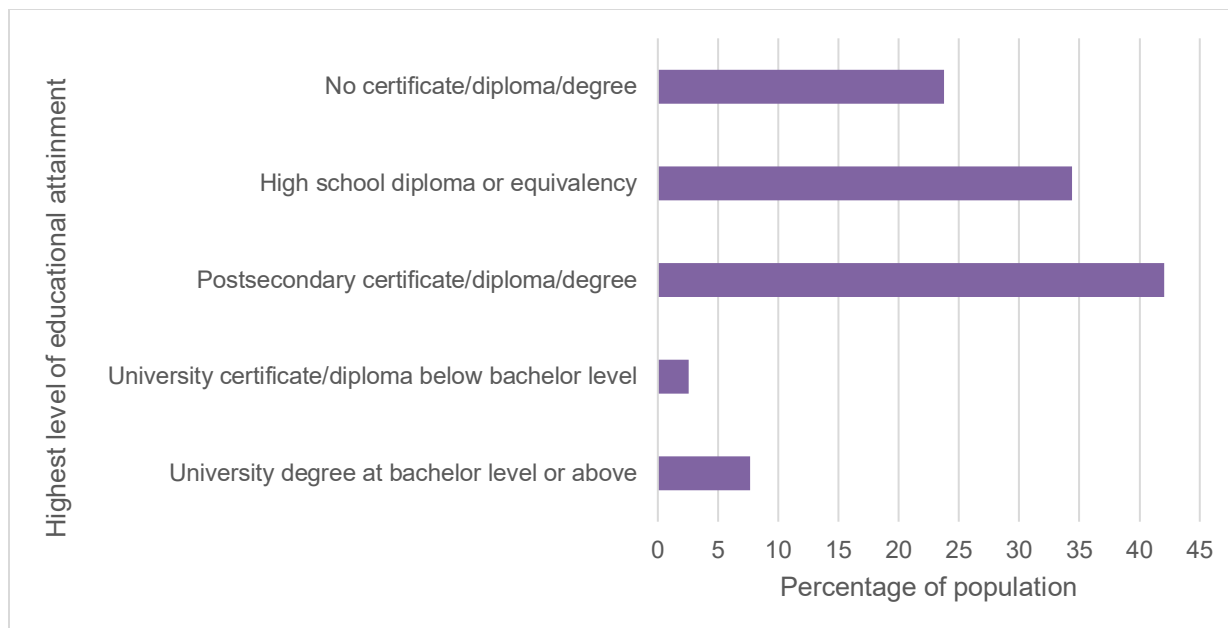


Source: Statistics Canada 2017c.

Figure 5.5-2: Education Attainment for Smithers Population aged 15 and older, 2016

5.5.1.3 *Houston*

In 2016, 23.8% of Houston residents age 15 or older did not have a high school diploma or degree (**Figure 5.5-3**). 34.4% had received a high school diploma or equivalency certificate, and 42% had completed post-secondary education. Of the 42% that completed post-secondary education, 38.4% received a trades certificate or diploma, 37.4% had obtained a college or other non-university certificate or diploma, and 18.2% completed a university certificate. The most popular post-secondary degrees amongst Houston residents were architecture, engineering, and related technologies (34.3%), business (19.7%), and health and related services (11.6%) (Statistics Canada 2017d).

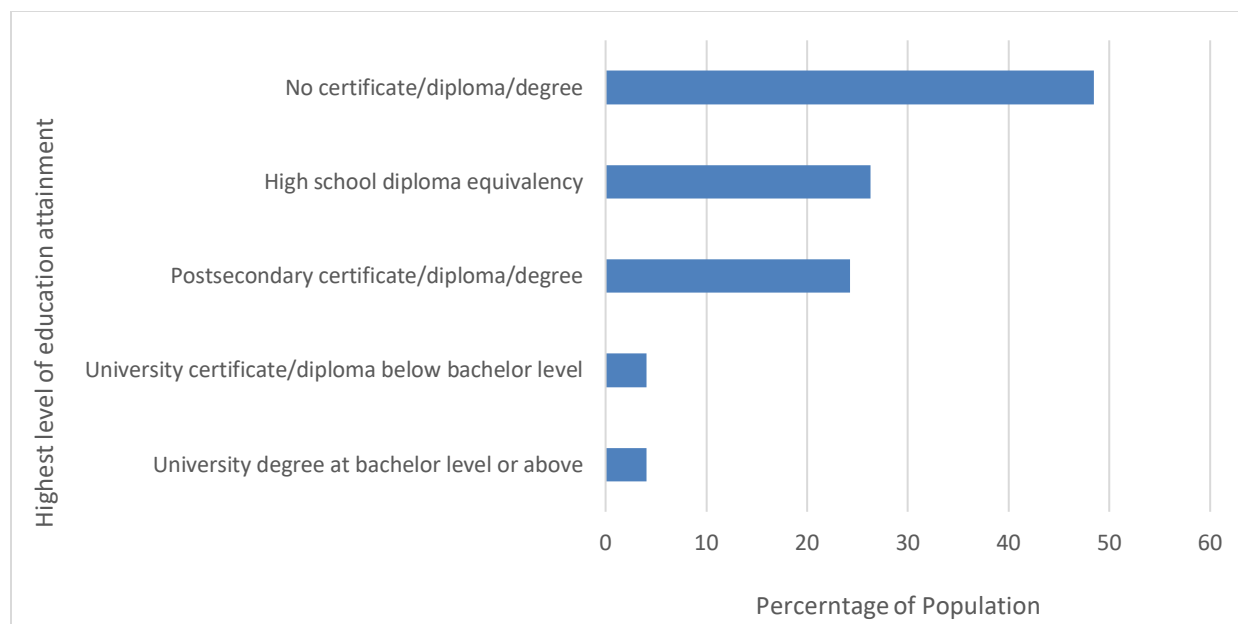


Source: Statistics Canada 2017d.

Figure 5.5-3: Education Attainment for Houston Population aged 15 and older 2016

5.5.1.4 *Witset*

In 2016, 48.5% of Witset's population over the age of 15 did not have a high school diploma or degree, which is the highest percent amongst LSA communities. 26.3% of residents over 15 received a high school diploma or equivalency and 24.2% had a certificate in trades and/or apprenticeship (**Figure 5.5-4**). 4.0% of Witset's population had a university certificate below a bachelor's degree, and another 4.0% had a university degree (Statistics Canada 2017e, 2017f, 2017g, 2017h).



Source: Statistics Canada 2017e, 2017f, 2017g, 2017h

Figure 5.5-4: Education Attainment for Witset Population aged 15 and over, 2016

5.5.2 Services

School District No. 54 (SD 54) serves the Bulkley Valley, providing education services to Smithers, Telkwa, Houston, and Witset. The district has five elementary schools and two high schools, as well as offering flexible learning programs via the Bulkley Valley Education Connection and the Bulkley Valley Learning Centre (SD 54 2019a).

Smithers is the educational hub for the LSA communities. The 2019 headcount for students from K-12 in public schools in the Bulkley Valley is 1,966, with Smithers servicing many of those students (BC Ministry of Education 2019a; SD 54 2019b). The district is staffed by 112 full-time teachers, 130 support staff and 15 administrative positions. It was noted that SD 54 is sufficiently staffed and adequately funded. The district finds specialized roles are the hardest to fill, such as French immersion teachers. The graduation rate for the District is 87% and the Indigenous graduation rate is 70%. The School District's greatest challenge is finding and retaining teaching staff, as there are a number of opportunities elsewhere in the province (SD 54 2019b).

When graduating high school, many students in SD 54 go on to pursue a career in trades and technology (SD 54 2019b). Grade 12 students can take college level courses in their final year of high school, which has encouraged a number of students to take courses offered at the Smithers Coast Mountain College (CMC) campus that can be used as post-secondary credits. **Section 5.5.2.4.1** describes SD 54 and Smithers CMC's partnerships.

5.5.2.1 Telkwa

Telkwa is a part of SD 54 that represents the Bulkley Valley. Telkwa has one public school, Telkwa Elementary School from grades kindergarten to seven, which is near capacity (SD 54 2019a; SD 54 2019b). There are no catholic or independent schools in Telkwa. Telkwa students attend Smithers Secondary for high school (SD 54 2019b).

In 2018/2019, there were 132 students enrolled at Telkwa Elementary School. 77% of students (101) were non-Indigenous, and 23% (31) were Indigenous. From 2008/2009 to 2018/2019, the student enrollment at Telkwa Elementary School decreased by 26% (178 students in 2008/2009) (BC Ministry of Education 2019b).

5.5.2.2 *Smithers*

Elementary and Secondary Education

Smithers is a part of SD 54 that represents the Bulkley Valley, and also hosts a number of independent schools. Smithers has a total of nine schools, five of which are public and four are independent (**Table 5.5-2**). As of late, Smithers has seen a decrease in enrollment numbers, which can be attributed to an aging population and a reduction in industry that would otherwise attract families with young children (SD 54 2019b).

Table 5.5-2: Public and Independent Schools in Smithers

Name	Grades	Type
Muheim Memorial Elementary	K-7	Public school
St. Joseph's	K-7	Independent school
Walnut Park Elementary	K-7	Public school
Bulkley Valley Education Connection	K-12	Public school
Bulkley Valley Christian School	K-12	Independent school
Bulkley Valley Christian Distributed Learning Programs	K-12	Independent school
Ebenezer Canadian Reformed School	K-12	Independent school
Smithers Secondary	8-12	Public school
Bulkley Valley Learning Centre	9-12	Public school

Source: GovBC 2019d

Student enrollment data is made available via the Ministry of Education website. **Table 5.5-3** illustrates student enrollment numbers for Smithers' public schools, including Indigenous and non-Indigenous numbers.

Table 5.5-3: Smithers' public schools student enrollment 2018/2019

School	Grades	Total student population	# of Non-Indigenous students	# of Indigenous students
Muheim Memorial School	K-7	299	241	58
Walnut Park Elementary	K-7	343	238	105
Smithers Secondary	8-12	588	428	160
Bulkley Valley Learning Centre	9-12	47	25	22

Source: BC Ministry of Education 2019c, 2019d, 2019e, 2019f.

Muheim Memorial School (Muheim) has a total student enrollment of 299, with 81% (241) of students being non-Indigenous, and 19% (58) being Indigenous (Ministry of Education 2019c). Since 2008/2009, Muheim's enrollment numbers have stayed relatively constant, increasing by 3% over the past decade (Ministry of Education 2019c).

Walnut Park Elementary (Walnut Park) has the highest student enrollment amongst public elementary schools in Smithers and has the highest Indigenous representation. Walnut Park has a total student enrollment of 343, with 69% (238) of students being non-Indigenous, and 31% (105) being Indigenous. Since 2008/2009, Walnut Park's enrollment numbers have remained steady, decreasing by 2% over the decade (Ministry of Education 2019d).

Smither's Secondary has the highest student enrollment amongst public secondary schools in Smithers. In 2018/2019, Smithers Secondary had a total student enrollment of 588, with 73% (428) of students being non-Indigenous, and 27% (160) being Indigenous (BC Ministry of Education 2019e). Since 2008/2009, Smithers Secondary's enrollment numbers have declined by 33% over the past decade, leaving the school at half capacity (Ministry of Education 2019e; SD 54 2019b).

The Bulkley Valley Learning Centre (BVLC) is an alternative education program that is run out of Smithers CMC campus and is predominantly used by adults trying to get their high school diploma, or high school students receiving dual credit classes (SD 54 2019b). In the 2018/2019 school year, BVLC had a student population of 47 students. Of that number, 53% (25) of the population were non-Indigenous and 47% (22) were Indigenous, which is the highest Indigenous enrollment amongst public secondary schools in Smithers (BC Ministry of Education 2019f). Since 2008/2009 when the school opened, the population has decreased by 53%, primarily because a similar program has opened in Witset to serve the community locally (Ministry of Education 2019f; SD 54 2019b).

Bulkley Valley Education Connection is a distributed learning program for students seeking an alternative to classroom-based instruction for kindergarten to Grade 12 students. Teachers work directly with parents and students to design a program suited to each individual student. Students enrolled in a distributed learning program usually receive their educational program from home (SD 54 2019a; SD 54 2019b).

5.5.2.3 *Houston*

Houston is a part of SD 54 that represents the Bulkley Valley. Houston has three public schools and one independent school (**Table 5.5-4**) (GovBC 2019d). Houston's economic downturn in the last decade has seen a decrease in public school enrollment (SD 54 2019b).

Table 5.5-4: Public and Independent schools in Houston

Name	Grades	Type
Silverthorne Elementary	K-7	Public school
Twain Sullivan Elementary	K-7	Public school
Houston Christian School	K-12	Independent school
Houston Secondary	8-12	Public school

Source: GovBC 2019d

Table 5.5-5 illustrates student enrollment numbers for Houston's public schools, including Indigenous and non-Indigenous numbers. In the 2018/2019 school year, Silverthorne Elementary had a student population of 161 students. Of that number, 59% (95) of the population were non-Indigenous and 41% (66) were Indigenous, which is the highest Indigenous enrollment amongst public secondary schools in Houston. Since 2008/2009 the population has slightly increased by 5% (BC Ministry of Education 2019g).

Twain Sullivan Elementary has the highest student enrollment amongst public elementary schools in Houston. Twain Sullivan Elementary had a total student enrollment of 169, with 68% (115) of students being non-Indigenous, and 32% (54) being Indigenous. Since 2008/2009, Twain Sullivan Elementary's enrollment numbers have decreased slightly by 12% over the decade (BC Ministry of Education 2019h).

Houston Secondary had a total student enrollment of 191, with 79% (150) of students being non-Indigenous, and 21% (41) being Indigenous in 2018/2019. Since 2008/2009, Houston Secondary's enrollment numbers decreased by 20% over the decade (BC Ministry of Education 2019i).

Table 5.5-5: Houston public schools student enrollment 2018/2019

School	Grades	Total student population	# of Non-indigenous students	# of Indigenous students
Silverthorne Elementary	K-7	161	95	66
Twain Sullivan Elementary	K-7	169	115	54
Houston Secondary	8-12	191	150	41

Source: BC Ministry of Education 2019g, 2019h, 2019i

5.5.2.4 *Witset*

Witset is a part of School District 54, although no public schools operate locally. Witset has one independent school, Witset Elementary and Secondary School from Kindergarten to Grade 12 that is run by Kyah Wiget Education Society (KWES). As of September 2018, there were 93 students enrolled at Witset Elementary and Secondary School (Ministry of Education 2019j).

The KWES is a non-profit organization that was formed as an independent body responsible for all educational matters in Witset, while accountable to the people of the community. KWES meets the BC Core Curriculum standards while also providing students with language and cultural studies from Kindergarten to Grade 12. KWES offers the following education programs and opportunities:

- ▶ Witsuwit'en Child and Family Center;
- ▶ Witset Elementary School;
- ▶ I Count High School; and
- ▶ Kyah Wiget Adult Education Center (KWES 2018).

Witsuwit'en Child and Family Center offers a Head Start Program designed to enhance early childhood development, school readiness and overall family health and wellness for First Nations children – from birth to 6 years - on reserve. They also offer an infant/toddler program, three year old program and a Kindergarten to Grade 4 program (KWES 2018).

I Count High School is a unique and personalized education program for Grades 8 to 12, accredited by the Independent School Branch of the BC Ministry of Education. Since opening in 2012, I Count High School has provided an alternate option for at-risk youth or students who encountering difficulties in the public school system, and incorporates language, customs and traditional stories into its teachings (KWES 2018).

Kyah Wiget Adult Education Center offers:

- ▶ A pre-employment program (also called Discovery Program) is offered to allow students to upgrade courses to meet entrance requirements to an Industry Training Authority accredited trades program.
- ▶ University College Entrance Preparation Program (UCEP) provides students with the necessary courses to meet the entrance requirement in order to apply to public Post-Secondary Institutes. In this program, students complete their grade 12 requirements as well as two college course that can be used as credits towards a Post-Secondary Program.

- ▶ Various Training and Certification Courses that support students' career options and aspirations.
- ▶ Post-Secondary Study Support Program. KWES has partnered with Nicola Valley Institute of Technology to provide certificate and diploma programs, based on student enrollment. As of January 2019, the following courses were offered: Organizational Behaviour, Principles of Marketing, Human Resources Management, and Community Development (KWES 2018).

5.5.2.4.1 *Post-Secondary Education*

CMC is based in Terrace and operates satellite campuses in communities across the northwest, including Smithers. CMC offers a variety of full-time programming in Smithers that includes university courses, diploma and certificate options to study art, business, health and social services, science, or trades (CMC 2019a). In 2010, updates were made to the Smithers CMC campus, which includes a gathering area, expanded learning facilities, and improved video conferencing and distance education capabilities (CMC 2019b).

Currently, CMC offers the following programs at the Smithers campus (CMC 2019d):

- ▶ Business Administration;
- ▶ Healthcare assistant;
- ▶ Aesthetics; and
- ▶ Health services (by distance).

Programs are offered on a rotating basis to avoid over saturating the workforce. Upcoming planned programs include professional culinary and carpentry. CMC also offers a number of training opportunities, including (CMC 2019d):

- ▶ Accreditation opportunities (i.e., updating credits, obtaining pre-requisites)
- ▶ Workforce training courses (i.e., Workplace Hazardous Materials Information System [WHMIS], first aid)
- ▶ Field school
 - Topics include: criminal justice, Indigenous language and culture, geomorphology, environment and ecosystems, history and geography of BC (CMC 2019c).
- ▶ Partnerships with local high school
 - Introduction to Trades
 - Introduction to Health
 - Introduction to Business (planned)

CMC partners with SD 54 via the BVLC, which is held on campus. This partnership offers training and post-secondary initiatives so students can obtain dual high school/college credits. The BVLC Centre also offers adult services, which helps mature students complete their high school diploma (SD 54 2019b). In recent years, courses have been focused on trades training. CMC also partners with industry to offer trades training (CMC 2019a).

The programs and services that Smithers CMC campus are currently focused on accreditation opportunities for students, Special Education, Early Childcare and Medical Services. The program with the highest enrollment at the Smithers campus is the Business Administration Program, which is typically enrolled by international students. Other well-attended programs include health care assistant, aesthetics, and trades (CMC 2019d).

There are some gaps in educational services provided at the Smithers CMC campus. A key gap is the structure of courses, which aren't typically scheduled on nights or weekends to appease students that work during the week. CMC Smithers is also missing the following programs, which were indicated as topics of interest to local students and education trends (CMC 2019d):

- ▶ Special education/special needs;
- ▶ Practical nursing;
- ▶ Engineering;
- ▶ Eco-tourism and sustainability; and
- ▶ Environmental management (mining, forestry, etc.).

Local education trends have seen a decrease in enrollment numbers. This has been attributed to decreasing high school graduation numbers, as well as work opportunities with industrial projects that don't require post-secondary education (CMC 2019d).

Educational Services

Table 5.5-6 outlines additional educational services offered in Smithers outside of the public and private school systems as well as post-secondary.

Table 5.5-6: Additional Education Services Offered in Smithers

Name	Services
Community Living BC	Training Services
Smithers Community Services Association	English as a Second Language (ESL) Training
Kopar Administration Ltd	Employment Programs
WorkBC	Employment Services Centre Employment Services

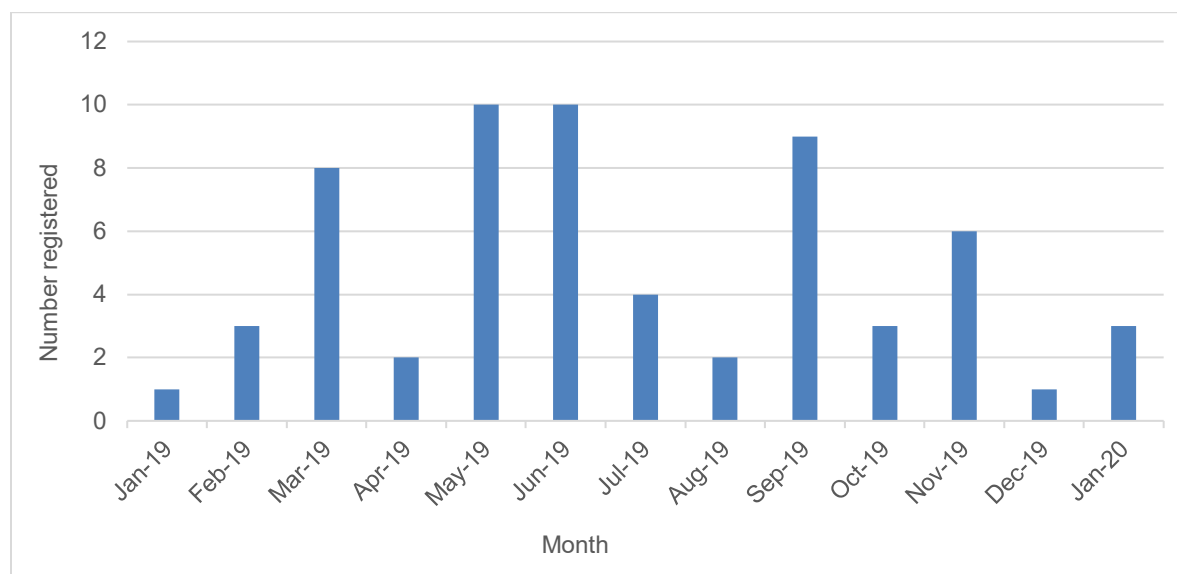
Source: RDBN 2014b

CMC operated a Houston campus until 2017 when it shut down due to low student enrollment. As of 2018, the Houston council was seeking provincial funding to reopen CMC's Houston campus or attracting another post-secondary institution. In the absence of a local post-secondary educational institution, CMC provides trades training programming in Houston in partnership with SD 54. Specifically, CMC has offered Millwright Foundations program and Youth Trades Sampler program and plans to offer Electrical Foundations in the future (Houston Today 2018).

5.6 Housing

Housing demand and resource development activities, such as mining and forestry, are intrinsically linked in northern BC. The increased economic activity associated with the development of projects may influence economic sectors including the number employees and hence, homes or accommodation required. At times, the mere perception of development has been linked to real changes in housing demand, which can also lead to increases in housing costs (BC Housing 2019).

Figure 5.6-1 illustrates the number of registered new homes in the Bulkley-Nechako region from January 2019 to January 2020. Registered new homes include both single detached homes and those in multi-unit buildings. New registered homes in the Bulkley Nechako totalled 62 in 2019, with the provincial total being 43,523 (BC Housing 2019). The Bulkley-Nechako regions new registered homes represents 0.0-0.3% of the total provincial share throughout 2019, The third quarter of 2019 (April, May, June) had the most newly registered homes with 22, and the fourth quarter had the least with 10 (BC Housing 2019).



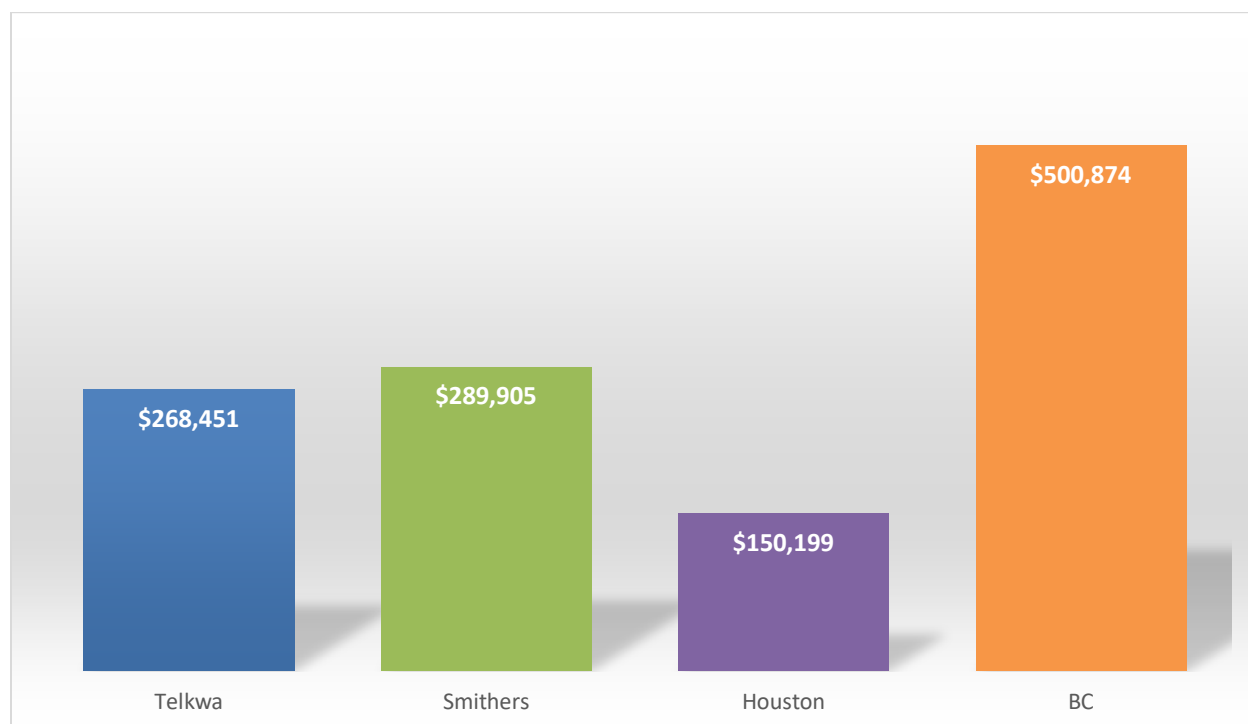
Source: BC Housing 2019

Figure 5.6-1: Registered New Homes in the Bulkley-Nechako Region

The Canada Mortgage and Housing Corporation (CMHC) reports on a number of housing statistics, including vacancy rates. The CMHC doesn't report on any of the LSA communities, but includes nearby Northern communities like Terrace, Prince George, and Prince Rupert for comparison. In 2019, the vacancy rates in these communities were more than double that of Vancouver and Victoria. Prince Rupert had the highest vacancy rate (3.4%), followed by Prince George (2.8%), and Terrace at (2.1%), compared to Vancouver at 1.1%, Victoria at 1.0% and the provincial average of 1.5% (CMHC 2020). Although these numbers aren't specific to LSA communities, they do illustrate a trend of higher vacancy rates (ranging from about 2-3.5%) in northwest BC compared to larger metropolitan cities.

The BC Northern Real Estate Board (BC NREB), which includes Bulkley-Nechako, Cariboo, Fraser Fort George, Peace River/Fort Nelson, and Skeena/Queen Charlottes reports that between 2019-2020 there was 7.4% decrease in home sales and a 6.2% decrease of new listings. They did however find that the average price of homes between 2019-2020 grew by 4.6% (BC NREB 2020).

Figure 5.6-2 illustrates the median value of dwellings in LSA communities in 2016. Smithers had the highest median value of dwelling at \$289,905, which is below the provincial average of \$500,874. The lowest median value of dwelling was Houston at \$150,199 (Statistics Canada 2017a, 2017b, 2016c, 2017d).



Source: Statistics Canada 2017a, 2017b, 2016c, 2017d

Note: Data was not available for Witset.

Figure 5.6-2: Median Value of Dwelling in LSA communities and BC, 2016

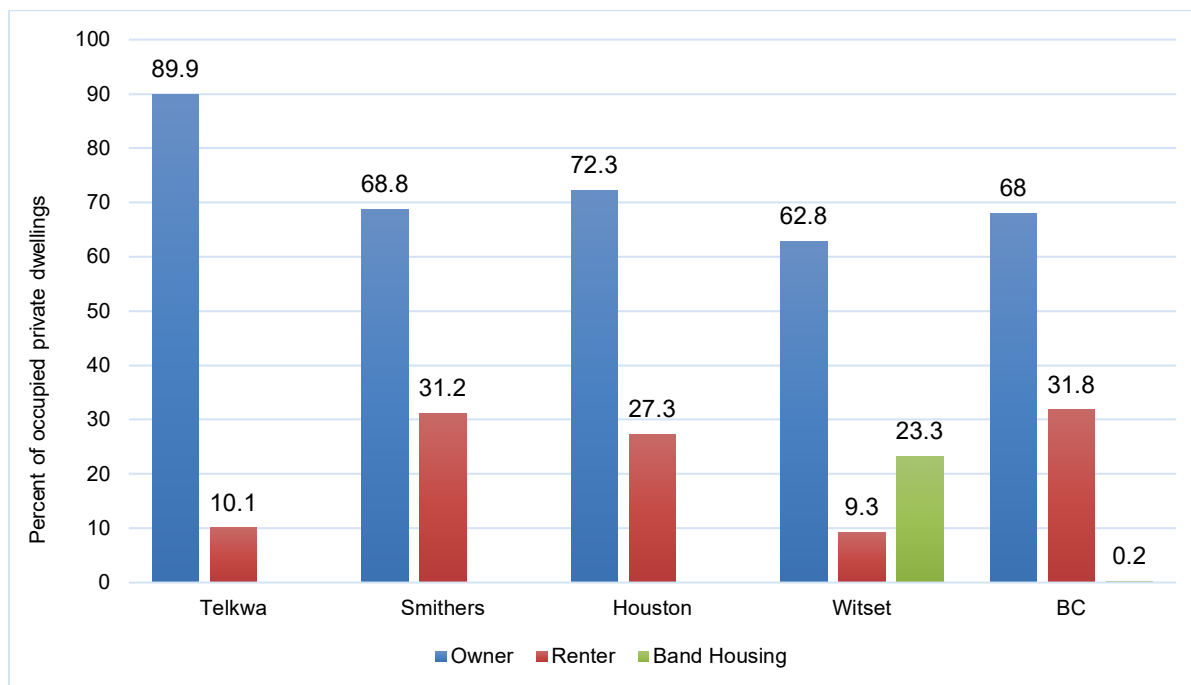
Figure 5.6-3 outlines median monthly rental rates in LSA communities in 2016. Telkwa has the highest median monthly rental rate at \$1,083 which is higher than the provincial average. The lowest median monthly rental cost across LSA communities is Houston at \$695 (Statistics Canada 2017a, 2017b, 2016c, 2017d, 2017e). Property assessments for single-family residential properties from 2019-2020 grew in all LSA communities (excluding Witset due to band housing). Based on the typical assessed property values defined by BC Assessment, Telkwa had the greatest increase in property assessments (14%), followed by Smithers (11%), and Houston (1%) (BC NREB 2020).



Source: Statistics Canada 2017a, 2017b, 2016c, 2017d

Figure 5.6-3: Median Monthly Rental Cost in LSA communities and BC, 2016

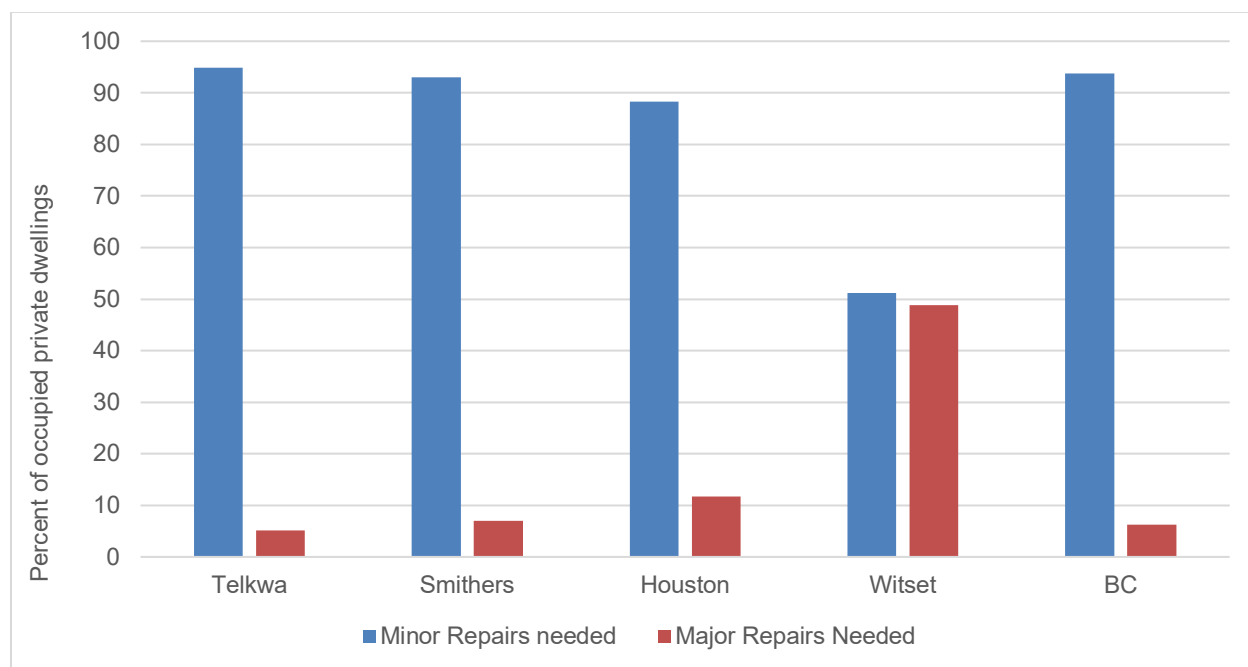
Of the LSA communities, Telkwa has the highest ownership rate (89.9%) and lowest rental rate (10.1%), based on population percentage in 2016. Smithers has the highest proportion of renters at 31.2%, which is just slightly below the provincial average of 31.8% (Statistics Canada 2017b, 2016c, 2017d).



Source: Statistics Canada 2017a, 2017b, 2016c, 2017d, 2017e

Figure 5.6-4: Private households by tenure, 2016

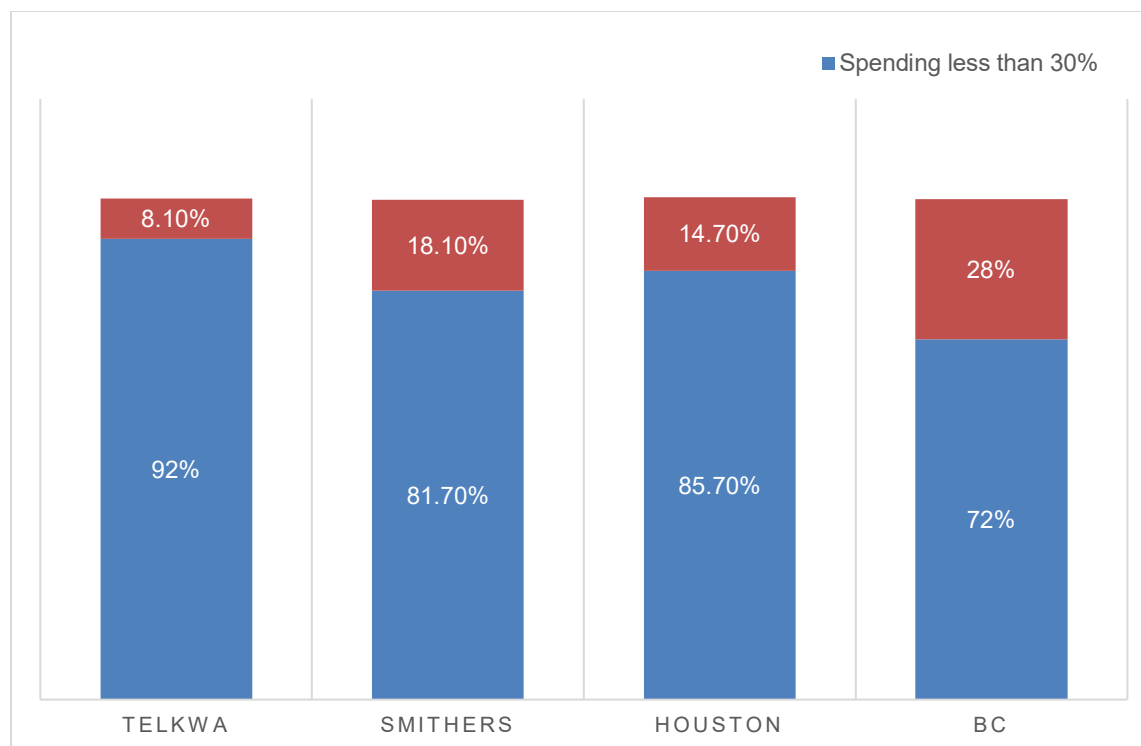
Figure 5.6-5 identifies the condition of owned occupied dwellings based on the level of repairs. Telkwa (94.9%), Smithers (93%) and Houston (88.3%) all require minor repairs to dwellings. In contrast, 47.6% of dwelling in Witset were identified as requiring major repairs (Statistics Canada 2017a, 2017b, 2016c, 2017d, 2017e).



Source: Statistics Canada 2017a, 2017b, 2016c, 2017d, 2017e

Figure 5.6-5: Occupied Private Dwellings by Dwelling Condition, 2016

Figure 5.6-6 illustrates the amount of income LSA communities spend on shelter costs. In 2016, Smithers residents spent the highest percent of their income on shelter costs, with 18.1% spending 30% or more. This is below the provincial average of 28% of residents spending 30% or more of their income on shelter costs (Statistics Canada 2017a, 2017b, 2016c, 2017d, 2017e). Telkwa residents spend the least on income, with 92% spending less than 30% of their income on shelter (Statistics Canada 2017b).



Source: Statistics Canada 2017a, 2017b, 2016c, 2017d, 2017e

Figure 5.6-6: Percentage of the Population Spending Income on Shelter Costs

There are several organizations within the LSA communities that are working on housing development initiatives for vulnerable populations, such as low income, elderly, and women fleeing domestic abuse. These organizations typically seek partnerships and/or grants from BC Housing's Community Housing Fund Program to create these housing development projects. Some of the organizations LSA communities engaged with BC Housing's Community Housing Fund Program are Smithers Community Services Association (SCSA), The Dze L K'ant Friendship Centre, Northern Society for Domestic Peace, as well as local governments (Smithers Community Services Association 2019).

5.6.1 Telkwa

In 2016, Telkwa had 495 private dwellings and an average of 2.7 person per household, the highest of LSA communities. Of these 495 households, 97% were non-condominiums, and 3% were condominiums. 89.9% of private dwellings were owned and 10.1% were rented. The majority of private dwellings in Telkwa were constructed between 1991-2000, with 5.1% requiring major repairs (Statistics Canada 2017b).

The median house value for Telkwa was \$268,451 in 2016 (Statistics Canada 2017b). During this time, monthly median shelter costs for owned dwellings was \$1239, and rented dwellings was \$1,083 per month, which is the highest monthly rental rates across LSA communities. This is also likely attributed to Telkwa having very large lots, with some about 5 acres in size (Village of Telkwa 2019b). 92% of Telkwa owners and tenants spend 30% or less of their monthly income on shelter costs (Statistics Canada 2017b).

Interviews indicated that there is a housing shortage in Telkwa, as well as the Bulkley Valley as a region. There are also a number of logistical challenges that limit Telkwa's ability to develop more housing, including issues regarding transporting building materials to Telkwa, its proximity to neighbouring Agricultural Land Reserve (ALR) land, and a lack of municipal water for new developments. Telkwa is

served by a bailey bridge that has a 90 degree turn on each side of the bridge, making it very difficult to move building equipment throughout the Village. Secondly, Telkwa is surrounded by ALR, which imposes a number of building restrictions as a means to preserve agricultural lands. Finally, the Village has a water shortage and therefore cannot permit the development of new houses based on the shortage. In 2018 the Village received a \$3.6 million investment from the province towards the construction of the water tower. Once constructed, this will solve Telkwa's water shortage issue. Telkwa does have a sizable amount of private land that could be developed to accommodate roughly 30-60 units (Village of Telkwa 2019b).

5.6.2 Smithers

In 2016, Smithers had 2290 private dwellings, with an average household size of 2.3 persons, the lowest of LSA communities. 68.8% of private dwellings in Smithers were owned, and 31.2% were rented, which is the highest rental rate within LSA communities. The majority of private dwellings in Smithers were non-condominiums (91.5%), and most dwellings were constructed between 1961-1980 (37.6%) with only 7% requiring major repairs (Statistics Canada 2017c).

The median house value for Smithers was \$289,905 in 2016. At this time, monthly median shelter costs for owned dwellings was \$911, and rented dwellings was \$835 per month. Smithers residents are spending more of their income on shelter costs compared to the other LSA communities. 81.7% of private dwelling owners and tenants spend 30% or less of their monthly income on shelter costs (Statistics Canada 2017c).

Smithers housing market has been consistent and steady over the last ten years. Because of the desirability of Smithers as a place to live, there is huge demand for housing in Smithers. Smithers is seen as an appealing place to live with an array of recreation and retail amenities. Based on this, it is not uncommon for people to move to Smithers without housing or an employment previously secured (Smithers Community Services Association 2019; Town of Smithers 2019). In Smithers it is typical for a house on the market to sell in about a week (Smithers Community Services Association 2019).

The vacancy rate in Smithers is about 1%, which has been consistent over the last. There are limited rental opportunities available, which seem to be shared through word of mouth or pre-existing relationships. Interviews indicated that a lack of economic return associated with managing rental properties contributed to the overall lack of available rentals. It is expensive and usually a lengthy process to build a property in Smithers, which proves difficult to get a good return on investment (Smithers Community Services Association 2019).

Many non-residents who find employment opportunities in Smithers are unable to accept positions based on the lack of available accommodations (Smithers Community Services Association 2019, Smithers Chamber of Commerce 2019; Town of Smithers 2019). As previously mentioned, Smithers residents are spending more of their income on shelter costs compared to the other LSA communities, with 18.1% spending 30% or more of their monthly income on shelter. Smithers housing isn't affordable for people that are low income, making minimum wage, or the elderly (Smithers Community Services Association 2019; Town of Smithers 2019). To alleviate this, some people live in short-term accommodations, such as hotels, until they are asked to leave during summer peak season (Smithers Community Services Association 2019).

Homelessness is a growing concern in Smithers, identified as an important social challenge facing Smithers, in part due to the increase in social conflict that has occurred in the downtown area (Smithers Community Services Association 2019). There have been two homeless counts in recent years, where about 20 homeless people were identified in Smithers. Defining an exact homeless number is challenging as some of these people are transients and move from place to place (Smithers Community Services Association 2019).

Smithers has several housing developments for low-income people or the elderly requiring affordable housing, as well as facilities to serve the homeless (**Table 5.6-1**). In November 2018, SCSA provided with \$1.5 million in funding from the provincial government to build 15 housing units (Grace-Dacosta 2018). The homes will be two-bedroom units that are about 700 square feet, with rent expected to be between \$750 and \$900. This project is still in the planning and procurement stage, with construction expected in 2019/2020 (Grace-Dacosta 2018).

Table 5.6-1: Smithers Low-income Housing Developments

Name	Organization	Description
2nd Avenue Property Development	SCSA	- Eight units - One-bedroom carriage houses 650 sq. feet with laundry facilities
Alpine Court Family Housing	Bulkley Drive Housing Society and BC Housing	24-unit townhouse style family complex 14 are subsidized based on family income and ten are rented at the current market rate.
Broadway House Apartments	SCSA and BC Housing	six apartments
Broadway Place Emergency Shelter	SCSA, BC Housing and the Town of Smithers	- nine bed low-barrier emergency shelter - serves men, women and families who find themselves in crisis
Goodacre Place	SCSA, BC Housing and the Town of Smithers	22 unit - long-term tenancies and short-term emergency stays - Offers affordable housing, meals, case planning, social and recreation activities, and other training and workshops.

Source: SCSA 2013a

5.6.3 Houston

In 2016, Houston had 1245 private dwellings, with an average household size of 2.4 persons. 97.2% of Houston's private dwellings were non-condominiums. 72.3% of private dwellings in Houston are owned and 27.3% are rentals. 54.2% of private dwellings were constructed between 1961-1980, with 11.7% requiring major repairs, which is the highest percent within LSA communities (Statistics Canada 2017d).

In 2016, the median private dwelling value in Houston was the lowest of LSA communities at \$150,199. As noted, housing prices fell in 2014/2015 after the closure of the Houston Forest Products, as well as Endako Mine and Huckleberry Mine entering into care and maintenance (Nienow 2016; Nienow 2017). During this time, 40 families left Houston, which created excess demand within the market, leading to a decrease in pricing (Houston Chamber of Commerce 2019).

Interviewee 1 noted that after the CGL project approval was announced in October 2018 that housing prices increased rapidly in Houston. "My house has stayed roughly the same price for 10 years. In October when the CGL Project was announced it shot up 40% in value" (Houston Chamber of Commerce 2019). Similar housing trends have transpired in Kitimat as a result of the CGL project, whereby houses were bought in anticipation of future housing price increases as a result of people moving locally to work on the Project (McKinnon 2018). This trend has resulted in a lack of housing options for buying or renting in Houston, with properties for sale typically sell in about a week (Houston Chamber of Commerce 2019).

The increase in industry activity in the area also means local trades people are busy working directly or indirectly on the CGL project and therefore are unable to construct new houses or renovate existing houses. As of June 2019, some residents were told it would be a year or more before someone was available for construction or renovation services (Houston Chamber of Commerce 2019).

In 2016, monthly median shelter costs for owned dwellings was \$656 and rented dwellings was \$695. 85.7% of owners and tenants in Houston spend 30% or less of their monthly income on shelter costs (Statistics Canada 2017d).

5.6.4 Witset

In 2016, Witset had 215 private dwellings, with the average household size of 2.9 people. 75.0% of dwellings were constructed more than ten years ago and 11.3% have been constructed within the past ten years. 48.8% of dwellings require major repairs and 51.2% require minor repairs (Statistics Canada 2017e, 2017f, 2017g, 2017h). Vacancy rate information for Witset was not available.

A proposed 26 Unit Passive House project is set to start construction in 2021 and is intended to address the affordable housing shortage. The project will provide 16 studio and 10 2-bedroom apartments. Other facilities will include a common room with a kitchen, a counselling room, boardroom, laundry area, recycling room and building management office (Witset First Nation 2020). The project is being funded under the 2018 Building BC Indigenous Housing Fund (Luma Development Management 2018).

5.7 Community Health and Well-being

5.7.1 Measuring Well-being

There are different ways to describe community health and well-being in LSA communities. This subsection combines quantitative and qualitative data. Quantitative data was derived from Socio-economic Indicators from the BC government, as well as the Community Well-Being Index (CWB) from Statistics Canada (GovCan 2019) and was supplemented by qualitative data collected through baseline interviews. The majority of this subsection draws on Socio-economic Indicators data from BC Stats (BC Stats 2013a-2013g), with Section 5.7.3.1 detailing CWB Index data for LSA communities.

Socio-economic indices summarize socio-economic conditions for regions of BC into a single composite index. Socio-economic indices are presented in three ways: local health areas, school districts, and/or regional districts. Socio-economic indices are also ranked from worst-off to best-off regions. For the purpose of capturing LSA communities neatly, socio-economic indices will be captured via local health areas.

Telkwa, Smithers, Houston, and Witset all fall within the Smithers Local Health Area (LHA). The LHA is one of many administrative boundaries the Government of BC has created to deliver statistical information based on geographic areas across the province. The information for the province's health boundaries is produced and maintained by BC Stats and the BC Ministry of Health and were last updated in 2012 (GovBC 2019e).

The CWB Index assesses socio-economic well-being in Canadian communities using indicators of socio-economic well-being, including education, labour force activity, income and housing. These indicators are combined to give each community a well-being "score". The CWB Index details socio-economic indicators for Telkwa, Smithers, and Houston. Indicator values may be missing for a community because of non-participation in the census, inadequate data quality, or insufficient population size (GovCan 2019). The CWB Index for Witset reserve communities only includes Moricetown 1.

5.7.2 Physical Health and Well-being

5.7.2.1 Smithers LHA

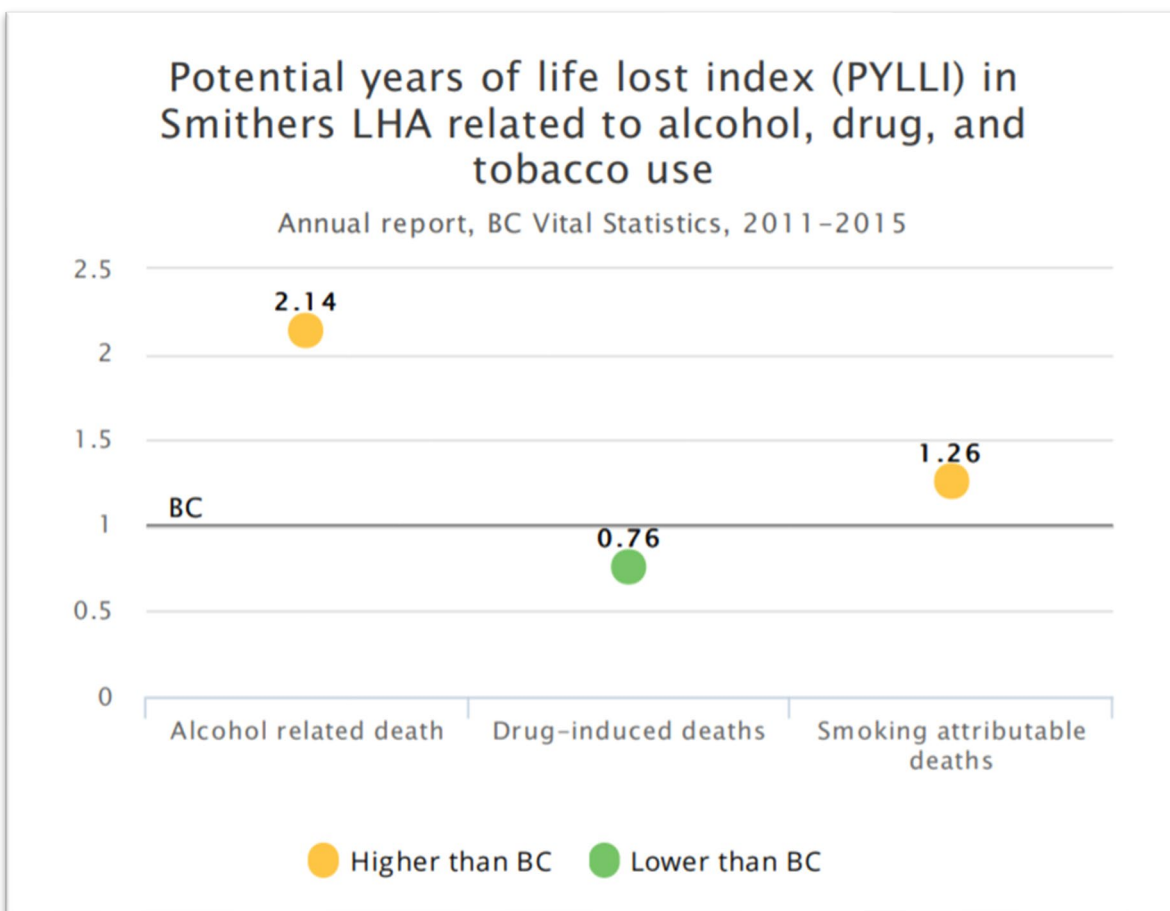
In 2012, Smithers LHA ranked in the middle of all LHAs (36th of 77) based on indicators of health problems. The average life expectancy between 2008-2012 in the Smithers LHA was 80.2, which is below the provincial average of 82.0 (**Table 5.7-1**). Potential Years of Life Lost (PYLL) refers to the number of years of life lost to early death (i.e., death before an individual reaches the age of 75). The average PYLL for the Smithers LHA per 1,000 population between 2007-2011 was 33.9 years for natural causes, 9.9 years for accidental causes and 6.0 years for suicide/homicide. In 2012, Smithers LHA had an infant mortality rate of 2.9 per 1,000 live births between 2008-2012, ranking at 54th of 77 LHA's (BC Stats 2013a).

Table 5.7-1: Indicators of Health Problems in the Smithers Local Health Area (LHA) and BC, 2012

Local Health Area	Life Expectancy at Birth Avg 2008-2012	Potential Years of Life Lost (PYLL) Per 1,000 pop – Avg 2007-2011		
		Natural Causes	Accidental Causes	Suicide/Homicide
Smithers LHA	80.2	33.9	9.9	6.0
BC	82.0	29.7	7.0	4.0

Source: BC Stats 2013a

Figure 5.7-1 demonstrates PYLL that are alcohol related, drug-induced, and smoking related in Smithers LHA between 2011-2015. Smithers LHA's PYLL indicates alcohol related (2.14 years) and smoking attributed deaths (1.26 year) are above the provincial average, whereas drug-induced deaths (0.76 years) are below the provincial average of PYLL (Provincial Health Services Authority 2019).



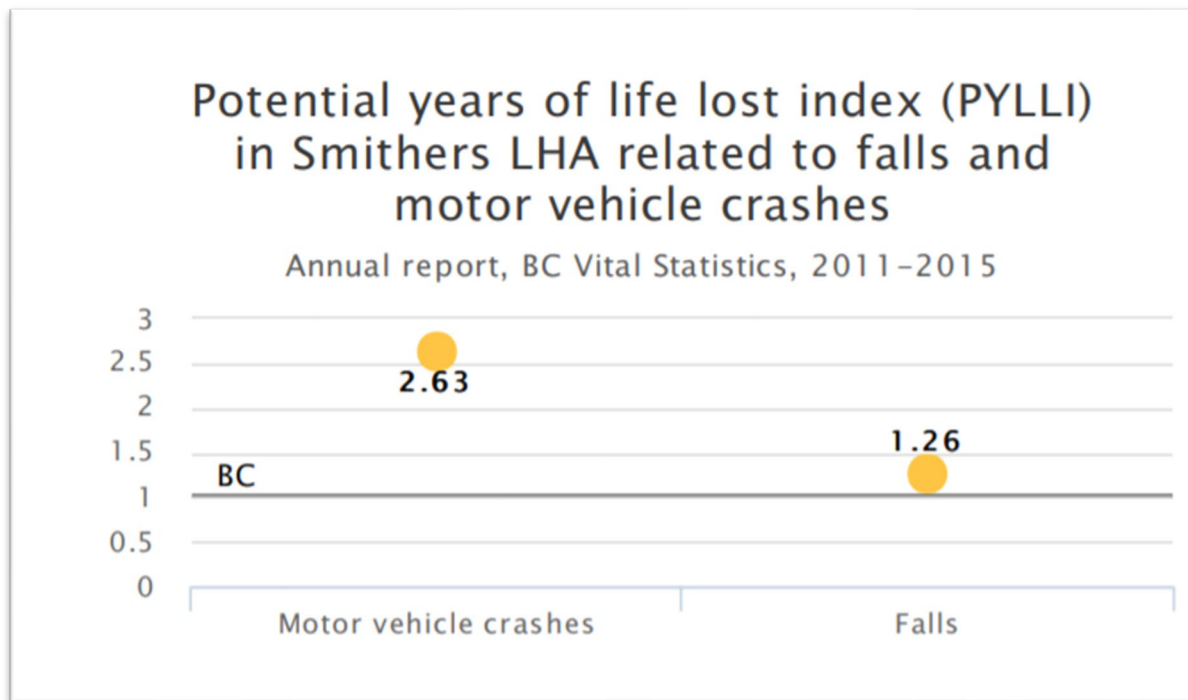
Source: Provincial Health Services Authority 2019

Figure 5.7-1: Potential years of life lost index in Smithers Local Health Area (LHA) related to alcohol, drug and tobacco use

During baseline interviews it was noted that drug use in Smithers has escalated and become a bigger social problem in the past 10-15 years. Drug-related deaths are on the rise, partially related to the “harder” drugs being consumed. It is believed that the presence of “harder” drugs has also led to the downtown area becoming more dangerous, promoting additional crime as a result of drug use (Smithers Community Services Association 2019).

Aging populations and opioid use were noted as the greatest challenge to the Smithers LHA (Northern Health 2019e). In 2016, the Government of BC declared a public health emergency in response to a rise in drug overdoses and deaths. In 2017, the provincial government allocated \$322 million over the next three years to decrease opioid-related deaths, end stigma and improve access to services for people struggling with addiction. Led by the new Ministry of Mental Health and Addictions, the government has taken the approach to combat the overdose crisis via crucial additional investments and improvements to mental health and addictions services (GovBC 2019f).

The PYLL Index for Smithers LHA related to motor vehicle crashes and falls between 2011-2015 are illustrated in **Figure 5.7-2**. Smithers LHA's PYLL for motor vehicle crashes and falls is higher than provincial rates at 2.63 years lost and 1.26 years lost respectively (Provincial Health Services Authority 2019).

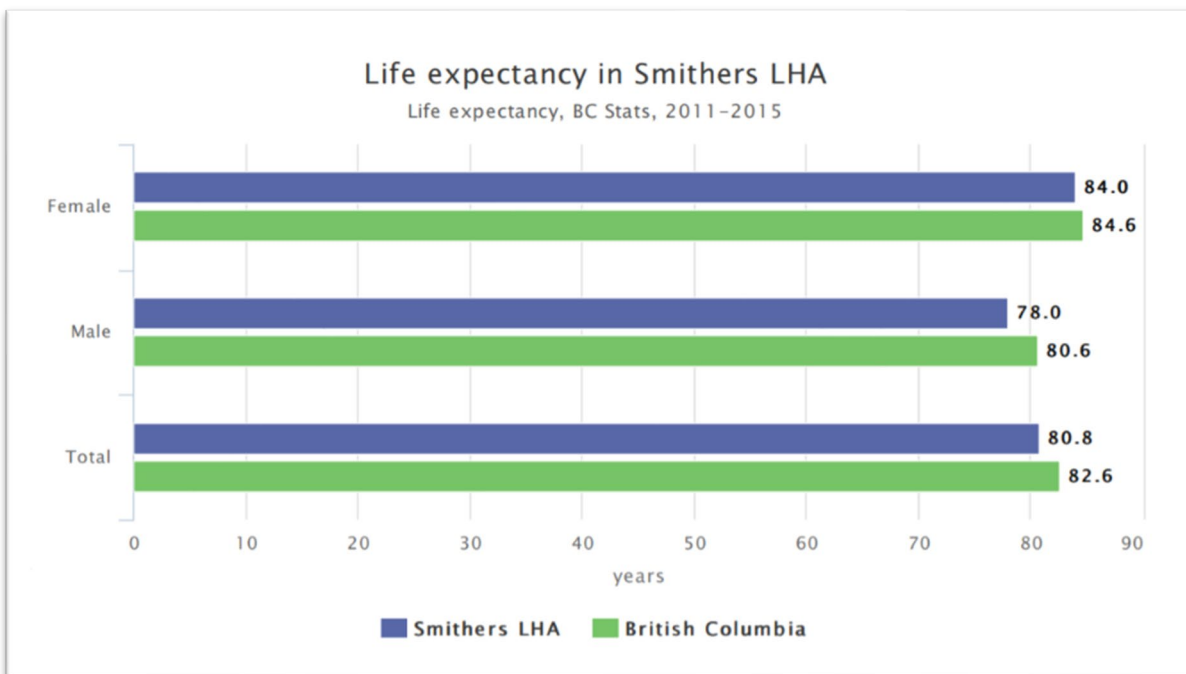


Source: Provincial Health Services Authority

Figure 5.7-2: Potential years of life lost index in Smithers Local Health Area (LHA) related to falls and motor vehicle crashes

The overall life expectancy of the Smithers LHA was 80.8 years old between 2011-2015, which is below the provincial life expectancy of 82.6 years old⁴ (**Figure 5.7-3**). Life expectancies for males and females in Smithers LHA were also below the provincial levels.

⁴ Note Table 5.7-1 above reports life expectancy at birth based on an average from 2008-2012, and the community health profile for the Smithers LHA is reporting life expectancy from 2011-2015 in Figure 5.7-3.



Source: Provincial Health Services Authority 2019

Figure 5.7-3: Life expectancy in Smithers Local Health Area (LHA) and BC, 2011-2015

5.7.2.2 Indigenous Communities

Indigenous populations experience a disproportionately high burden of chronic disease and associated risk factors compared with the general population (First Nations Information Governance Centre [FNIGC] 2018). Health inequities occur across the life course and are shaped by the relationship between health and the effects of colonial policies.

Nearly two-thirds (59.8%) of Indigenous adults, one third (33.2%) of Indigenous youth, and more than one-quarter (28.5%) of Indigenous children reported having one or more chronic health conditions. Among Indigenous children, the number of reported conditions shows a sizable decrease from 2008. Chronic health conditions such as diabetes, arthritis, high blood pressure, allergies and chronic back pain remain the most commonly reported conditions among Indigenous adults. Among Indigenous children and youth, allergies and asthma were the most commonly reported health conditions (FNIGC 2018).

More Indigenous youth with chronic health conditions reported feelings of depression and a reduced sense of mental, emotional and spiritual balance, compared to youth without a health condition. More than one-third (34.8%) of Indigenous youth diagnosed with anxiety disorders, one-third (33.8%) of those with mood disorders, and nearly one-third (29.7%) of those with learning disorders reported that they were receiving treatment for their conditions. 17.4% of Indigenous adults reported having psychological distress, which suggests that they are likely to have a moderate to severe mental disorder (FNIGC 2018).

5.7.3 Perceptions of Health and Indicators of Well-being

5.7.3.1 Community Well-being Index

Table 5.7-2 details CWB scores for socio-economic indicators across LSA communities. Based on the 2016 census data, Smithers ranks highest for income, education, housing, and labour force activity totalling an overall CWB score of 82 out of 100. Telkwa is close behind with 81, Houston at 78, and Moricetown 1 at 59. Houston's income score is consistent with other LSA communities, however education, housing, and labour force data scores trail Telkwa and Smithers to a greater extent (GovCan 2019).

Table 5.7-2: Community-well being (CWB) index scores, 2016

Community	Income	Education	Housing	Labour Force Activity	Overall CWB Score
Smithers	79	64	96	88	82
Telkwa	78	63	98	87	81
Houston	79	56	93	83	78
Moricetown 1	58	36	68	72	59

Source: GovCan 2019

Indicator values are missing for Coryatsaqua 2, Babine 17, Bulkley River 19, Jean Baptiste 28 reserve communities due to either inadequate data quality or insufficient population size.

Moricetown 1's CWD's scores are lower than the rest of LSA communities, reaffirming socio-economic trends detailed throughout Section 5. Many Indigenous people and communities face deeply rooted social and economic challenges, including poverty and lacking social services and infrastructure (i.e., housing, education, mental health) (National Collaborating Centre for Aboriginal Health 2017). These challenges are intricately connected to historic effects of colonialism at individual, family, community and systematic levels. It has also been acknowledged that these socio-economic challenges negatively impact health and well-being (Mendelson 2006; Standing Senate Committee on Aboriginal Peoples 2011).

Educational attainment of Indigenous adults has increased at the high school and graduate levels since the 2008, although there is still a gap in educational attainment between Indigenous adults and the general population at the high school and post-secondary levels. Unemployment for Indigenous adults is high; however, labour force participation is also high, which may point to a lack of opportunities in Indigenous communities (FNIGC 2018).

When examining the social and economic determinants of health it becomes evident that Indigenous people as a whole do not experience the same standards in terms of education, employment and housing as the general, non-Indigenous population in Canada (FNIGC 2018).

5.7.3.2 Socio-economic Indicators

In 2012, Smithers LHA ranked in the middle of all LHAs (35th of 77) based on for overall regional socio-economic conditions, based on human economic hardship, crime, health, education, children as well as youth at risk (BC Stats 2013b).

Smithers LHA ranked 30th (out of 77) for indicators of human economic hardship in 2012. This ranking was based on 2.2% of the area's total population (all ages) being on income assistance, excluding persons with disabilities and persons with persistent multiple barriers (**Table 5.7-3**). Of those on income assistance, 1.3% had been on income assistance for more than one year, and 1% had been on it for less than one year. 1.9% of the province's total population is on income assistance (BC Stats 2013c).

Table 5.7-3: Indicators of human economic hardship in Smithers Local Health Area (LHA) and BC, 2012

Local Health Area	Total % of Population on Income Assistance			% of Seniors receiving Maximum GIS
	Total %	For 1 or more years	For less than 1 year	
Smithers LHA	2.2	1.3	1.0	1.1
BC	1.9	1.0	0.9	2.9

Source: BC Stats 2013c

A number of baseline interview participants noted homelessness as a growing concern in Smithers. One interviewee identified homeless as the greatest social challenge facing Smithers, in part due to the increase in social conflict that has occurred in the downtown area (Smithers Community Services Association 2019; Town of Smithers 2019). In recent years there have been two homeless counts, with the number being around 20 homeless people in Smithers. It is however, a challenging to define as some of these people are transients and move from place to place (Smithers Community Services Association 2019).

Smithers LHA ranked 35th for indicators of crime in 2012 out of 78 LHA's (BC Stats 2013d). Total serious crime rates for the Smithers LHA were below the provincial rate. Of the total, serious violent crimes were above the provincial average and seriously property crimes were below the provincial average (**Table 5.7-4**).

Table 5.7-4: Indicators of crime in Smithers Local Health Area (LHA) and BC, 2012

Local Health Area	Rate of Offences per 1,000 Population (Avg 2009-2011)		
	Total Serious Crime	Serious Violent Crime	Serious Property Crime
Smithers LHA	9.9	3.9	6.1
BC	11.1	3.3	7.8

Source: BC Stats 2013d

In 2018, the Smithers RCMP received about 6,000 calls. The most prevalent types of crime that Smithers RCMP responds to is minor assault, mischief, and disturbance. Because the Bulkley Valley District Hospital (BVDH) is located in Smithers, the Smithers RCMP also provides support to patients who might create risk, or are struggling with mental health. In 2018, the Smithers RCMP received 122 calls involving patients at the Bulkley Valley District Hospital (RCMP 2019b).

In July 2019, Statistics Canada released a report showing that Smithers LHA had a sizable increase in its crime severity index (CSI), violent crime severity index (VCSI) and non-violent crime severity index (NVCSI). The CSI rose 31.5% between 2017-2018, the VCSI rose by 38% and the NVCSI grew by 28.7% (Barker 2019b). The Smithers RCMP attributes the rise in crime to a change in Statistics Canada's methodology in reporting crime, as well as an increase in calls from the Bulkley Valley District Hospital. In 2018, one patient with an extended stay at the hospital generated several calls daily or weekly, prompting the RCMP to support hospital staff to prevent violence (Barker 2019b; RCMP 2019b).

In 2018, domestic violence, property crimes and break-and-enters decreased, whereas crimes against persons and theft over \$5,000 have increased. In terms of numbers of actual incidents, there were 949 crimes reported to Smithers RCMP in 2018, a crime rate of 16,832 per 100,000 population. RCMP cleared 404 of those files (42.6 per cent), 148 by laying charges and 256 by other means. A total of 149 individuals were charged with crimes in 2018 within the Smithers LHA (Barker 2019b).

Smithers LHA ranked 35th (of 77) for indicators of children at risk in 2012. Between 2008-2012 the infant mortality rate for the Smithers LHA was 2.9 based on 1,000 live births, which is below the provincial rate of

3.7 (**Table 5.7-5**). Between 2009-2011 the total serious juvenile crime rate was 6.7, per 1,000 population aged 12-17, which is higher than the provincial rate of 3.8 (BC Stats 2013e).

Table 5.7-5: Indicators of children at risk in Smithers Local Health Area and BC, 2012

Local Health Area	% of Children (0-14) on Income Assistance		Rate of Children in Care	Rate of Infant mortality rate	% Below grade 4 and 7 reading standards	Rate of Total Serious Juvenile Crime
	For 1 year or more	For < 1 year				
Smithers LHA	2.0	1.7	11.2	2.9	19.4	6.7
BC	1.9	1.6	9.1	3.7	20.5	3.8

Source: BC Stats 2013e

Smithers LHA ranked 37th (out of 77) for indicators of youth at risk in 2012. 2.6% of youth aged 15-24 were on income assistance as of September 2012, compared to the provincial average of 2.1% (**Table 5.7-6**). Between 2009-2012, 14.9% of 18-year old's in Smithers LHA didn't graduate high school, and the LHA had a total serious crime rate of 9.9 based on offences per 1,000 population between 2009-2011 (BC Stats 2013f).

Table 5.7-6: Indicators of youth at risk in Smithers Local Health Area and BC, 2012

Local Health Area	% of Youth on Income Assistance			% of 18-year old's who didn't graduate high school	Rate of Total Serious Crime
	Total	For 1 year or more	For < 1 year		
Smithers LHA	2.6	1.2	1.5	14.9	9.9
BC	2.1	0.9	1.1	26.2	11.1

Source: BC Stats 2013f

Smithers LHA ranked 53rd for indicators of education concerns out of 78 LHA's in 2012. From 2009-2012, 14.9% of 18-year-olds in Smithers LHA didn't graduate from high school, which is below the provincial average of 26.2%. Smithers LHA was below the provincial grade 7 standards for writing and math but above in reading (**Table 5.7-7**). Please refer to **Section 5.5** for education attainment statistics for LSA communities.

Table 5.7-7: Indicators of education concerns in Smithers Local Health Area and BC, 2012

Local Health Area	% of 18-year old's that didn't graduate high school	% of Students below grade 7 Standards		
		Reading	Writing	Math
Smithers LHA	14.9	22.6	11.0	24.5
BC	26.2	22.0	13.8	25.9

Source: BC Stats 2013g

5.8 Community Infrastructure

Table 5.8-1 provides a summary of major infrastructure and utilities for LSA communities.

Table 5.8-1: Summary of major infrastructure and utilities for LSA communities

Community	Water	Wastewater and Sewage	Solid Waste	Energy	Communications	Air Transport
Telkwa	Full municipal water system	Sewage lagoon system.	Weekly curbside garbage pickup, bi-weekly recycling pickup	BC Hydro and/or natural gas	Telephone, High-speed internet, Monthly newsletter.	None
Smithers	Water is provided via three deep wells.	Sewage system	Bi-weekly curbside garbage and recycling pick up, alternating each week.	BC Hydro and/or natural gas	Telephone, High-speed internet, Once weekly newspaper	Smithers Regional Airport
Houston	Water is provided via four supply wells and a 500,000-gallon reservoir	Sewage system	Weekly curbside garbage pickup	BC Hydro and/or natural gas	Telephone, High-speed internet, Once weekly newspaper	Houston Airport (no commercial flights)

Source: Village of Telkwa 2018, Town of Smithers 2018, District of Houston 2018, RDBN 2014d, OPUS 2017
Information for Witset was not available.

5.8.1 Telkwa

Water

The Village of Telkwa's water is sourced primarily from the Bulkley River, which is treated in a traditional Water Treatment Facility. The water is pumped from the Bulkley River to the water treatment plant which is located on the west side of the Telkwa Bridge. The water is treated and then sent through the distribution system with the reservoir acting as a backup. The Village of Telkwa also has another backup water source being the well (Village of Telkwa 2018).

Telkwa has aerated lagoons with a capacity of 2,000 residential users (RDBN 2014e). In 2017, essential repairs, maintenance, and investigative work on Telkwa's sewage lagoons and water treatment plant occurred. For about 30 years, the Village had been seeking funding for the water tower to enhance water quality, supply, and safety of municipal water. In 2018, Telkwa received key grant funding of \$3.6 million for the construction of the Trobak Water Reservoir project. Construction of the water tower is underway, with completion planned for the end of 2019 (Village of Telkwa 2018).

92% of Telkwa's municipal taxes are derived from residential properties taxes, predominantly due to the lack of local commercial properties. Because of this, Telkwa relies heavily on grants to finance community infrastructure services. Telkwa also has high municipal service costs, primarily because of its rural spread-out nature. Typically, the denser a community it, the cheaper is it to provide municipal services. Most of Telkwa's property lots are around 5 acres in size, resulting in higher costs to delivering municipal services (Village of Telkwa 2019b).

Solid Waste

Curbside garbage is picked up weekly, and recycling every second week (RDBN 2014e)

5.8.2 SmithersWater

Water supply for the majority of Smithers' residents is sourced from three deep wells on the southeast side of town. The water from the wells is treated approximately one month of the year with sodium hypochlorite during the Town's annual water main flushing operations. The wells feed into a single pressure zone distribution grid which includes two water storage reservoirs capable of holding 505 ML (Town of Smithers 2018).

The Smithers Airport is supplied by a separate water system from the Town. It consists of one deep well and three underground storage cisterns, two small distribution pumps and a fire pump. The airport system also services a 29-lot subdivision on Lake Kathryn and an elementary school (RDBN 2014b).

The Town of Smithers is not at capacity for the sewer system or water system, nor do they require updating in the near future. The only gap in community infrastructure projects is the cistern at Smithers airport that requires either replacement or upgrades, however this water is for emergency purposes only (Town of Smithers 2019).

Solid Waste

Curbside garbage and recycling are picked up bi-weekly, alternating each week (Town of Smithers 2013b). Knockholt Regional Landfill is the only landfill that services Smithers and is located 12km east of Houston. As of 2019, the landfill has 59 years of capacity at the current site. (RDBN 2014b).

In 2009, the Smithers Regional Airport became wholly owned and operated by the Town of Smithers, following a transfer from Transport Canada. The airport is currently undergoing a \$9 million Airport Modernization Project that includes expansion and renovations of the boarding lounge, baggage claim area, security areas, and office space. Airside and groundside paving was also undertaken to expand the runway and improve overall asphalt quality (Town of Smithers 2013a).

Three commercial passenger airlines operate at the Smithers Airport, Air Canada, Central Mountain Air, and Northern Thunderbird Air (Town of Smithers 2013a).

5.8.3 HoustonWater

The District of Houston's water system is comprised of four supply wells and a 500,000-gallon reservoir (RDBN 2014c). Two of the wells are used on a regular basis and two are for back up purposes. One of the backup wells has a standby diesel engine that can be used in the event of a sustained power failure. In 2015, a new water treatment plant was constructed, and in 2017 a new \$2.36 Million water tower was constructed to replace the existing water reservoir (District of Houston 2018).

Solid Waste

Residential garbage is picked up once a week. Residents must drop off their own recycling at the Houston Bottle Depot. In March 2019, the RDBN approved the construction of a new recycling depot and waste transfer station in Houston at the old Houston Landfill site on Mountain View Drive (Mcbride 2019).

Knockholt Regional Landfill is located approximately 12km east of Houston. As of 2019, the landfill has 59 years of capacity at the current site (RDBN 2014c).

A number of infrastructure upgrades are currently underway or planned for the near future (Houston Chamber of Commerce 2019). Highway 16 that runs through Houston is receiving upgrades to sidewalks, undergrounding overhead BC Hydro and Telus lines as well as pavement patching and repairs, backfill and soil remediation, and the replacement of streetlights (Houston Today 2019). A Community Hall and new Fire Hall are also planned (Houston Chamber of Commerce 2019). Houston is actively seeking funding to implement its Downtown Beautification Plan that includes the construction of a community barn and a plaza space as well as decorative crosswalks to enhance visitor experience in the downtown (Houston Today 2019).

5.8.4 Witset

Information regarding community infrastructure in Witset was not available at the time of writing.

5.9 Health and Emergency Services

5.9.1 Health Services

Northern Health is the principle health service provider for LSA communities, covering the Northwest, the Northeast, and the Northern Interior (Northern Health 2019a). Within the Smithers LHA, there are about 450-500 people employed by Northern Health. In addition, there are also 15-30 physicians that service the Smithers LHA, with the majority being visiting physicians (Northern Health 2019e).

5.9.1.1 Telkwa

Smithers is the health care hub that services the LSA communities, including Telkwa. Refer to **Section 5.9.1.2** for a description of the health care services in Smithers.

Well Spring Home & Community Services is a senior home care assistance company located in Telkwa offering companionship services, personal care services, and education and consultation for senior home care assistance (Well Spring Home & Community Services 2019).

5.9.1.2 Smithers

Smithers is the regional hub for health and social services to the Bulkley Valley. Smithers has one hospital, one health unit centre, two long-term care seniors' centres, and several physical therapy offices. Smithers also has a number of social services including programs for the treatment of drug and alcohol addictions, emergency housing and shelter, daycare, programs related to child protection, programs for learning (youth, literacy, seniors, and disabled individuals), family support programs, fetal alcohol spectrum disorder services, programs for seniors, risk reduction services, pregnancy outreach, and victims' services (Bulkley Valley Social Planning Society 2019).

Bulkley Valley District Hospital

Smithers and the surrounding area are serviced by the Bulkley Valley District Hospital (BVDH), which is operated by Northern Health. The BVDH is a full-service hospital providing emergency, medical, surgical, maternity and palliative services. The BVDH has a total of 53 beds; 37 beds for acute care, 14 for in-patients, and two for maternity. The BVDH sees about 15,000 emergency room visits per year, and 6,000 acute patient days per year (Northern Health 2019e). There are about 200-250 babies born each year at the BVDH. In July 2019, the BVDH unveiled its new CT scanner (Hewitt 2019).

The BVDH is primarily made up of visiting physicians with the following specialties: ears, nose, and throat, internal medicine, pediatric endocrinologist, dermatologist, plastic surgery, urology, and obstetrics and gynecology. In terms of permanent local positions, Smithers has 25 family doctors, three psychiatrists, and the hospital is currently recruiting a radiologist and a pediatrician (Northern Health 2019e).

A specialist nursing team provides care for those under cancer treatment. Some community services are also based at the hospital, including home support, home care nursing, and rehabilitation therapy. The hospital also offers physiotherapy and occupational therapy, as well as numerous mental health and addictions services, social work services, and outreach clinics. Ambulance and air ambulance services are available and major medical care transfer is to Prince George Rural Coordination Centre of BC [RCCBC] 2018).

Northern Health provides various “tiers of service” depending on the size and location of the community. Based on this, the BVDH does not offer cardiac services, intensive care, a psychiatry unit, or have a magnetic resonance imaging (MRI) scan. Individuals requiring these medical services would have to travel to Terrace (204 km), Prince George (370 km), or Fort St. John (805 km) for additional health services (Northern Health. 2019d; Northern Health 2019e).

Northern Health is currently working through the planning process to fully replace the BVDH with a larger and more modern hospital. It is anticipated that the planning, funding, and approval phase of the replacement will take 7-15 years. Outside of this, there are a number of major capital projects planned for the future as well (Northern Health 2019e).

Smithers Health Unit

The Smithers Health Unit offers public health nursing services including family health services, postpartum support, parent-baby drop-in, immunization clinics, school health, options for sexual health, communicable disease services, harm reduction and needle exchange services, injury prevention, quit smoking services, and community development (Bulkley Valley Social Planning Society 2019).

Bulkley Lodge

Bulkley Lodge is operated by Northern Health and provides long-term care to 70 residents across four units within the building. The Bulkley Lodge has two specialized units for residents who may benefit from secure, smaller or slower-paced environments (e.g., dementia care). Three of the rooms are designated for short-stay clients who require respite, convalescent or palliative care. The facility has 14 designated mental health and addictions beds and offers 24-hour staffing. Additional services provided to residents include daily activity programming, therapeutic recreation, spiritual programming, occupational therapy, and specialized nail and foot care (Northern Health 2019b).

The Meadows

The Meadows is a 14-unit supportive housing development located in Smithers, made possible through a partnership between Smithers Community Services Association, BC Housing, and Northern Health. The

Meadows provides assisted living to seniors and people with disabilities. The units are self-contained, wheelchair-accessible apartments with a 24-hour response system (Smithers Community Services Association 2013b).

Aboriginal Health Improvement Committee

The Aboriginal Health Improvement Committee in Smithers is a venue for Aboriginal people to voice their health concerns and provide information about events or opportunities. Committee members include representatives from Indigenous communities, Indigenous organizations, and local Northern Health leadership (Northern Health Indigenous Health 2019).

5.9.1.3 Houston

Smithers is the healthcare hub for LSA communities, including Houston. Refer to **Section 5.9.1.2** above for a description of the health care services in Smithers.

Houston Health Centre

Houston Health Centre offers a variety of services including urgent care and outpatient services, public health, and home and community care. Further services available include Assistive Devices Program, mental health and addictions, private physiotherapy clinic, child and infant development programs, women's health clinic, and visiting specialists that include pediatrics and gynecology. The health centre provides space for many community groups, such as club house, and support groups for new mothers (RDBN 2014c).

Houston Residential Care

Houston Residential care is part of the Houston Health Centre and includes a Primary Care Physician Mental Health Clinicians, an Urgent Care Department, as well as a visiting dietician and diabetic nurse. Houston Residential care consists of four permanent beds and two short stay beds used for Respite and Palliative care. This care facility is attached to the Health Center and primarily staffed with one Licensed Practical Nurse and one Residential Care Aid (Northern Health 2019c).

5.9.1.4 Witset

The Witset Health Centre provides general personal health for our community members through the following Community Health programs:

- ▶ Education - Offer increased access to information on a variety of wellness topics through presentations, workshops, and meetups for new moms, elders, and other groups.
- ▶ Advocacy - Advocate for Witset members and doctors to ensure members have access to care, understand treatment options, and feel confident in their medical experience.
- ▶ Support - Provide health and wellness support to Witset members through awareness and other programs.
- ▶ Prevention - Provide preventative solutions to health concerns in the community.
- ▶ Cultural Advocacy - Encourage and offer more language and culture in programs and services (Witset First Nation 2019a).

The Home and Community Care Program is offered via the Witset Health Centre, which operates in accordance with College of Registered Nurses of British Columbia (CRNBC) Standards of Practice (Witset First Nation 2019a).

The following services are available through the Home and Community Care Program via appointments:

- ▶ Jet tub
- ▶ Foot care
- ▶ Treatment for chronic illnesses and diabetes
- ▶ An Elders Lunch every first Tuesday of the month
- ▶ Community lunches every Wednesday of the month (with the exception of the first week)
- ▶ Transportation to medical appointments (Witset First Nation 2019a).

The Children's Oral Health Initiative (COHI) is a program targeting children between 0-7 years old and their caregivers. This programme helps prevent tooth decay and supports healthy lifestyles (Witset First Nation 2019a).

Witset has a Community Health Nurse that provides services for pre-natal and post-natal assistance, as well as offering educational programs in the local schools. The Community Health Nurse visits both Witset and Hagwilget, to promote health while preventing disease. The Community Health Nurse offers seasonal flu shots, as well as vaccinations to children in the post-natal programs (Witset First Nation 2019a).

Witset has an Addictions and Trauma Counsellor that provides counselling to youth, families, and individuals with a focus on additions and trauma counselling (Witset First Nation 2019a).

Witset also has a Mental Health Counsellor that provides the following counselling services:

- ▶ High-risk kids and teens
- ▶ Youth and family counselling, including couples counselling
- ▶ Drug and alcohol counselling
- ▶ Trauma counselling of both individuals and groups (Witset First Nation 2019a).

5.9.2 Emergency Services

The Smithers RCMP detachment serves Telkwa, Smithers, Fort Babine Reserve and Witset (RCMP 2015). The Smithers RCMP Detachment has 16 General Duty positions, four Traffic Services positions, five clerical positions (seven employees), eight Guards, a Victim Services Manager (three volunteers), two Auxiliary Constables, and one Victim Support Councillor. One of the positions is dedicated to proactively working with the Indigenous communities (RCMP 2019b).

Some of the services available at the Smithers detachment include criminal records check, Chauffeur's permit, fingerprints, and vulnerable sector check (RCMP 2015). Outside of these services, the Smithers RCMP's work is proactive, partnering with a number of local support agencies in the community, as well as participating in many community events (RCMP 2019b).

The Smithers RCMP detachment is sufficiently resourced to meet its service goals. Detachments typically rely on one another for certain equipment. For example, helicopters, police dogs, and forensic identification can be requested from Terrace or Prince George in a timely manner (RCMP 2019b).

The BC Ambulance Service provides support for Telkwa, Smithers, Houston and Witset. The service employs two full-time and more than 10 part-time paramedics, using three ambulances (Town of Smithers 2019). Patients requiring further medical treatment than is available at the BVDH are transported to the nearest major medical facility are located in Terrace and Prince George. The BVDH emergency room services are limited but include trauma services. Refer to **Section 5.9.1.2** for information regarding the BVDH's services.

5.9.2.1 *Telkwa*

Telkwa has a volunteer fire department with approximately 20 members that are trained as fire fighters, medical first responders, and as swift water and ice rescue technicians (Village of Telkwa 2020). In 2018 the Telkwa Fire Department saw a two-fold increase in person and equipment hours over 2017. The department responded to 101 calls in 2018 compared to 71 calls 2017. There was a slight increase in calls within the village, but a significant increase in out-of-town calls. By February 2019, the was on track to respond to well over 80 in the course of the year (Smithers Interior News 2019).

5.9.2.2 *Smithers*

Smithers has a volunteer fire department comprised of 40 volunteers. The Smithers Fire Department provides services beside structural firefighting including: first responder services, highway rescue, aircraft firefighting, fire prevention, public fire safety education, and volunteer fire fighting training. Smithers Fire Department has the following equipment:

- ▶ Two (2) Class "A" Engines, 1250 gallon per minute (gpm) & 1050 gpm pumps;
- ▶ One (1) Aerial 85', 1250 gpm pump;
- ▶ One (1) Rescue Truck, 650 gpm pump & compressed air foam system (CAFS);
- ▶ One (1) Tender, 3000 gallons, 1250 gpm pump;
- ▶ One (1) Bush Fire Truck, CAFS;
- ▶ One (1) Command Truck; and
- ▶ One (1) Sprinkler Protection Unit Trailer, Type 2 (Town of Smithers 2013c).

5.9.2.3 *Houston*

Houston's emergency services are provided by the Houston RCMP detachment, which serves Houston, Granisle, Topley, and Tachet. Some of the services available at the Houston detachment include criminal records check, fingerprints, online crime reporting, police certificate, report a crime and vulnerable sector check (RCMP 2019).

Houston has a volunteer fire department consisting of 30 members, including six officers. In addition to fire suppression services, the Houston Volunteer Fire Department provides a range of other services including fire prevention, fire investigation, highway rescue, public education, vehicle extrication, hazardous material response, and confined space rescue (District of Houston 2019a).

Fire department equipment includes:

- ▶ One (1) Unit E-13 – 1991 Superior Emergency customer pumper (750 gallon tank; 1050 gpm pump);

- ▶ One (1) Unit E-12 – 2004 Freightliner FL80 crew cab with a hub body (800 gallon tank; 1050 gpm pump and 140 CFM CAFS);
- ▶ One (1) Unit E-11 – 2016 Freightliner M2 crew cab with a hub body (1000 gallon tank; 1050 gpm pump and 140 CFM CAFS);
- ▶ One (1) Unit T-11 – 2012 Freightliner M2 chassis Rosenbauer Tanker (1500 gallon tank, 500 gpm pump); and
- ▶ One (1) Unit R-11 – 2000 Superior Emergency Freightliner FL60 crew cab (150 gallon tank; CAFS, hurst cutting jams and other rescue equipment) (District of Houston 2019a).

The Fire Department responded to a total of 233 incidents in 2017 an increase of 66% over the 2016 call volume. Of these calls, 73 were fire related calls (31% of call volume), 138 were first responder calls (59.5% of call volume) and 22 were rescue (motor vehicle accident) calls (9.5% of call volume) (District of Houston 2018).

5.9.2.4 *Witset*

Smithers is the emergency services hub for LSA communities, including Witset. No specific information regarding emergency services for Witset was available at the time of writing. Refer to **Section 5.9.2.2** for a description of the emergency services in Smithers.

5.10 Community Services

5.10.1 **Telkwa**

Telkwa residents enjoy a number of outdoor activities including snowmobiling, snowshoeing, cross country skiing, fishing, hiking, and golfing. Telkwa is home to Riverside Golf Course, and an RV campground (Village of Telkwa 2019a). The Village has a number of walking trails, parks, and sporting fields including the Dockrill Outdoor Ice Rink. Telkwa hosts several annual events including the Telkwa Barbecue and Demolition Derby, Tyhee Lake Triathlon, and Music in the Park, a series of concerts in Eddy Park throughout the summer months (Village of Telkwa 2018; Village of Telkwa 2019a).

The Telkwa Museum is a small and seasonal museum that highlights Telkwa's rich history. Telkwa also has a library, the Reading Centre that is run by volunteers on a part-time basis (Village of Telkwa 2019a).

Accommodations

Telkwa has four accommodation options, including two small hotels, one lodge, and an RV campground (**Table 5.10-1**). Cointe River Inn and Inn at the Creamery are two small hotels serving Telkwa.

Table 5.10-1: Telkwa and area accommodations

Business Name	Accommodations
The Cointe River Inn	Six rooms
The Inn at the Creamery	Four rooms
Eddy Park Lodge	Six rooms
Tyhee Lake Guest Ranch B&B	Three rooms
Total rooms	19 rooms
Fort Telkwa Riverfront RV Campground	30 RV sites Two guest houses

Source: Eddy Park Lodge 2019; Fort Telkwa 2019; Tourism Smithers 2019b; Love Telkwa 2019; Tyhee Lake Guest Ranch 2019.

5.10.2 Smithers

Popular recreation activities in Smithers include fishing, hiking, golfing, hunting and skiing (RCCBC 2018). Smithers has a golf course, camping and RV parks, cross-country skiing trails, and Hudson Bay Mountain, a downhill skiing resort (Northern Development Initiative Trust 2010). The Bulkley Valley Regional Pool and Recreation Centre in Smithers provides swimming as well as a gym, climbing wall (Bulkley Valley Social Planning Society 2019). Smithers also has two hockey arenas, a curling rink, sporting fields, baseball diamonds, walking and hiking trails, and a number of public parks (Town of Smithers 2013d). Smithers does not have a community or youth center, which were identified as gaps in the town's community services (Town of Smithers 2019).

Smithers is also known as a hub for arts and culture (Town of Smithers 2018; Town of Smithers 2019). Smithers has a number of cultural and artistic community assets, including Smithers Civic Centre, the Smithers Public Library, Smithers Art Gallery, Bulkley Valley Museum, and Bovill Square (Town of Smithers 2013d). The main community event in Smithers is the Bulkley Valley Exhibition, held each August that features a rodeo, parade, entertainment, dancing, amusement rides and games (Calendar North 2013).

The SCSA is the main not-for-profit organization providing community services for Smithers and the Bulkley Valley (SCSA 2013c). SCSA provides the following services:

- ▶ Youth and family support
- ▶ Housing
- ▶ Community learning
- ▶ Health

Table 5.10-2 highlights the services and programs SCSA's provides.

Table 5.10-2: Smithers Community Services Association (SCSA) programs and services

Name	Description
The Family Support Program	▪ Provides one-to-one and group support, and also works to link caregivers to other supportive services in the community.
The Homelessness Prevention Program	▪ Connects people who are experiencing homelessness, or at risk of becoming homeless due to crisis or transition, with housing.
Community Learning Services	▪ Adult literacy programming with volunteer tutors ▪ Literacy awareness and tutor training workshops ▪ Drop-in forms and application assistance ▪ Supports and group programming for adults with low literacy ▪ Community awareness, capacity building and promotion of support for literacy issues ▪ Family literacy promotion and activities to help parents and children incorporate literacy into their daily lives

Name	Description
English Language and Multicultural Services (ELMS)	▪ The ELMS Program empowers newcomers to Canada to live full lives in our community. The program offers: ▪ Immigrant Settlement Assistance - Information and orientation to assist newcomers to Canada in settling into a new home and country ▪ English Language Training - Free multi-level English classes, practice groups and tutoring to improve English skills ▪ Community Connection Services - Educational, social and cultural events to prepare for active lives in Canada and to build a welcoming and supportive community
Summer Step Up	▪ Through one-on-one tutoring, students work on academic areas indicated by their classroom teacher's referral or their family's preference in a casual summer environment. Step Up also provides meaningful work experience in the education field to students considering teaching as a career
Christmas Hampers	▪ Christmas hampers provide food for a Christmas dinner as well as some canned and fresh foods to about 1000 people. We also give toys and books to all children 16 years of age and younger.

Source: SCSA 2013c.

In 2015, the Town of Smithers identified creating an affordable housing plan and implementation strategy as one of their major strategic priorities for capital infrastructure projects. In March 2019, a 24-unit modular apartment building called Goodacre Place was constructed on Railway Avenue in Smithers. The development includes two accessible units on the ground floor for persons with disabilities and two units will be large enough to accommodate multiple short-term stay beds for families and individuals in need of emergency housing. The new apartments are to be made available to people currently using a local shelter on Broadway Avenue in Smithers (Ministry of Municipal Affairs and Housing 2019).

In November 2018, the provincial government announced a \$2.7 million in funding for affordable housing rentals in Smithers and Telkwa. \$1.5 was provided to SCSA to construct 15 two-bedroom units and \$1.2 was given to Telkwa Senior Housing Society to build 12 one-bedroom units for seniors. The proposed location for the Smithers units will be on Main Street, and the proposed Telkwa location will be Hankin Avenue and Second Street. Both housing projects are expected to start construction some time in 2019 (Grace-Dacosta 2018).

Accommodations

Table 5.10-3 identifies short-term accommodation options in and around Smithers.

Table 5.10-3: Short-term accommodations in and around Smithers

Business Name	Accommodation
Aspen Inn and Suites	60 rooms
Capri Motor Inn	61 rooms

Business Name	Accommodation
Chickadee Acres Bed and Breakfast	Two rooms
Fireweed Motor Inn	21 rooms
Florence Motel	21 rooms
Mountain View Motel	40 rooms
Logpile Lodge	7 rooms
Prestige Hudson Bay Lodge	98 rooms
Sandman Inn	35 rooms
Sidewinder Inn	One cabin (with eight rooms)
Silvern Lake Trail Bed and Breakfast	Four rooms
Smithers Driftwood Lodge	4 rooms One private apartment
Smithers Guesthouse	Five rooms
Stork Nest Inn	22 rooms
Sunshine Inn	57 rooms
Twin Valley Inn	12 rooms
Total rooms	427 Rooms 1 private apartment
Glacier View RV Park & Cabin Rental	20 RV and camping sites One private guest house Nine cabins
Smithers Par 3 and PV Park (Formerly Riverside RV Park and Camping)	35 RV sites 12 camping sites
Total sites	55 RV sites 21 camping sites

Source: Chickadee Acres Bed n' Breakfast 2019; Silvern Lake Trail Bed & Breakfast 2019; Glacier View 2019; Town of Smithers 2013e.

5.10.3 Houston

Popular recreation activities in Houston include fishing, water sports, snowmobiling, skiing, and golf. Houston has two main public recreation facilities, Claude Parish Memorial Arena for skating and hockey and the Houston Leisure Facility that hosts an aquatic centre and fitness gym (District of Houston 2019b). Houston also has a local curling rink, golf course, and bowling alley. Houston has 13 public parks that include sporting fields, baseball diamonds and playgrounds (District of Houston 2019c).

Houston Community Hall operates year around with various functions from community events, social parties and weddings (District of Houston 2019d). Major annual community events in Houston include Pleasant Valley Days (May), Canada Day (July), Drag Races (July), Mud Racing (July) and Christmas Light-Up (November) (District of Houston 2019e).

Overtime, social services have become centralized into regional hubs, such as Smithers (Houston Chamber of Commerce 2019; Dze L K'ant Friendship Centre 2019b; Smithers Community Services Association. 2019.). This means that the majority of government social services related to mental health, addiction, employment income assistance, parole, etc., are located in Smithers, which is 65 km away from Houston. Because Houston has the cheapest housing market compared to LSA communities, many low-income people and families have relocated to Houston due to its affordability. This trend has created an uneven distribution of people to services (Houston Chamber of Commerce 2019; Dze L K'ant Friendship Centre 2019b). For those needing to travel to Smithers to receive social services, there is one bus route that

connects Houston to Smithers (Route 162) that departs Houston at 8:30 am and returns at 4:00 pm (BC Transit 2019). The once daily bus route is not sufficient to serve the population of Houston that relies on travelling to Smithers to receive social services (Dze L K'ant Friendship Centre 2019b).

The main community service provider in Houston is the Dze L K'ant Friendship Centre (Friendship Centre). The Friendship Centre is guided by Aboriginal values that provides activities, services, and information to all people. The Centre's mission is to "develop skills and strengths while incorporating spiritual, emotional, mental and physical well-being to help people become self-sufficient and self-reliant" (Dze L K'ant Friendship Centre Society 2019a). The Friendship Centre has five full time staff that service about 55 families. On a typical day, the Friendship Centre has 80-100 people come through the door. The Friendship Centre's demographics are mainly indigenous females that are single moms. The majority of users of the Friendship Centre are aged 20-25, have 3-5 kids, and are on income-assistance (Dze L K'ant Friendship Centre 2019b).

Most people that use the Friendship Centre come for the programs (which includes meals, served twice daily) as well as to use the laundry facilities. Programs that are offered include:

- ▶ Afterschool program (for children aged 8-12)
- ▶ Teen program
- ▶ Family Support program
- ▶ Tadpoles program (for pre-kindergarten children)
- ▶ Connections program (youth-at-risk or youth-in-care)

The Friendship Centre also offers counselling services, including emotional and mental health support, however, the staff are not trained professionals in this field. Staff also help to facilitate meetings between users of the Centre and government appointed social workers and/or lawyers to discuss custody arrangements and other similar disputes (Dze L K'ant Friendship Centre. 2019).

Although the Friendship Centre is the main community service provider in Houston, it is operating beyond its capacity. The physical infrastructure of the Friendship Centre is not sufficient. There are six rooms to support all the programs offered, including for private meetings for counselling services or with social workers/lawyers. The Friendship Centre also isn't accessible and because of the size, as programs are capped at 15-person maximums. The Centre often turns people away because capacity has been reached (Dze L K'ant Friendship Centre. 2019).

Accommodations

Houston has a number of different accommodation options (**Table 5.10-4**). The Sunshine Inn is fully booked until 2020 due to accommodating individuals working on the CGL project (Houston Chamber of Commerce 2019).

Table 5.10-4: Accommodations in Houston

Business Name	Accommodation
Bearspaw Suites	Two private suites One room
Houston Motor Inn	55 rooms
Idylwild Motor Inn	Under renovations
Knotty Pines B&B	One private suite

Pleasant Valley Motel	51 rooms
Sunshine Inn Houston	36 rooms
Total rooms	143 rooms 3 private suites
Shady Rest RV Park	26 RV sites 6 camp sites
Silverthorne RV Park	15 RV sites 10 camp sites
Total sites	41 RV sites 16 camp sites

Source: Bearspaw Suites 2016; Love Houston 2019

5.10.4 Witset

Widzin Kwah Canyon House Museum is open to the public daily from May to September and offers a 45-minute professionally guided Wet'suwet'en Cultural Tours of either the Museum or the Widzin Kwah Canyon. The Museum tour shares Wet'suwet'en culture, stories and traditions with visitors, and the canyon tour focuses on archaeology, traditional fishing and fish preparation activities, plants and traditional uses, and fisheries management. The Museum features stories, photographs, writings, artifacts and recently excavated stone tools. The Museum also sells locally made moccasins, beaded jewelry, and native Wet'suwet'en art (Witset First Nation 2019b).

Witset has a Cultural Wellness Advocate that is responsible for the planning, development, implementation and coordination of support services for children and families. Responsibilities also include providing appropriate home and community-based support and prevention services, ensuring programs that promote Wet'suwet'en culture and language, healthy lifestyles and relationships for youth (Witset First Nation 2019b).

The Health Centre hosts bi-weekly sports and fitness outings, cooking activities and drop-in nights. Information on recreation programs and events are shared on the Witset Recreation Facebook group.

There are a number of events held in Witset throughout the summer, National Indigenous Day, the Annual Moricetown Mud Races, Return of the Salmon, and Sports Day. National Indigenous Day is held each June to celebrate Indigenous cultures. Festivities in Witset typically include traditional drumming and dancing, and a Wet'suwet'en language contest. The Moricetown Mud Races is a race of various vehicle types through a giant mud pit, and also features a kid's zone with bouncy castles and face painting. Return of the Salmon is a gathering above the Widzin Kwah Canyon in June each year to celebrate the wild salmon's return from the Pacific Ocean. Sports Day features a wide variety of activities, including a softball tournament, a grease-pole climb, baby crawl, water balloon toss, home run derby, and watermelon-eating contest (Witset First Nation 2019b).

Accommodations

In 2018, Witset conducted a major \$1.4 million redevelopment of their RV Park and Campground that is the first accessible campground in BC. The RV Park and Campground has seven large pull-through sites that include water, sewer, and power, as well as eight un-serviced tent sites. Amenities for the RV Park and Campground include high-speed internet, children's playground, washrooms and washer and dryers (Witset First Nation 2019b).

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